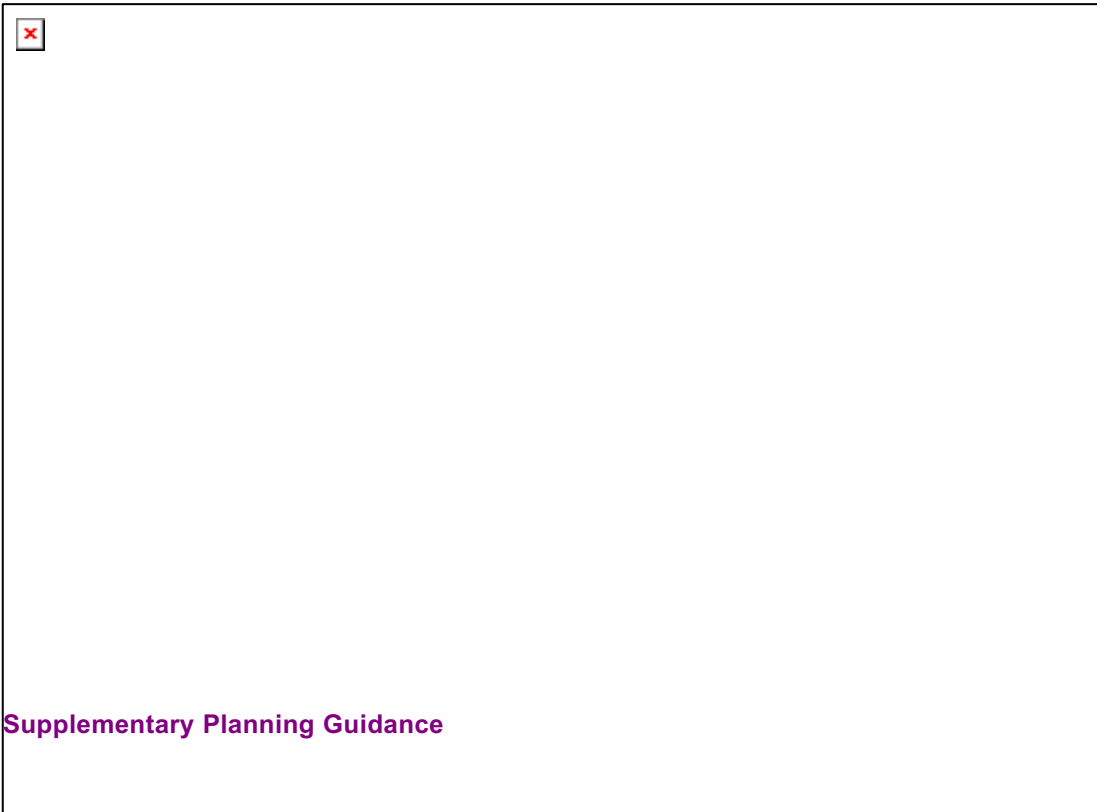


# SWANSCOMBE PENINSULA WEST PLANNING BRIEF



Supplementary Planning Guidance

## Supplementary Planning Guidance

February 2004



## Swanscombe Peninsula West Planning Brief

### Statement of Publicity

This Planning Brief has been the subject of formal public consultation (carried out between 6 February and 20 March 2003) and the views of interested parties have been taken into account in its preparation. A copy of the Cabinet/General Assembly of the Council report (dated 19 February and 26 February 2004), which considered the responses received is available for inspection during office hours at the Civic Centre, Home Gardens, Dartford. This Planning Brief was adopted as Supplementary Planning Guidance by the Council on 26 February 2004.

For further information please contact:

Planning Policy Team on 01322 343631

Room C3, Civic Centre, Home Gardens, Dartford, KENT, DA1 1DR

[sian.phillips@dartford.gov.uk](mailto:sian.phillips@dartford.gov.uk)

# Contents

<b>Statement of Publicity</b>		2
<b>1. Introduction</b>		
	1.1 Purpose of the Planning Brief	5
	1.5 The Opportunity	6
	1.8 Interface with Ingress Park	7
	1.9 Swanscombe Peninsula as a Whole	7
	1.11 The Historical Legacy	8
<b>2. Planning Policy Context</b>		
	2.1 National Planning Policy	8
	2.2 Regional Planning Policy	9
	2.4 Sub Regional Planning Policy	9
	2.6 Kent Structure Plan Policy	10
	2.7 Local Plan Policy	10
	2.8 Riverside Context	11
	2.11 Role of Site within Kent Thameside	12
	2.14 Timing and Phasing	13
<b>3. Key Objectives</b>		
	3.1 Topography	14
	3.3 Geotechnics, Hydrology and Land Raising	14
	3.7 Access	15
	3.9 Channel Tunnel Rail Link	16
	3.11 Wharf Facilities	17
	3.12 Ecology and Nature Conservation	17
	3.15 Archaeology	18
	3.17 Power Lines	18
<b>4. Detailed Guidelines and Requirements for Development Proposals</b>		
	4.2 Riverside Setting	19
	4.6 Ports and Wharves	20
	4.8 Landform	20
	4.12 Archaeology and Heritage	22
	4.16 Contamination	23
	4.17 Air Quality	23
	4.18 Built Form	23
	4.20 Development Pattern and Land Uses	25
	4.27 Community Building and Social inclusion	28
	4.39 Utilities	32
	4.41 Access and Circulation	33
	4.69 Structural Design and Landscaping	40
	4.72 Ecology	41
	4.78 Green Grid	43
	4.83 Open Space	44
	4.84 Public Slipway	45
	4.86 Design Principles and Themes	45
<b>5. Conclusion</b>		
	5.3 Implementation	48
<b>Figures</b>		
	1 Swanscombe Peninsula West: The Setting	4
	2 Swanscombe Peninsula West: The Site	4
	3 Extract from RPG9a	10
	4 Nature Conservation	26
	5 Public Rights of Way	39
<b>Appendices</b>		
	Appendix 1: Policies in the Local Plan Review Second Deposit Draft	50
	Appendix 2: Green Grid Guidance	53
<b>Further Reading</b>		55

Figure 1 - Swanscombe Peninsula West: The Setting

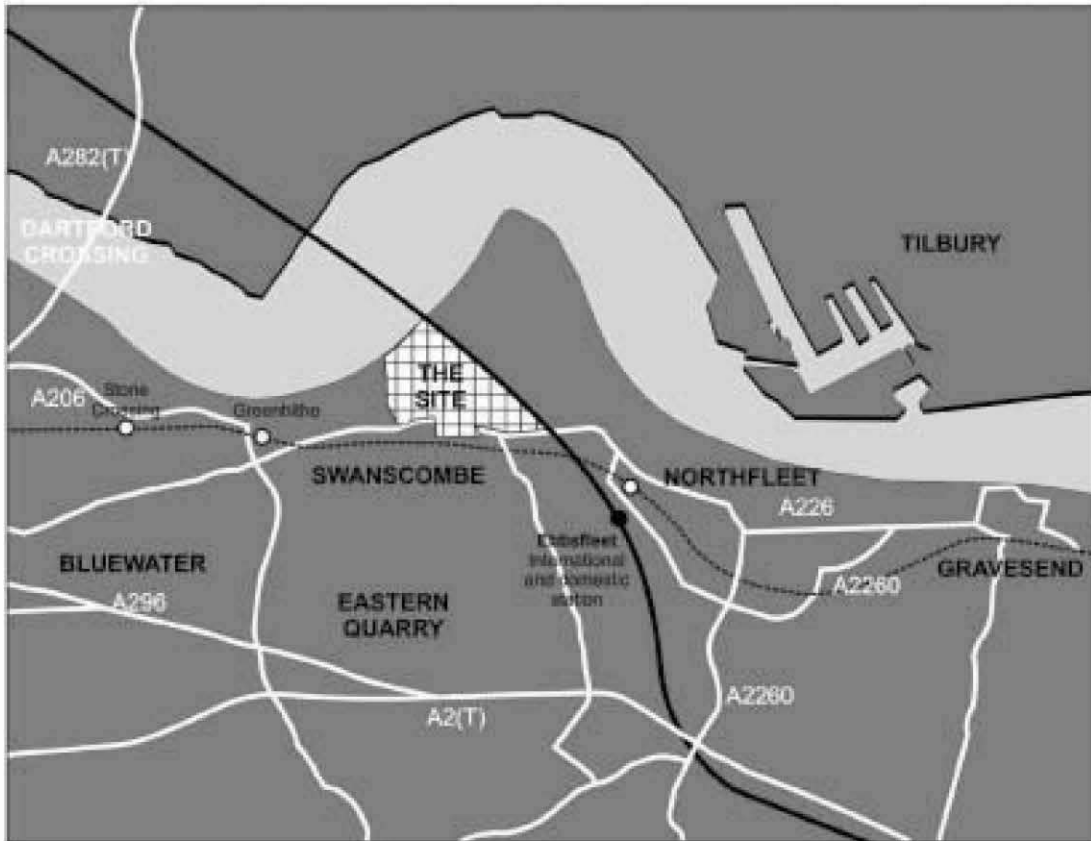
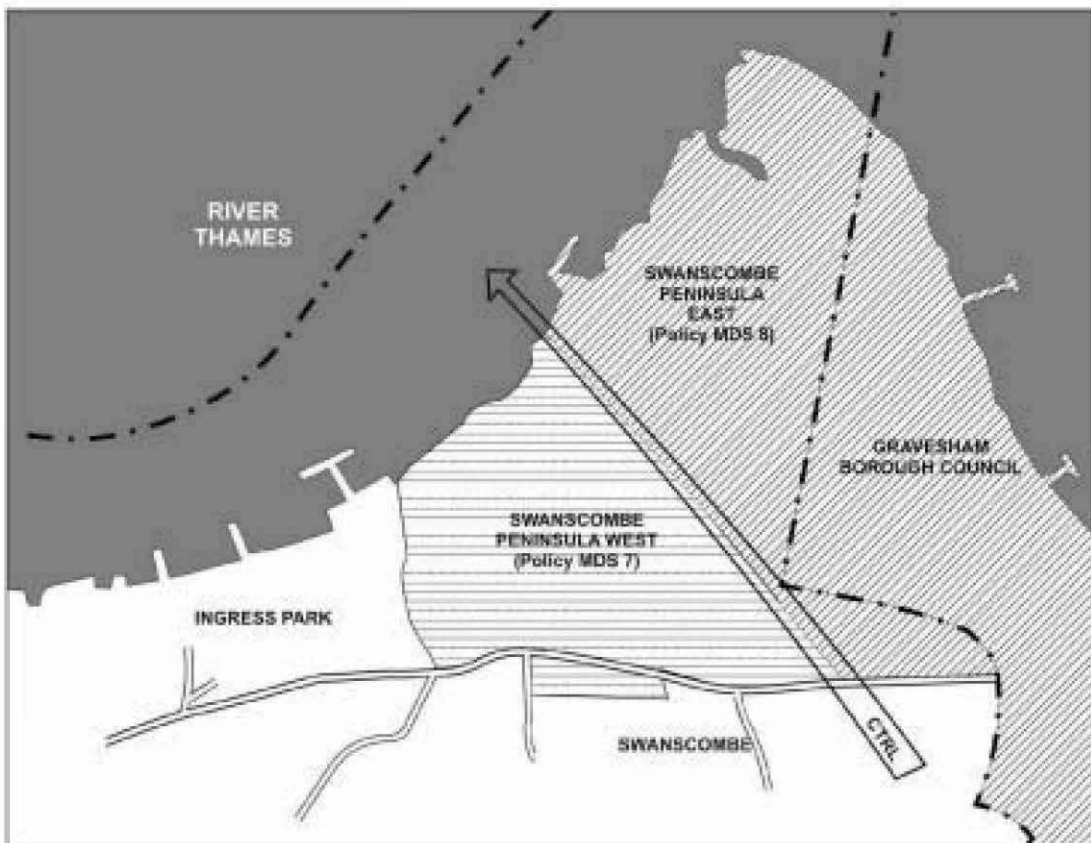


Figure 2 - Swanscombe Peninsula West: Policy Areas



# 1. INTRODUCTION

## Purpose of the Planning Brief

1.1 This brief is to be read in conjunction with the Dartford Borough Local Plan Review Second Deposit Draft (Appendix 1 provides a list of the most relevant policies). The Second Deposit Draft establishes the Council's policy approach to the reuse and development of Swanscombe Peninsula West, primarily through Policy MDS7, and also through policies in the River Thames chapter. The preparation of this brief is necessary to take the broad policy for the site set out in the Second Deposit Draft forward to the next level of detail. The brief will add detail to these policy aspirations by identifying the planning and urban design principles and requirements for the development of the site. This will provide a basis for environmental impact assessment work, masterplanning and subsequent planning applications, thereby realising the potential of this strategic site. This supports the Government's aspirations for Thames Gateway, and its desire for overall environmental enhancement and the delivery of strategic development sites.

1.2 Development at Swanscombe Peninsula West is likely to be delivered in a number of phases over a five to ten year timeframe. This brief sets out the physical requirements that relate to the envisaged, predominantly residential, mixed use development including an estimated 1,700 dwellings at Swanscombe Peninsula West. Consequently, service providers can understand the implications for the provision and timing of the services and facilities for which they are responsible. The brief does not seek to apportion funding responsibilities between developers, service providers and other agencies or funding streams that may be involved. Development at Swanscombe Peninsula West, however, may have to contribute to both on-site and off-site infrastructure provision. This will be a matter for detailed negotiation within the framework of the guidance set out in Chapters 8 and 16 of the Local Plan when specific development proposals are brought forward.

1.3 This Brief provides the parameters within which a master plan for the site can be prepared by developers as part of the planning submission. The master plan will provide detailed interpretations of the issues covered in the brief and how they will be addressed in the eventual development. The planning brief will be used by the Council in its determination of subsequent planning applications, and by the developer(s) in the preparation of those applications. These will need to be accompanied by supporting information, including an Environmental Assessment and a Transport Assessment.

1.4 As context to the determination of the principles to be applied to the redevelopment of the site, consideration is first given in the brief (in Sections 2, and 3) to the site itself. Respectively, these two sections consider the site's features (some that act as constraints,

others that provide opportunities), existing planning policies that have a bearing upon the form, mix, disposition and quantity of future uses to be sought on the site, and the site's context in terms of the emerging urban structure of Kent Thameside. Section 4 provides the overall detailed development requirements and guidelines for the site.

## The Opportunity

1.5 Swanscombe Peninsula West provides a unique and exciting opportunity for creating a high quality new community with a strong sense of place for Kent Thameside. The Local Plan contains three specific objectives for development at Swanscombe Peninsula West:

- To secure a predominantly residential mixed-use development, based upon urban village principles.
- To ensure development is fully integrated with neighbouring sites, especially Ingress Park, and takes full advantage of its riverside setting.
- To retain and enhance the existing habitats and areas of nature conservation importance.

The gradual transition over time from a peripheral under-used site alongside the river to a compact urban village style of development should embrace best practice and innovation in terms of planning, transport and design. Capitalising on its riverfront aspect and proximity to the planned Ebbsfleet business district, and contributing to fundamental Kent Thameside objectives such as Fastrack and Green Grid, the site can provide the opportunity for inspirational regeneration.

1.6 Swanscombe Peninsula West is one of the largest allocated development sites in the Thames Gateway sub-region. The Government identified the site in RPG9a, as one of a series of 'main opportunities' for development in the South East and Kent County Council, in its Structure Plan, confirmed the principle of the re-use of the site as a major development location.

1.7 Additionally, both the Kent Prospects and the Kent and Medway Economic Board's Action Plan act as countywide context documents that support and promote the type of development envisaged for Swanscombe Peninsula West. In particular they promote:

- **Smart Development** by encouraging the provision of Broadband Technology;
- encouraging **Green Growth** that promotes sustainability through greater public transport use, innovation in design, reduced waste and increased recycling; and
- nurturing **Quality Communities** by encouraging a range of housing types and tenures and the provision of open and green spaces and corridors.

## **Interface with Ingress Park**

1.8 The development at Ingress Park (immediately to the west) has enhanced the quality of the riverside environment in this part of the Borough and as development proceeds along the river, it is logical to extend the planning policy framework so that the interface between the two developments can be considered in an integrated way. The start on development at Swanscombe Peninsula West, to initially provide approximately 450 dwellings by 2011 should be integrated with development at Ingress Park both in terms of urban design and timing.

## **Swanscombe Peninsula as a Whole**

1.9 Swanscombe Peninsula covers an area of 205 ha between Greenhithe and Northfleet, of which 173 ha fall within Dartford Borough. It comprises three distinct parts:

- Swanscombe Peninsula West (the subject of this Draft Planning Brief) is the land between Ingress Park and the Channel Tunnel Rail Link (CTRL) alignment and north of the North Kent Railway Line. It includes the area known as Black Duck Marsh and the former Swanscombe Cement Works and covers approximately 90 ha;
- Swanscombe Peninsula East is the land east of the CTRL alignment, measuring approximately 83 ha, and includes Swanscombe Point, Swanscombe Marshes and part of Botany Marshes;
- a further 32 ha of Swanscombe Peninsula East, which includes most of Botany Marshes, and falls within Gravesham Borough.

The Gravesham Borough Local Plan Review First Deposit Draft identifies the Gravesham part of the peninsula as land “safeguarded for possible future development post 2011”. Possible development options will be explored through the preparation of a planning brief.

1.10 It is within both the short term and long term context that development at Swanscombe Peninsula West needs to be considered. Indeed consideration of the western part of the peninsula cannot be isolated from consideration of the Peninsula as a whole and relevant parts of the Brief therefore include specific reference to the wider context. This reflects the potential of adjoining land for development and the need to ensure effective connectivity. More importantly, development proposals on the West must illustrate to the Council that they would not prejudice development on the remainder of the peninsula and that any phased development is environmentally acceptable and workable.

## The Historical Legacy

1.11 Originally, Swanscombe Peninsula formed a large site extending from the present chalk spine along London Road, down across the marsh and out onto the River. This was the subject of major chalk quarrying and since then, Swanscombe Peninsula West has had a long, largely industrial, history relating to the manufacture of cement from 1825 to the current day. Historically, parts of the 90 ha site have been used for tipping waste. Primarily, this related to whitening waste and debris from demolished buildings, in connection with the cement works that formerly stood on the site. In addition, a former gas works, a sewage treatment works, electricity sub stations, warehousing and lorry parking have existed on the site. The central area, between the existing radar station and the former sewage works, which is now subdivided by the CTRL alignment, has been the subject of both historical and current cement kiln dust tipping.

1.12 The majority of the site is owned by Lafarge Cement UK (previously Blue Circle Industries plc). The other occupiers of the site operate under relatively short term tenancy agreements. Approximately 25 ha of the site are affected by the construction of the CTRL. These works are scheduled to cease by 2007. Between the CTRL construction compound and Ingress Park is the site of the former Blue Circle Cement Work's sports ground. This area, commonly referred to as Black Duck Marsh, is now low quality agricultural "set-aside" land, although it does have significance in terms of particular ecological habitats.

1.13 The industrial history of Swanscombe Peninsula has left a complex site with difficult ground conditions, and which is experiencing further impact from the construction of the CTRL. Nevertheless, the potential of this low lying site for a new mixed use community with its own identity and character, developed over a number of years has been enshrined in sub regional, strategic and local planning policy guidance.

## 2. PLANNING POLICY CONTEXT

### National Planning Policy

2.1 Five Planning Policy Guidance Notes (PPGs) are particularly relevant to the redevelopment of Swanscombe Peninsula West:

*PPG1: General Policy and Principles* (February 1997) which emphasises the concept of sustainable development as a means of securing higher living standards whilst protecting and enhancing the environment;

*PPG3: Housing* (March 2000) which places an emphasis on providing new housing - including the provision of affordable housing - on previously developed land, and which



requires the more efficient use of developable land by increasing the density of development and reducing car parking standards;

*PPG9: Nature Conservation* (October 1994) which places an emphasis on contributing to the abundance and diversity of British wildlife and its habitats and minimising the adverse effects on wildlife where conflicts of interest are unavoidable.

*PPG13: Transport* (March 2001) which promotes the integration of land use and transport planning, encourages more sustainable transport, gives priority to people over ease of traffic movement and seeks a reduction in the need to travel, the latter in part to be encouraged through mixed use development; and

*PPG25: Development and Flood Risk* (July 2001) which promotes the management and reduction of flood risk in the land use planning process and seeks to avoid developments being built in locations that are unable to mitigate against tidal or fluvial flooding.

## **Regional Planning Policy**

2.2 In 1994, the Government published *Regional Planning Guidance for the South East* (RPG9). This set out the Government's determination to redirect development pressures from the west of London to the east of the capital. Thames Gateway was earmarked as the 'main opportunity for growth' in the South East with the potential to 'accept significant levels of housing and employment development, alongside improvements in environmental quality' (para 2.4). Within Thames Gateway, Kent Thameside (the areas of Dartford and Gravesham north of the A2) was identified as one of two major growth points.

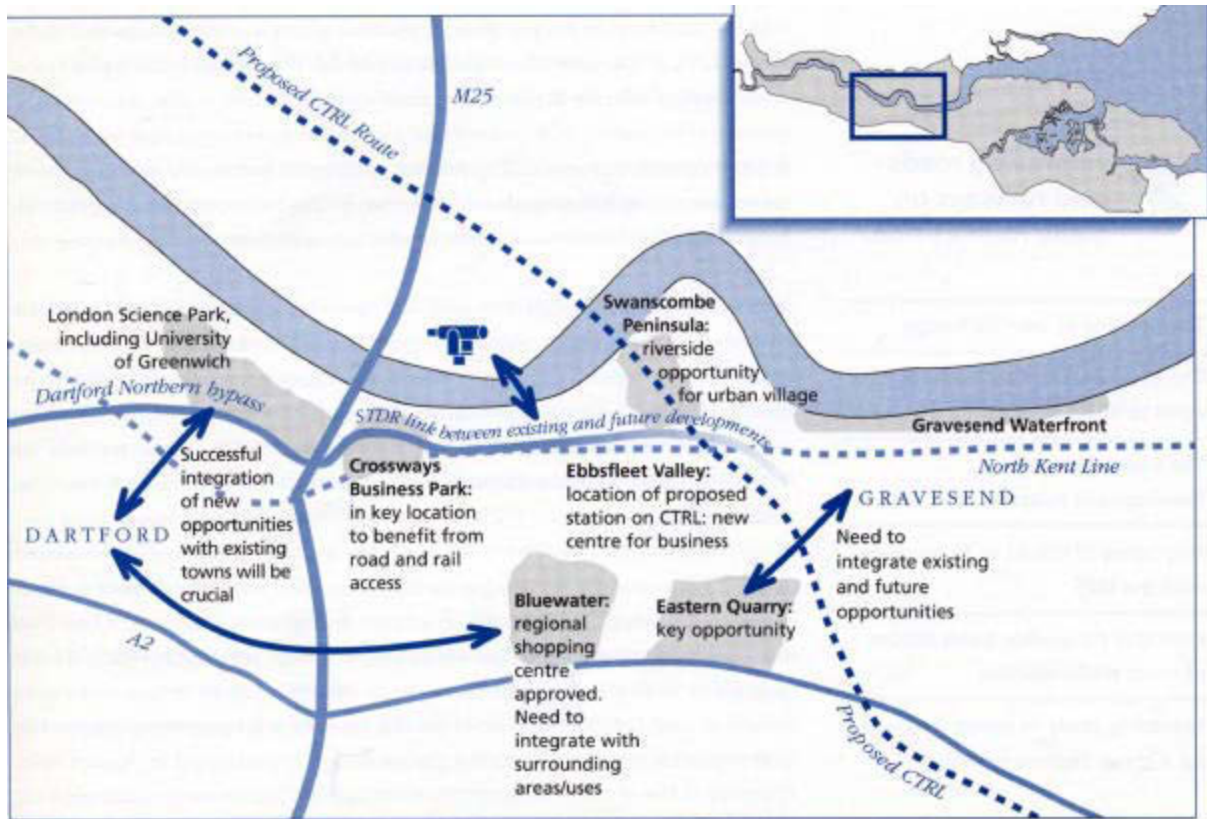
2.3 Updated RPG9, published in 2000, endorsed the development potential in Thames Gateway and indeed elevated it from regional to **national** priority status (paragraph 4.9). Amongst other things, this called for 'the opportunities presented by the area', including the availability of large potential development sites, to be 'maximised'. This has evolved into the recent Ministerial focus on the potential of Thames Gateway to deliver early progress on some of the fundamental planning objectives for the south east.

## **Sub Regional Planning Policy**

2.4 The development potential of the peninsula was first formally acknowledged in *RPG9a: The Thames Gateway Planning Framework* (1995). In this, the site is described as one of a series of "main opportunities whose commanding views along the River Thames offer a valuable opportunity to secure quality development", and identified as a riverside opportunity for an urban village. RPG9a includes environmental upgrading as a core theme and within this, sees the Green Grid concept as a key structural element of policy for the Gateway. Swanscombe Peninsula West will form a strategic component of this Green Grid. Overall, policies seek to foster a step change in image, economic buoyancy and quality of life.

2.5 *RPG9b: Strategic Planning Guidance for the River Thames* (1997) gives formal planning guidance in relation to the River and riverside land. Consistent with *RPG9a*, the guidance advocates a multifunctional riverside combined with environmental enhancement. The Local Plan Review's River Thames chapter's policies elaborate on these different facets.

**Figure 3**



**Extract from RPG9a - © HMSO 1995**

**Kent Structure Plan Policy**

2.6 The Government's vision for the peninsula was subsequently reinforced in the Kent Structure Plan (1996) in which the site is allocated for "major mixed use development, predominantly housing, taking full account of the area's relationship with the River Thames and the proposed Channel Tunnel Rail Link and integrated with an enhanced public transport and road network". There is no change to this approach, in the recently published Kent and Medway Structure Plan: Deposit Plan 2003.

**Local Plan Policy**

2.7 The Local Plan Review Second Deposit Draft defines the precise boundaries of the Swanscombe Peninsula West site and sets out in more detail in a site-specific policy the principles that are to guide the redevelopment of Swanscombe Peninsula West (Policy MDS7).

**MDS7 Swanscombe Peninsula West**

Development proposals at Swanscombe Peninsula West will be permitted subject to the following criteria:

1. a mixed use development consisting predominantly of residential use, together with the necessary community infrastructure and some business uses;
2. a development form which integrates with the development at Ingress Park;
3. a minimum of 25% of the net developable area identified for strategic public open space, to be incorporated within the Green Grid network, in addition to local open spaces within the built up areas;
4. the retention and enhancement of water courses, wildlife habitats and landscaping;
5. the creation of a public right of way along the entire river frontage within the site, which will form part of the Green Grid network, and a public slipway;
6. no built development within 100 metres of the boundary of the CTRL safeguarded area until the CTRL has been completed;
7. the provision of the necessary community infrastructure, including a community primary school, to support the development, fully integrated with the proposed development at Ingress Park;
8. approval by the Environment Agency and English Nature of any works that would affect riparian habitats;
9. the provision of cycle and footway networks throughout the site including links to Swanscombe, Greenhithe Station and the river;
10. the provision of retail proposals that meet the needs of local residents and employees and do not adversely affect the vitality and viability of Dartford town centre or existing or proposed district and local centres; and
11. the provision of a bus route network which serves the development and allows bus priority throughout.

**Riverside Context**

2.8 Two of the central principles of both the *Thames Gateway Planning Framework* (RPG9a) and *Strategic Planning Guidance for the River Thames* (RPG9b) are to bring life to the River Thames and the riverfront, and to create a new environmental standard. The guidance recognises that the River remains an under-utilised resource and that many undeveloped and redundant sites along the waterfront need to be re-used and/or developed. Competing demands need to be catered for, however, if the Thames is to fulfil its main functions as a major river, a setting for development, an open space and ecological resource, a transport artery (principally for freight) and a recreational, and tourism asset.

2.9 While the use of the River for freight and passenger transport is clearly important, it is only one element amongst many to be addressed in considering land use, transport and environmental issues and their inter-relationships along the riverfront. A balance needs to be struck between the realisation of major development opportunities and the retention and promotion of more traditional river-related activities such as operational aggregates wharves whose importance is recognised by regional guidance. This is particularly important in the

context of the peninsula as a whole and the possibility that alongside new development here, there may be potential to accommodate port uses, including the relocation of the existing aggregates depot at Johnson's Wharf from Greenhithe.

2.10 In general, there is very little public activity along the riverside within the Dartford portion of the peninsula, due to its relative inaccessibility. The flat, open landscape comprises areas of inter-tidal mud and marsh, dissected by a network of drainage channels, which introduce an element of 'wildness' into the river landscape. The foreshore and inter-tidal zone have a particular importance for nature conservation - providing important roosting sites for migratory estuarine birds for example. There is also a navigation radar station at Broadness Point, the northern tip of Swanscombe Peninsula.

### **Role of Site within Kent Thameside**

2.11 The peninsula has a key role to play in the new urban structure of Kent Thameside. It will consolidate development along the riverside and provide links to the river for communities to the south. An overall vision for enhancing connectivity between new development and existing communities together with links further afield to both the countryside to the south and River Thames to the north provide the context for the preparation of development proposals at Swanscombe Peninsula West.

2.12 The new international and domestic passenger station at Ebbsfleet, on the Channel Tunnel Rail Link, is due to open by 2007. This will serve to consolidate nearby Ebbsfleet's position as a '*new focus of growth in the South East*' (RPG9a). Employment-led growth around the new station at Ebbsfleet is what sets regeneration in Kent Thameside apart from elsewhere. Major residential development programmed at Eastern Quarry will complement this. The juxtaposition of Bluewater, Eastern Quarry and Ebbsfleet has the potential to produce a dynamic synergy in planning and environmental terms that is unparalleled in the Thames Gateway, probably in the South East and possibly in the country. Swanscombe Peninsula is immediately adjacent to these catalysts for growth and as such is ideally located to provide complementary residential development.

2.13 The overarching theme of regeneration can be well served by development at Swanscombe Peninsula. The environmental enhancement and the high design quality of development seen at Ingress Park needs to be used as a benchmark for development on this site. The opportunity to create a special sense of place close to the River and the creation of different character areas across the site has huge potential for raising the profile of the site.

## Timing and Phasing

2.14 Maintaining momentum in the development of Kent Thameside however, needs a strategy for Swanscombe Peninsula West to proceed as quickly as possible. Preparing early supplementary planning guidance will focus attention on those aspects of site preparation with long lead-in times, and should enable eventual development to form a seamless transition eastwards from Ingress Park. The Local Plan Review Second Deposit Draft contains an early indication of possible phasing for anticipated development at the peninsula. The table below gives an indication of the expected phasing of development.

Swanscombe Peninsula Development*	Up to 2011	Post 2011
West Site - Residential	450 units	1250 units
East Site - Residential		1000 units
West Site - Employment**	25,000 m <sup>2</sup>	

\* Figures in each phase are indicative only. \*\* Square metres are given in terms of gross floorspace

2.15 Development at the peninsula will take place over a number of years. Proposals for Swanscombe Peninsula West must be prepared within the context of the entire peninsula and its potential development. Proposals must demonstrate that throughout the build programme, and especially in the case of early phases of housing, a satisfactory quality of environment will be maintained - this includes both social and physical characteristics. In order to ensure the realisation of the overall goal of achieving an integrated, mixed use development here, an appropriate mix of residential and other uses should be achieved as the development progresses, as well as essential community and transport and environmental infrastructure being in place as it is needed, phase by phase.

2.16 Previous uses on the site, CTRL safeguarding and the scale of eventual development on the Peninsula dictate the need for certain environmental safeguards. In particular, it will need to be demonstrated:

- that any new development occupied before the completion of CTRL works would be unaffected by the remaining impact of those works;
- that any new development occupied before the conclusion of the phased land raising (necessary to establish the development platforms) should not be adversely affected by subsequent phases; and
- that satisfactory arrangements can be made for access to the new development in advance of completion of the main transport routes which, could in time and if deemed necessary, serve the whole Peninsula.

### 3. KEY OBJECTIVES

#### Topography

3.1 The River Thames forms the northern edge of the peninsula with the northern portion of the site (Broadness Marsh) comprising reclaimed land. Following extensive chalk quarrying and the subsequent use of the site for industrial purposes the peninsula is largely flat. However, the authorized tipping of works waste has, over the last fifty years, created a number of raised areas giving rise to levels in Swanscombe Peninsula West varying from -2 to +6 m AOD over much of the area. The levels change dramatically at the southern boundary of the site where the land rises from about +6m to +28m at the face of the old quarry which forms the chalk spine. Apart from the junction between Manor Way and London Road the majority of London Road, to the immediate south of the site, is situated on a thin chalk spine above Swanscombe Peninsula West.

3.2 Swanscombe Peninsula is often subject to very strong winds from the River. The design and elevation of rooflines will need to be well articulated in order to reduce possible wind damage, whilst landscaping should be incorporated to form windbreaks. Landscaping nearest the River should respect the marshland character – in particular, trees are not characteristic of marshland and should be used sparingly, especially very close to the River. There may also be the opportunity to work with the Public Utilities Liaison Officer (PULO) to explore the potential for innovative sustainability projects eg harnessing wind power for local energy generation.

#### Geotechnics, Hydrology and Land Raising

3.3 The majority of the site is located within the tidal flood zone and therefore subject to the Local Plan Review's Second Deposit Draft Policy NR7, which requires flood risk to be properly assessed and addressed for development proposals within the tidal flood zone. Developing the eventual design will require close liaison with the Environment Agency (EA) on matters relating to the overall water environment, potential flood risk and effects of topographical change on adjoining areas. It will be the developer's responsibility to provide a flood risk assessment which will need to include an audit of the sea wall and any other flood defence facilities to establish their long term stability and, where necessary, determine appropriate enhancement and management measures, and ensure these are in place to provide continued maintenance of the flood defences\*.

---

\* The Environment Agency will require the 15 metre land drainage consent width from the bottom of the flood defences to be maintained so that emergency access and repair to the sea wall can be carried out by the Agency if required. It should be borne in mind that the bottom of the berm is considered to be bottom of the flood defence but the Agency would review the margin required depending on the extent of any land raising that may take place at the edge of the berm.



3.4 Maintaining emergency access to the river frontage is a critical issue for both the EA and Port of London Authority (PLA) in terms of emergency planning issues. As a result, close liaison with the EA and PLA will be needed for any requirements relating to approved access routes in case of spillage/accident and temporary storage areas for contaminated materials.

3.5 The EA requires habitable rooms to be at a level not lower than 7.4 metres AOD. Planning applications for land raising fall to Kent County Council to determine in the light of policy W5 of the Kent Waste Local Plan. The Borough Council will support in principle any application for land raising, ground modelling and stabilisation on the site which makes:

- maximum re-use of existing, on-site waste material as engineering fill, subject to the fill material being suitably treated;
- use of Channel Tunnel Rail Link (CTRL) tunnel spoil, where possible, as engineering fill, subject to the fill material being suitably treated;
- use of the River Thames, where possible, for the importation of fill from off-site;
- a final landform which would serve as a safe platform for development and provide opportunities for open space and landscape; and
- a final landform that enables the conservation and enhancement of existing nature conservation interests.

In the event of separate planning applications being submitted for land raising and development, then the land raising application would need to be accompanied by sufficient information to demonstrate that the quantity and type of fill for the land raising element is necessary for the built development to take place. The Council would expect an 'engineering specification' to support the land raising element of the application.

3.6 The combination of ecological interest and land raising issues offer opportunities to create and enhance valuable water features and areas of open space within the site. Retention of marshland may be a positive way of conserving and enhancing amenity and wildlife habitats, and achieving sustainable drainage systems. Any resulting amenity and wildlife habitats in these areas, however, will require careful attention to the ecological implications of any potential access and disturbance. Careful consideration must be given to siting, design, maintenance and legal responsibility of any new features created.

### **Access**

3.7 The main access point to the site is the existing junction of Manor Way and the A226 London Road. At present, the London Road/Manor Way/Craylands Lane junction is a priority crossroads, with traffic islands configured for the later addition of traffic signals. A Transport Assessment for the site will have to include an evaluation of the performance of this junction

and what form of junction should be provided to serve future development on the site. It is unlikely to be feasible to have the site developed to its full potential with only this sole means of access, so the Transport Assessment will also need to demonstrate the level of development that will be possible prior to any additional means of access being developed. In addition to this junction, pedestrian access can currently be obtained from London Road via the "Lovers Lane" corridor (along the site's western edge) and from Pilgrims Way (at the south eastern corner of the site). Frequent bus services run along London Road. The site's nearest rail station - Swanscombe - is located about 700 metres east from the London Road/Manor Way junction; Greenhithe station is some 1.2 km to the west. Currently, Manor Way is used as an access route for Channel Tunnel Rail Link construction traffic and to the western end of the Kent Kraft Industrial Estate. In future, access will also be needed for maintenance and safety purposes to the Rail Link corridor, including the Thames Tunnel. Such access needs should be reflected in development proposals.

3.8 The Council is concerned that development at Swanscombe Peninsula West should not result in worsening traffic pressure on the London Road corridor, especially to the west of the site. The Transport Assessment should therefore identify an access strategy that will spread the traffic generated by the site over more than one access point at successive stages of development. In particular, modelling of long-term overall traffic generation for the Peninsula may indicate a requirement for "Peninsula Way" (first conceived as a north-south link between the site and Ebbsfleet) and a link to Lower Road via the Swanscombe Peninsula East site. Different options for "Peninsula Way" may need to be explored in the light of levels of traffic generated by the development.

3.9 The Highways Agency is concerned that any potential traffic impacts of development of the site on the trunk road network (notably the A2) are identified at an early stage and, as necessary, measures considered to ameliorate them. This issue will need to be dealt with in the Transport Assessment.

### **Channel Tunnel Rail Link**

3.10 The CTRL route dissects the peninsula and enters the tunnel under the Thames on Swanscombe Marshes. Planning permission has been granted at Swanscombe Peninsula for slurry lagoons to accommodate fill from the CTRL Thames Tunnel and at the former Croxton and Gary site at London Road, Swanscombe. The phasing of the development therefore will depend upon the impact of CTRL construction and land raising activities upon adjacent land. In order to reduce disturbance arising from the construction of the CTRL and traffic movements, including noise and dust, no built development shall take place within 100 metres of the boundary of the CTRL safeguarded area until the CTRL has been completed (likely to be at the end of 2006).



## Wharf Facilities

3.11 There is an existing, but disused, wharf facility on the Dartford side of the peninsula (Bells Wharf and Whites Jetty) and active wharves on the Gravesham side. Bells Wharf (located partly within Swanscombe Peninsula West) and Whites Jetty are safeguarded through the Channel Tunnel Rail Link Act for bulk materials handling in connection with construction of Stage 2 of the Rail Link. More information is given in the section on ports and wharves beginning at paragraph 4.6.

## Ecology and Nature Conservation

3.12 Swanscombe Peninsula is not covered by any statutory nature conservation designation. Notwithstanding this, Policy C16 of the Local Plan Review Second Deposit Draft seeks to make satisfactory provision for the maintenance of local wildlife habitats and the creation of wildlife corridors.

3.13 A Phase One Habitat Survey has been carried out for the entire Swanscombe Peninsula Site (a Phase One Habitat Survey incorporates a comprehensive baseline assessment of ecological interest on a site). This illustrated the presence of:

- 1 *Open water and swamp*, within Black Duck, Swanscombe and Botany Marshes. These habitats support water voles, common wetland plant communities, common amphibians and over wintering wildfowl. Protected under the Wildlife and Countryside Act 1981 the water voles' presence will be a material consideration when determining any planning applications.
- 2 *Scrub woodland*, the main area of which is to the south of Black Duck Marsh. This area is dominated by sycamore and supports a heronry of local significance.
- 3 *Grassland*, of limited inherent ecological interest, which dominate the previously tipped areas. This habitat is used by breeding birds and reptiles.
- 4 *Saltmarsh* areas, to the northwest and northeast of Broadness Marsh, seaward of the tidal defence embankment. This is classified as a priority habitat within the UK Biodiversity Action Plan.

3.14 Within Swanscombe Peninsula West significant local nature conservation interest exists therefore to merit the retention of the ecological value of both the Black Duck Marsh area, and

the existing heronry. This is located in the established woodland on the higher ground to the southwest of Black Duck Marsh. It does not include the scrubland.

### **Archaeology**

3.15 Swanscombe Peninsula West is not included within an area of statutorily designated archaeological, geological or historical constraint. Numerous archaeological remains are, however, recorded at the site and in the surrounding area. Some of these are of considerable importance, and there is also the likelihood of well preserved waterlogged archaeological remains being present within alluvial deposits at the site.

3.16 Provision should be made for archaeological evaluation to be undertaken followed by preservation in situ, wherever possible, of important archaeological remains, and/or further archaeological investigation as appropriate. As a first step a comprehensive desk based archaeological assessment and walkover survey of the site should be undertaken to help determine areas in which archaeological remains may survive. Development at Swanscombe Peninsula is expected to occur on a phased basis but it is preferable for the desk-based assessment to be undertaken in the very near future for the site as a whole, so that requirements at the site can be considered at a more strategic and meaningful level at an early stage in the design process. The results of the assessment and field evaluation should be used to inform the preparation of the Master Plan (see also paragraph 4.90 which refers to the potential for celebrating and interpreting aspects of this heritage).

### **Power Lines**

3.17 Although no power lines cross Swanscombe Peninsula West a section of the national grid runs to the east of CTRL within Swanscombe Peninsula East, where one of the tallest pylons in Great Britain is to be found, visually dominating part of the peninsula.

## **4. DETAILED GUIDELINES AND REQUIREMENTS FOR DEVELOPMENT PROPOSALS**

4.1 Swanscombe Peninsula West offers the opportunity to create a mixed use, predominantly residential, public transport orientated community in the form of a compact urban village. A design approach which delivers a fully integrated mix of uses is fundamental to encouraging the development of a community that will be less dependent on car travel. The mix of 1,700 homes and 25,000 square metres of employment floorspace will require the provision of complementary uses and infrastructure to serve the needs of the new development. In order to create a sustainable new community, a series of guidelines and requirements are set out to

shape and inspire the design of development proposals at the site. Figure 4 indicates the areas of nature conservation importance which will guide the design of the site – the precise boundaries of these areas can only sensibly be determined after more detailed study at the master planning stage.

## Riverside Setting

4.2 Development proposals will be expected to take full advantage of the attractive setting of the peninsula on a major bend in the River Thames. A clear message from sub regional guidance is the need to ensure a high quality of development and landscaping, and the importance of taking full advantage of riverside locations. The Local Plan Review's River Thames chapter develops this theme and includes several key objectives for sites along the River:

- To achieve a balance between competing uses along the riverside, including housing, recreation and commercial, while safeguarding areas of nature conservation interest.
- To protect the waterfront from developments which neither contribute to, nor benefit (through a riverside setting) from a riverside location.
- To ensure that new development makes the best use of the riverside setting through siting and design.
- To seek the provision of key landmark features and focal points beside the River.
- To identify strategic locations along the riverside where footpath and cycle links would be of greatest benefit to help achieve long term continuous access along the River.
- To conserve and manage key areas of riverside green space with recognised nature conservation value.
- To promote green links and green corridors between riverside open space and inland areas for public access and enjoyment.
- To contribute to Integrated Coastal Zone Management
- To seek greater use of the River as a means of transport for both freight and passengers, subject to ensuring infrastructure needs and consistent with the development strategy for Kent Thameside.

4.3 There is a particular need to ensure high quality in terms of accessibility and sustainable urban design beside the River. In the past, many buildings backed on to waterways and so discouraged public use and lessened security on the water. Future development should face the River in order to encourage access and security.

4.4 In addition, the riverside location creates the opportunity to capitalise on views and vistas. The visually impressive Queen Elizabeth II Bridge, in terms of scale and design, is probably one of the most dramatic features of Kent Thameside and Thames Gateway, and demonstrates the ability of skyline features to become important landmarks beside or across the

River. The design strategy should maximise riverside views and vistas, both from and to the site. Additionally, historical, archaeological and cultural features of the River Thames, including small items such as mooring bollards, provide reminders of the river's commercial past and should be preserved and displayed wherever possible.

4.5 In terms of the operational River, there is a need to take proper account of river safety issues. Where these have implications for the exercise of its planning powers, the Council will look to the appropriate bodies, including the Port of London Authority (PLA), to provide advice. Proposals for development at Swanscombe Peninsula will need to take account of the existence of the navigation radar station at Broadness Point, together with the lighthouse and meteorological station also located with the radar. An area of land at the northernmost point of the Peninsula will therefore be required to be kept free of any visual obstructions. In addition to the radar facility, visual sight lines are also important for shipping purposes, as vessels travel around the bend in the River created by the Peninsula, and as a result, the masterplanning for the site will have to address the need for these sight lines when designing the form and heights of future built development. Close liaison with the PLA will therefore be necessary. There is also the need to protect the integrity of the tidal defence system of the River Thames (see Policy RT6).

#### **Ports and Wharves**

4.6 The significant growth in development within Kent Thameside planned for the next 20 years will generate considerable demands for the importation of goods, including minerals. To the east of Crossways and west of Greenhithe Village lies the Johnson's Wharf aggregates depot where sea-dredged aggregates are imported. In planning terms, the depot is an important existing, established facility within Kent Thameside. Aggregates and other materials vital to the regeneration of the area are delivered in a sustainable manner (helping to reduce freight traffic on roads) and, consequently the existing use is safeguarded from prejudicial development. Bells Wharf and Whites Jetty, located on the Dartford side of the peninsula, are safeguarded specifically for bulk materials handling for phase 2 of the Channel Tunnel Rail Link.

4.7 The Local Plan Review makes the proviso that should the present operations at Johnson's Wharf cease, there may be opportunities to relocate the facility to a location less sensitive in terms of its inter-relationship with neighbouring uses and its environs but which could still serve Kent Thameside needs, for example, at Swanscombe Peninsula. This is not envisaged to be within the western portion of the Peninsula, where development will reflect the character and type of uses established at Ingress Park.

#### **Landform**

4.8 Before the construction of new infrastructure and buildings can begin, a substantial amount of earthmoving will need to be undertaken to re-profile the site into viable development platforms which are safeguarded from any tidal inundations of the River Thames. The Environment Agency requires the land to be raised to ensure that future habitable rooms within houses are 7.4 metres AOD. Over the entire peninsula the earth working required will be an extensive and costly exercise and accordingly, is likely to be undertaken in distinct phases. This brief requires that ground stability be ensured and that surface and ground water flows should be adequately assessed, in conjunction with the Environment Agency, to arrive at the best practical solution and address a full range of issues including land drainage and nature conservation objectives.

4.9 Factors that should guide land raising are:

- the need to establish an optimum land formation that both creates an attractive environment and provides appropriately sized development platforms to accommodate the proposed quantum of development;
- the need to establish a landform that facilitates access from London Road and Ingress Park;
- the need to establish a land formation which permits access to the riverside but avoids the possibility of flooding of the site and other property not hitherto affected;
- the need to establish a landform which recognises, protects and enhances ecological value and interest within the site;
- the creation of spaces and corridors which form part of the Green Grid network and linking these areas within the site to the remainder of the Green Grid;
- the need to provide areas for strategic landscaping as part of the site's infrastructure;
- the need to create the appearance of a soft, natural landform rather than a hard, engineered environment;
- the desirability of using landform to help establish visual richness and create distinct character areas within the site to which future residents, workers and visitors can relate; and
- the desirability, wherever feasible, of encouraging walking and cycling.

4.10 All earth working will be subject to Environment Agency licensing regulations, ensuring that there is no unacceptable adverse impact on surrounding residential areas.

4.11 Development proposals must include a site preparation strategy with clear overall proposals for such matters as:

- the cessation of current uses;
- the removal of any redundant industrial and/or utilities plant;
- the implementation of any necessary mitigation works to deal with contamination;
- land raising in order to prevent the possibility of tidal flooding;
- the provision of drainage and water bodies;
- the provision of stable re-graded development platforms;
- routes for utilities and subsequent access; and
- the conservation and enhancement of any existing natural assets.

### **Archaeology and Heritage**

4.12 The relatively undeveloped coastline of the Swanscombe peninsula has been considered to be of high historic environment potential in a recent desk-based assessment of the north Kent coast (Wessex Archaeology 2000). It is understood that the “Manorways” may have their origins in the inning of the marsh in the 12<sup>th</sup> to 13<sup>th</sup> centuries. There is the potential for significant archaeological remains to be present within the intertidal zone and also for evidence of historic land reclamation together with buried early land surfaces within alluvial areas, as recently discovered during work for the Channel Tunnel Rail Link.

4.13 The north Kent coast, and the Swanscombe area in particular, was very important for the development of both Roman and Portland cement in the nineteenth century. In 1825, James Frost opened the first cement works producing the new ‘British cement’ at Swanscombe. The first reliable and fully understood production of Portland cement anywhere in the world occurred at the Swanscombe works in the 1840s. The development of the cement industry led to ever expanding quarrying for chalk in the surrounding area, and the development of tram networks together with wharves along the River Thames. A whiting works was established near the cement works in the 1930s. It is not clear on the basis of present evidence what, if anything, survives of the earlier industry within the site. If earlier structures were present they could be of considerable importance. Craylands Gorge, a former tramway linking Eastern Quarry with the cement works, connects with the development site via tunnels through the Chalk bedrock, and is one of the few survivals in the area of this important industry. As a result of its long history, the cement works at Swanscombe is likely to have an extensive and detailed archive. It is important that this material is kept in an appropriate store and is accessible to researchers.

4.14 As a direct result of the quarrying for chalk, the removal of extensive areas of sands and gravels in the area south of the development site led to the discovery of important Palaeolithic remains including the famous Swanscombe skull, in what is now Swanscombe Heritage Park, to the south of the Swanscombe peninsula site.

4.15 A comprehensive examination of the heritage assets of the site needs to be undertaken to inform the future design of the site – early liaison with the County Archaeological Officer is recommended. It is important that proposed development at Swanscombe Peninsula respects and enhances any surviving historic environment features within the peninsula itself – (such as historic boundary markers and the flint walls associated with the historic Lovers Lane route, and the distinctive flint wall which runs along the London Road) - and also is designed to respect and link in with heritage features and the wider historic environment in the surrounding area. Improved understanding and interpretation of the heritage of the area offers an important opportunity to help develop a sense of identity for new communities, and to develop links with existing communities whilst helping to foster a sense of belonging and pride in the environment. It is also important that any future interpretation relating to this site is linked with strategies being prepared for interpretation at sites within the adjacent area and Kent Thameside as a whole.

### **Contamination**

4.16 Contamination on the site relates principally to areas that have been used for the processing and tipping of cement products and waste materials. Appropriate contamination land surveys in accordance with published guidance and the use of appropriate risk assessment tools ie the Contaminated Land Exposure Assessment (CLEA) guidelines will be required to establish the nature and extent of any contamination issues. This is especially important where residential development or public areas are envisaged or where there are possible impacts on controlled waters and/or ecosystems. Where contamination issues arise, remedial action will need to be identified and implemented prior to development taking place. This is in line with Policies NR20 and NR21 of the Local Plan Review Second Deposit Draft.

### **Air Quality**

4.17 Monitoring stations have revealed high levels of NO<sub>2</sub> and particulates in the Dartford area. An air quality impact assessment will be required prior to determining any planning application. The assessment methodology will need to be agreed and will include those areas beyond the boundaries of the proposed development that could be impacted by an increase in road traffic. The results of the impact assessment should guide the design of the layout of the development, including the public transport infrastructure.

### **Built Form**

4.18 The Local Plan Review Second Deposit Draft requires that Swanscombe Peninsula West be developed in the form of a high quality, compact, mixed use, urban village. Although there is no universal blueprint for the model urban village, the Local Plan Review Second Deposit Draft's Development and Design chapter contains useful guidance on the two key themes of **public transport orientated development** and **walkable neighbourhoods**.

4.19 Fundamental to this concept is that as many people as possible should live (and/or work) as close as possible to nodal points on public transport routes in order to encourage the provision and use of public transport. The services and facilities they require to meet their day to day needs should also be focused on or at public transport nodes. Particular facets of this approach are:

#### *Public Transport*

Development should be most dense around public transport stops - provision will therefore influence the way in which the overall pattern of development density is planned and vice versa. The aim is for public transport infrastructure and services to be planned for and integrated with the built development, in such a way that it becomes the preferred mode of travel within Kent Thameside, for both business and pleasure. Fastrack – Kent Thameside's high quality bus-based local transit system will form part of the public transport solution here. Modern infrastructure must be used to facilitate fast, frequent and reliable services and respond to passenger needs and comfort. Segregation from other traffic is one tool that can help in delivering this. Good public transport provision must be provided from the earliest stages of development. Main public transport stops should have good cycle parking.

#### *Walking Distances*

The overall aim is for most development to be located "right on top" of public transport connections. Uses that are likely to generate or attract any significant number of trips should be within no more than 400 metres walking distance of a good, or potentially good, public transport service - less if uphill walking is involved. Employment, education and leisure uses that are particularly intensive should be located considerably closer than this. Residential development should be located within convenient walking distances of community uses such as convenience shops, schools and recycling facilities.

#### *Densities*

Development should be concentrated as close as possible to public transport routes. Plot ratios for commercial developments should be at least 1:1 close to main public transport stops and 0.5:1 beyond the 200 metre mark.

#### *Permeability*

Permeability – that is, the extent to which an environment allows people easy access through it, either by means of safe footpaths, cycleways, streets or landscaped areas – should be apparent throughout the development and designed with care to be most effective close to public transport stops.

#### *Priority for Non-Car Modes*



Full consideration of the needs of pedestrians, cyclists and public transport and their priority over the car should be an integral part of the design process and solution. Accordingly, as a fundamental principle, routes for walking, cycling and public transport should be attractive, safe and convenient.

#### *Creation of the Urban Environment*

To encourage walking, the street scene should be designed at a pedestrian scale, visual interest created and continuity of the pedestrian route maintained. Built form should determine highway design considerations.

#### *Parking Strategy*

In its end form, the development should be served by very good public transport with parking provision in accordance with adopted maximum parking standards. Notwithstanding the potential for high public transport patronage, car parking provision will still need to be designed to ensure that on-site, on-street car parking problems do not arise. In the early years, when public transport services are still being developed, less strict standards may be applied, although the emphasis will still be upon keeping parking levels to a minimum. To this end, the Council will require a comprehensive Parking Strategy that will link provision of travel alternatives with parking levels.

#### *Traffic Reduction*

A public transport orientated development such as Swanscombe Peninsula West should provide other travel alternatives that seek to reduce car dependence. However, the car may well be the most suitable means of travel for some journeys. Initiatives such as Community Car Clubs can help to reduce the need for people to own cars, while still retaining their ability to have access to a car if they need one. Car Clubs are now gaining in popularity in different parts of the UK and are already well established in parts of mainland Europe. Development proposals should include a thorough assessment of how car use can be minimised.

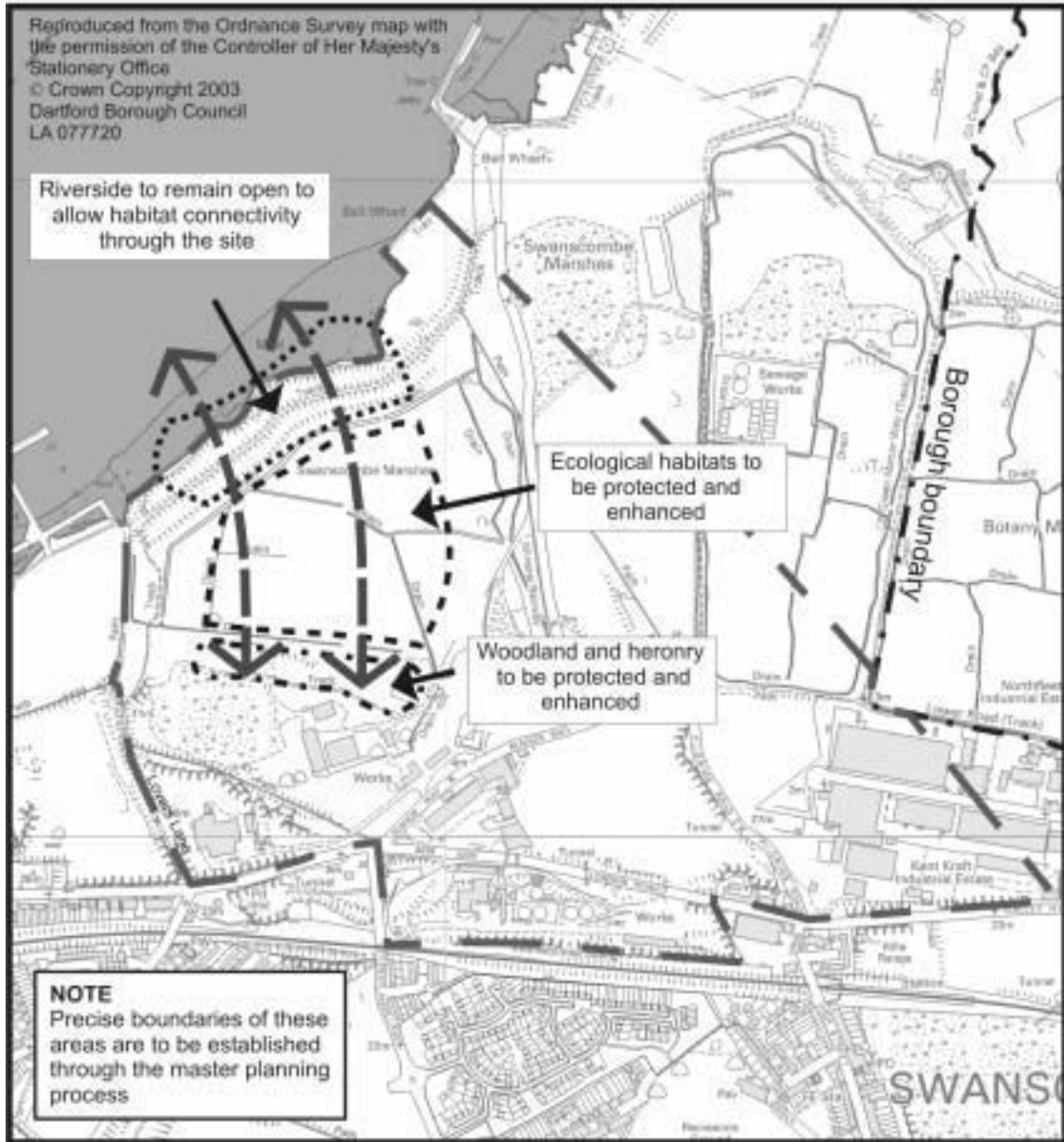
### **Development Pattern and Land Uses**

4.20 Background work undertaken in conjunction with the preparation of the draft brief and early environmental work has determined a spatial approach to Swanscombe Peninsula West which is driven by the ecological assets present on the site. Significant local nature conservation exists within the drainage systems of Black Duck Marsh and the woodland to the south of this area. It is important therefore to maintain these areas and their connectivity with the River Thames. Accordingly, a design premise which incorporates these natural open areas and their connection to the River will guide the future development of the site. As a result, the frontage to the River will remain largely undeveloped. Figure 4 gives spatial expression to this approach.

4.21 Integration with development at Ingress Park is fundamentally important, especially in terms of place making and building communities. It is vital therefore that built development at this western end is “seamless” in its transition from Ingress Park to Swanscombe Peninsula West. In design terms the built form needs to “finish” this edge of development and provide a

specific backdrop for the ecological area, create a strong sense of place, and highlight the natural aspect of connections to the River.

Figure 4 Nature Conservation



4. 22 Within Swanscombe Peninsula West, development at the upper end of the range of densities to be provided should be focused upon the proposed public transport route(s) which will run through the site and, to a lesser extent, upon the connecting routes of feeder services within the site. Such development may also be appropriate along the riverside, although careful attention will need to be paid to design to maintain and create interesting views and vistas (see particularly 4.88), and also to ecological considerations. Such development should maximise the views and sense of identity provided by both the River Thames and in particular, the Dartford Bridge – the use of “cutting edge” architectural styles may be appropriate in order to capture the essence of the site’s riverside location.

4.23 Swanscombe Peninsula West will incorporate the **urban village concept**. This will include the creation of suitable village focal points. Whilst this Brief is about Swanscombe Peninsula West, the location, scale and range of facilities to be provided should take account of planned provision at Ingress Park (that planning permission includes a local centre in the north east of the site) and existing provision in Swanscombe (Milton Road/Milton Street/Craylands Lane and Swanscombe High Street). New facilities should be designed to serve locally generated needs. Retail uses in particular will be limited to a small number of A1, A2 and A3 uses which will cater for local “top-up” and basic service needs. It will be important to demonstrate that these uses will complement, and not compete with, existing facilities in Swanscombe and those to be provided at Ingress Park. Community focus will also naturally gravitate toward the school sites and there may be the opportunity to reinforce this with other community uses co-located. They should be located at nodes on the public transport network and function as a focus for social and economic activity. These would include a mix of community facilities and services together with employment compatible with residential development. Stops on the public transport route(s) that are not within the centres should also be a focus for higher density residential development, as well as significant employment generating uses.

4.24 Policy MDS7 proposes that Swanscombe Peninsula West should contain a **range of uses** – primarily residential with supporting community, leisure, employment and retailing uses meeting local needs together with areas of public open space and water features - at least 25% of the site area is to remain undeveloped to form the Green Grid structural elements, in addition to local open spaces within the built up areas. The resulting land use mix must comply with the policies and standards contained in the Local Plan Review Second Deposit Draft. An intended mix, in the form of a land use budget, should accompany the master plan.

4.25 The disposition of the main uses and their intensity will be influenced by the guiding principle of **public transport orientated development** as described above. **Mixed use elements of the development**, such as local centres should be located along public transport routes and other uses that generate high traffic movements should be located at public transport nodes. Elsewhere, individual uses may be more likely to predominate (although still within a mixed use setting). There may be a preference to locate business uses close to Fastrack stops, but on the (particularly southern) periphery of the site so that extra traffic is not drawn into and/or through the site, and further work at the master planning and transport assessment stage will need to resolve this issue. It is important that wherever possible, an appropriate mix of residential and other uses should be provided once initial development has begun.

4.26 **Areas of open space** will be required within the site (see paragraphs 4.78 to 4.82 for further details on how this will contribute to the Green Grid network) with appropriate links

between them. It will be important to prepare a Biodiversity Action Plan for the site to accompany the Master Plan. In addition, the greening of the residential environment itself should form a strong theme within the development, and in turn, contribute to local biodiversity. It is also anticipated that there is potential for the inclusion of open water features in parts of the site. Positive management plans will need to be in place, for example to ensure that potential disturbance factors are minimised to enable local wildlife to flourish. It may be possible for the resulting water bodies / marshland to be multi-functional in terms of visual amenity, local biodiversity, sustainable urban drainage, and passive leisure and recreational potential.

### **Community Building and Social Inclusion**

4.27 Proposals should also include a clear statement on **community development and infrastructure provision** to be submitted to the Council for approval. A key aspect of this will be the integration of the Swanscombe Peninsula West development with existing communities (Knockhall, Swanscombe and Galley Hill / Northfleet) and with new development at Ingress Park and proposed development on Swanscombe Peninsula East. Swanscombe is one of three wards in the Borough covered by the Thames Gateway Urban II programme. This programme aims to encourage innovative approaches to urban regeneration. The programme will bring approximately £7.4 million to Kent Thameside over a 6 year period and will concentrate on 3 key themes: Social Inclusion, Access to Learning and Business Infrastructure and Regeneration. Development proposals should have a positive relationship with existing communities. Consultation with Swanscombe & Greenhithe Town Council and liaison with the Urban initiative should take place. It may be possible to incorporate innovative approaches to the provision of seedbed workspace for small businesses and early dialogue with the Council's Economic Development Officer should take place. A local labour scheme was used to develop Bluewater, that utilised, and where necessary trained, local labour to help with the construction and implementation of the development. The Council is currently developing this sort of approach into a "local employment initiative" which will comprise an "umbrella" scheme within which individual projects will sit. The development proposals will need to feed into this scheme in order to demonstrate positive integration with the local community. This may include an element of self build that would help address issues associated with integrating new and existing communities. For all aspects of community building, early discussions should be held with local stakeholders to ensure that viable projects have time to gain momentum and be programmed and delivered to meet the acknowledged needs. A useful resource in developing projects will be the recently published "Swanscombe Neighbourhood Renewal Action Plan". The proposals' statement on community development and infrastructure development will need to demonstrate a positive relationship with the recommendations contained in this Plan.

4.28 This brief gives the Council the opportunity to highlight the nature and scale of community facilities which will likely be required to serve the needs of the proposed development although this list is not exhaustive (for instance, adult education and youth and

community needs remain to be quantified). The Local Plan Review Second Deposit Draft contains guidelines, which have been devised in conjunction with the relevant service providers, for assessing requirements. Readers of this brief are advised to consult the Local Planning Authority for further technical details relevant to these requirements. It is particularly crucial in terms of assessing the requirements for anticipated development to have regard to figures for both Swanscombe Peninsula West and the overall Dartford portion of Swanscombe Peninsula (due to the uncertainty about eventual uses within Gravesham, these figures apply only to land within Dartford Borough). The following table generates requirements (based on a purely mathematical calculation) for both 1,700 and 2,700 units respectively of:

Type of Community Infrastructure	Swanscombe Peninsula West Policy MDS7 1,700 units	Swanscombe Peninsula* Policies MDS7+MDS8 2,700 units
Primary Schools, (2 ha in area for a 2FE and 1.15 ha in area for a 1FE) Pre-school provision would be approximately 500 sq m if attached to a primary school.	Three (1x 2FE and 1x 1FE**)	Five (as left plus 1x 2FE)
Secondary School (up to 8 ha in area)	Financial Contribution Required	One
Community Halls - A temporary community hall is necessary at the early stages of development to help enable a community to become established	One	Two
Sports and Leisure Centres	One	Two
Social Services (Provision usually forms part of a joint facility located at for example schools or health centres)	One	One
Places of Worship	One	One
Health Centre (to provide General Practitioner, General Dental Practitioner and Community Health Care Services)	One	One
Library	One	One
Local Shopping Centre	Two	Three
District Shopping Centre	One	One

\* Within Dartford Borough - further discussion will need to occur to establish the position within Gravesham

\*\* The LEAs optimum size for a new primary school is 2 forms of entry (FE), and therefore the 1FE school proposed should be combined with the 1FE provision already in the pipeline at Ingress Park (to make a 2FE school).

These requirements indicate the scale of needs, not the eventual form of delivery. The numbers of facilities are not fixed and should not preclude innovative approaches to the design and delivery of provision. The design and location of these facilities are of vital importance to the overall quality of the development and it will be important to consider the role that proposed leisure, community and other uses can have in contributing to local vitality, accessibility and

sense of place. The developer should work with the Council's Economic Development Officer, where required, to ensure that the occupation of any retail units is secured. The master planning of new development at the site needs to provide the mechanism for providing an important opportunity to promote other specific initiatives arising from feedback from the local community or the Urban Initiative for example. The Masterplan process should demonstrate that meaningful engagement with existing communities has taken place to inform community integration issues.

4.29 The document "Sustainable Communities Building for the Future" produced by the Office for the Deputy Prime Minister sets out the key requirements for sustainable communities. These include the following:

- Sufficient size, scale and density, and the right layout to support basic amenities in the neighbourhood and minimise use of resources (including land);
- Good public transport and other transport infrastructure both within the community and linking it to urban, rural and regional centres
- A well-integrated mix of decent homes of different types and tenures to support a range of household sizes, ages and incomes.
- Good quality local public services, including education and training opportunities, health care and community facilities, especially for leisure.

The Council needs to be satisfied that all the requirements for a sustainable community have been met. An integral part of the master planning process should be to clearly identify, and provide for in terms of land take, the community and infrastructure needs generated by the development. By the planning application stage, the proposals should be able to identify how these might be programmed, delivered and funded. (The new Kent & Medway Structure Plan: Deposit Plan – a material consideration from September 2003 – includes Policy QL13b) to this effect). The community development and infrastructure provision statement should include indication of how, when and where key elements of physical and community infrastructure will be provided. Community stakeholders (including Swanscombe & Greenhithe Town Council) must be fully engaged from the start. Programmed provision should complement existing facilities and take account of the objectives of the "Swanscombe Neighbourhood Renewal Action Plan". This implementation statement will require close liaison with neighbouring land owners and developers from different sectors ie residential, commercial and other sectors to ensure that the component parts of the development come forward in a co-ordinated way.

4.30 In principle, provision should be made on site. Alternative locations may be appropriate on adjacent sites if these can better serve the needs of the development. Community facilities should be located as much as possible within or near the centres. Provision can be made in the form of entirely new facilities, or upgrades to existing provision. New provision can also be co-



located and/or integrated and this can bring sustainability benefits for example maximising opportunities for linked trips. This approach must be acceptable to the relevant service providers. Temporary solutions involving phased or incremental provision may be appropriate in the early years of a development to ensure that facilities are provided concurrently with the residential development to which they relate. This will be especially important given the relationship between development of the West site and the remainder of the site.

4.31 In principle, all Kent County Council service providers will need a presence on the site. The current preference is for these services to be provided in a “campus” style format. The campus would need to be centrally located with excellent accessibility. The campus would provide services from “cradle to grave” and reflect “Life Long Learning” principles. Externally, the layout and building design needs to maximise opportunities to “design out crime” and internally, the facilities need to be capable of providing flexible spaces that can accommodate a variety of uses.

4.32 Adequate provision of **affordable housing** is crucial for the success of Kent Thameside development. It is vital for the proper functioning of the local labour supply market as well as the creation of mixed communities. A Housing Needs Study for Dartford Borough was finalised in 2002 and the results fed into the Local Plan Review Second Deposit Draft. This indicates that the local planning authority will seek to achieve 30% of the residential accommodation to be provided as affordable housing.

4.33 Affordable housing should be interpreted within the context of this site as meaning residential accommodation provided with a subsidy to ensure that the rent or sale price is set and remains at a level that is genuinely affordable to local people whose income does not enable them to secure housing adequate for their needs through the open market.

4.34 This could be achieved through a variety of means and might include submarket housing options such as shared ownership or entry level initiatives designed to address the needs of key workers in the area, as well as social rented accommodation which responds to the needs of those on the Council’s Common Housing Register. Additionally, in conjunction with assessing housing needs, a “Private Sector Stock Condition Survey” was completed in 2001. This showed real issues for the locality and noted that “the second highest level of substantial disrepair is found in Swanscombe and Greenhithe” in addition to a 6.2% rate of unfitnes. As guidance evolves at the national planning policy level (for example the consultation relating to affordable housing carried out on PPG3 suggested “there may be scope to address opportunities arising in the existing stock”) there may well be the opportunity to develop a strategy here, which diverts some of the resources for affordable housing into enhancing the contribution of the existing stock. Early engagement with the Council’s Housing Strategy Team is advisable to determine an appropriate strategy for provision.

4.35 In line with circular 6/98 where it is not proposed that an RSL approved by the Council will manage housing, the Council will expect to see measures in place that restrict occupancy to households who are genuinely in need, are affordable at both the outset and longer term and are safeguarded through planning agreement.

4.36 The size, tenure and mix of affordable homes, including any requirement for specialised housing to meet particular need groups, provided as part of a development proposal will be expected to reflect the local needs as identified by the Council in its annual Housing Strategy, taking account of any relevant guidance issued by government at the time. Potential developers are encouraged therefore to make early contact with the Housing Strategy team at the Council for the latest assessment of need.

4.37 The authority is keen to avoid high concentrations of affordable housing, particularly flatted accommodation, in one location and will expect the **affordable housing** provision to be both reasonably proportionate with the footprint of the residential development site as a whole and well related to the rest of the residential units. This might be best achieved by arranging the affordable housing in small clusters or by “pepper potting” them amongst other residential units. There is an expectation that affordable housing will be provided pro rata in line with the development of market housing units.

4.38 The Council is keen to improve the long-term “usability” of new homes. **Lifetime homes** include 12 basic features to ensure a new house or flat is suitable for all stages of its occupants’ lives and is adaptable for use by people with disabilities. Essentially this means designing the house in such a way that it can be easily adapted with less disruption to occupants. Part M of the Building Regulations covers this issue but aims to achieve a “visitorability” standard rather than a lifetime home standard. Policy H21 and Appendix 6 of the Local Plan Review Second Deposit Draft sets out the design criteria which will be sought over and above that required by Part M. It is the Council’s intention to seek lifetime homes at a rate of 25% of general market housing and 25% of affordable housing.

## Utilities

4.39 This planning brief promotes a coordinated and sustainable approach to the provision of ‘utility infrastructure’. The community development and infrastructure provision statement should ensure that trunk infrastructure is determined at the outset, and planned for the whole site. The sustainable provision of infrastructure can be encouraged through providing trunk services. This helps negate the incremental effects of developments by individual developers, often experienced on sites the size of Swanscombe Peninsula, and the associated cumulative demand for incremental expansion. A coordinated approach to utility infrastructure would also facilitate the proposed phasing of development, outlined in paragraph 6.5. In this regard, it is



essential that routes are reserved for services at the earliest stages in planning developments and phased strategies developed to economically serve the proposals. Separate utility corridors should be considered in areas where the maintenance of continuous public transport provision will be an issue.

4.40 Utility companies have been consulted on the content of the brief. Southern Water, for example has highlighted the requirement for development to provide increased capacity of the pumping station at Swanscombe to transfer extra flows arising from the development to Northfleet Wastewater Treatment Works. They have also advised that with regard to Northfleet treatment works, this will also need upgrading to accommodate the additional flows arising from all new developments in the area, including Swanscombe, although they do not anticipate that the existing site boundary will need to be altered to accommodate the upgraded treatment facility. Continued dialogue with the utility providers is recommended.

### **Access and Circulation**

4.41 The preparation of an access and circulation strategy should maximise opportunities for creating effective linkages between existing and new communities. The strategy should address walkers and cyclists as well as motorised traffic. The concept of good public transport is fundamental to the minimisation of traffic generation and achieving public transport orientated development in order to realise the site's capacity and to meet sustainability objectives. Its peninsula location and phased development programme, however, means that access and circulation matters need to be carefully considered in both the short and longer terms, as well as the wider context of the site. If they are not properly and comprehensively addressed at this early stage, the potential for successful, sustainable development could be compromised.

#### *Public Transport - Fastrack*

4.42 Fastrack is a comprehensive, bus-based public transport system which will operate throughout Kent Thameside. It will be provided on a network of dedicated "track" consisting of bus-only roads, on-street bus lanes and priority at junctions. The development proposals must provide for the procurement and provision of *Fastrack* infrastructure as an integral part of the development. They must also secure the on-going, long term provision of appropriate services on this infrastructure. The east-west Riverside core Fastrack route is planned to link Dartford and Gravesend with the major riverside development sites in between including North Dartford, Crossways, Ingress Park, Swanscombe Peninsula and Northfleet Embankment. Any development at Swanscombe Peninsula West needs to provide for the Fastrack Riverside Route as it passes between Ingress Park to the west of the site and suitable points at the eastern boundary that will allow further connections eastwards towards Gravesend and

southwards to Ebbsfleet. For the reasons noted at Paragraph 4.19 of this Brief the east-west Fastrack route through the site should be segregated from other traffic and delivered at as early a stage as possible. It is recognised however that the detail of the alignment will evolve as the development progresses. In addition to the delivery of specific *Fastrack* corridors, there will be a requirement to provide Fastrack service connections to the wider parts of Kent Thameside, especially Ebbsfleet, Bluewater, Eastern Quarry, Dartford and Gravesend.

4.43 As part of the *Fastrack* network, provision is to be made for high quality stops and, where appropriate, interchanges. Real-time information must be provided at the stops. *Fastrack* stops should be sufficient in number to minimise walking distances, whilst not being so frequent as to have a negative effect on journey times. Appropriate enforcement measures will be needed to ensure that unauthorised vehicles will not use Fastrack infrastructure. A detailed Fastrack specification will be provided to assist in making appropriate provision. Financial contributions towards the securing of important off-site links in the Fastrack network, such as Everards Link, may be required. The Transport Assessment will need to determine the quantity of development that can be accommodated prior to such links being provided.

4.44 Development proposals will need to demonstrate that the required public transport solutions for the site will benefit existing communities (for example along London Road) as well as new development areas.

#### *Local Public Transport*

4.45 Provision for local bus routes to provide services to parts of the site not served by *Fastrack* will also be needed. The developer, operators, the local planning authority and the local transport authority will need to consider together the potential routes that will be needed at each stage of development. Local bus services will be needed in some parts of the development before a *Fastrack* route can be established, and provision should be made for other bus services to serve the site, complementing the *Fastrack* network once that is established. The road layout should be designed to give priority to buses over cars.

4.46 Within the site, specific *Fastrack* corridors will not provide the only routes for buses. Other roads need to be suitably designed to enable some additional public transport penetration to parts of Swanscombe Peninsula West that *Fastrack* does not reach.

4.47 Development proposals should also show what locations local bus routes would need to serve in addition to those destinations accessible from the site by Fastrack in order to maximise the site's accessibility by public transport.

### *Public Transport - Rail*

4.48 Swanscombe Peninsula West is not directly served by rail. However, development in Swanscombe Peninsula West will need good links to both Swanscombe and Ebbsfleet stations. These should be in the form of attractive pedestrian and cycle routes and local public transport services. Development at the site may offer an opportunity to develop a new eastern access onto Swanscombe Station. Developer contributions may be sought towards this and towards improvements at the station itself.

### *Road Infrastructure*

4.49 The peninsula site will be developed over the long term and the impacts of its phased development, in terms of traffic generation, will emerge over time as well. As such, the full requirements of development at the peninsula will not be determined until a future date. It is worth emphasising however, that development at the peninsula may generate a need for financial contributions to projects such as the London Road/St Clements Way junction improvement and "Peninsula Way".

### *London Road*

4.50 London Road is an important transport spine through Kent Thameside. Development at Swanscombe Peninsula will create additional traffic on this route, and development proposals must include a Transport Assessment to ensure that resulting traffic growth can be accommodated in a sustainable way, not least because of community concerns and impacts from already growing traffic levels. This overall assessment should address three strands:

- The provision for modes of transport other than the car, along London Road or parallel routes, in order to reduce the overall traffic generation from the development, and hence on London Road;
- Provision of measures to minimise adverse effects of traffic generation on the local community in general; and
- Specific measures to provide a range of alternative and additional routes to reduce the levels of traffic that may need to use London Road;

4.51 In the first case, reducing reliance on the private car is a key objective of development sites in Kent Thameside. In particular, the need to provide measures to maximise use of east-west *Fastrack*, local bus, cycling and walking routes will need to be determined.

4.52 In the second case, where required, it will be necessary to introduce measures to reduce the intrusion of traffic on people living in homes adjacent to London Road. This might include, for example, widening of narrow footways and better facilities at bus stops.

4.53 In the third case, consideration will need to be given to the provision of more than one access point – for example, through the Crest site to the west – although this will have to be an indirect route so that “rat running” is not encouraged.

4.54 Good linkage to Swanscombe Peninsula East will also be needed. This might include a route around the northern side of the peninsula, although the technical feasibility of constructing over the CTRL route will have to be considered.

#### *Greenhithe*

4.55 The intersection of London Road with St. Clement’s Way, a short distance to the west of the site, is a particularly important node on the local highway network. This roundabout junction is already beginning to show some delay at peak periods and further development is likely to exacerbate any problems. It is not likely, however, that capacity problems here can be dealt with in a piecemeal fashion, and so a number of options for improvement have been considered by the highway authority. The Highway Authority has evolved a scheme for improving traffic flows at this junction, including measures to improve priority for Fastrack and other public transport.

4.56 Development proposals at Swanscombe Peninsula will need to determine the level of development which is feasible before the proposed improvement of London Road/St Clements Way is triggered. Beyond this level, improvement proposals would have to be in place to address the impacts of further development, and it is expected that appropriate contributions would be required.

#### *Peninsula Way*

4.57 The earliest visions for Kent Thameside identified the option of providing a north-south link towards Ebbsfleet and the A2. Known as “Peninsula Way”, there is a requirement in the Ebbsfleet planning conditions which reserves a corridor for this provision. It is likely that enhanced access to the peninsula will be necessary in order for the total development potential of the peninsula to be realised.

4.58 The earlier option of “Peninsula Way” may not necessarily be realised as originally envisaged, although the original purpose and objectives of “Peninsula Way” are still current and can be set out as follows:

- Local access – It must provide local access for the Peninsula and the surrounding area;
- Kent Thameside facilities – It must provide accessibility between the Peninsula and the facilities provided within the wider Kent Thameside area ie. Bluewater, Ebbsfleet Station etc
- Facilitate *Fastrack* – It must facilitate high-quality *Fastrack* links through the area, in particular the Riverside Route;
- Relieve London Road – It must provide a degree of relief to London Road by providing additional permeability, and hence route choices, in this part of Kent Thameside.

Development proposals therefore, must address each of these in turn and provide a satisfactory solution.

4.59 **New access points** into the site will be required for both general traffic and/or public transport services (with suitable priority given to the latter). They are expected to be:

- in the west of the site from the Ingress Park development, (with a connection from this to London Road at or near Manor Way);
- in the south from London Road at Manor Way; and
- in the east of the site, provision for linking to new roads that are to be constructed to service Swanscombe Peninsula East.

4.60 Proposals must include a **Transport Assessment** which must demonstrate the suitability of these access points together with any necessary off-site highway improvements. Any necessary transport improvements should be provided prior to development or, if not, prior to the phase of development that requires them. Additionally, the proposals will need to demonstrate how accessibility will be maintained during the CTRL works.

#### *Local Roads and Streets*

4.61 The overall form of development in Swanscombe Peninsula West should be of a “permeable grid” nature, where walking, cycling and public transport routes need to be more direct than equivalent routes by car.

4.62 Successful environments are those designed at the human scale with the needs of the pedestrians, cyclists and public transport taking priority over car use. As such, development proposals should follow the principles set out in “Places, Streets and Movement” (DTLR 1998). The built form will determine the design of roads within the development to fit within a clear hierarchy of spaces and places and provide for pedestrian and cycle movement before vehicular

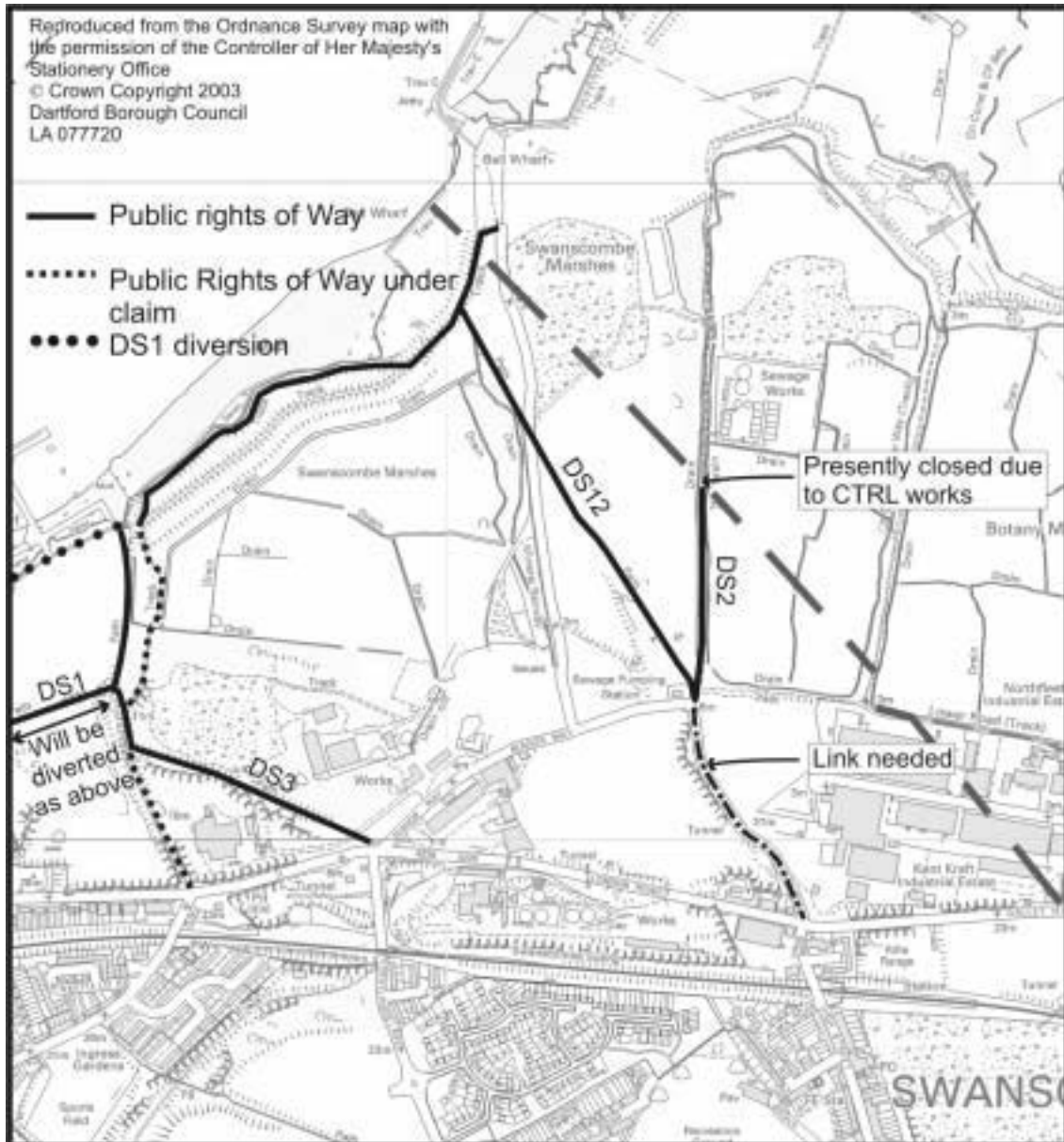
movement. Road layouts should be designed to have in-built speed restriction by means of their horizontal alignment and width. The incorporation of “Home Zones” should be explored at design stage.

### *Walking and Cycling*

4.63 Good quality **pedestrian and cycle routes** are a vital component within an urban village to provide ease of access between where people live and the facilities they need. The ability to walk or cycle to the centres and to *Fastrack* and bus stops along convenient, safe, interesting and attractive routes will be particularly important. Similarly, such routes should also be provided to establish links with the surrounding new and existing communities. The creation of a suitable network of Public Rights of Way (PROW) will need to be addressed in a holistic manner. Establishing desirable pedestrian linkages at the outset can help shape the form of development. Currently, there are 4 PROW within the site in addition to the “Lover’s Lane” route which is under claim – see Figure 5. The development proposals should provide for the following:

- At Ingress Park there are plans to divert existing DS1 from the middle of the site to a location along the riverside. The path is to be a minimum width of 2 metres and will be located along the river side of the flood bank along the concrete apron of the flood wall. This must be continued along the frontage of the Swanscombe Peninsula West site with uninterrupted views of the River. (At Ingress Park along the diverted route of DS1 there is a cycle track at a higher level – this segregated provision needs to be continued along the SPW frontage.
- DS3 should be kept in situ to provide a paved route connecting communities with facilities.
- The “Lovers’ Lane” corridor needs to provide a route which is as natural as possible, connecting London Road to the riverside. This should provide a route which is 7 metres in width, at grade, and aligned with natural areas wherever possible. The configuration of built development along this route will provide opportunities to “loop back” similar to the existing routes under claim.
- DS12 corridor – A north/south route needs to be provided to connect London Road with the riverside at the eastern end of the site – ideally, up through the Pilgrim’s Road corridor and northwards. This needs to be 15 metres in width and should incorporate a 1.5 metre width segregated cycle track within it.

Figure 5 Public Rights of Way



4.64 Routes with a primarily recreational function must be designed carefully. Many recreational walkers/cyclists only travel short distances before they wish to loop back to connect with transport and other local facilities e.g. shops, pub etc. The riverside route, in particular, should accommodate this need wherever possible. Wherever these routes approach the eastern boundary of the site, thought must be given to how these will eventually connect up with movement corridors on Swanscombe Peninsula East. Where PROW cross roads, suitable crossing provisions will be required. Public Path Creation Agreements will be required to ensure that future maintenance of these paths rests with the owner of the land. In all cases, early dialogue with KCC's PROW team is recommended.



4.65 New access ways into and out of the site (as described above) should contain safe dedicated routes for both pedestrians and cyclists. Where historic access routes exist, such as Lovers Lane, these should form the basis for the location of new access ways within the development wherever possible.

#### *Car Parking*

4.66 Proposals must be accompanied by **Travel Plans** as a means of encouraging less car use and, hence, the need for car parking. Initiatives such as “car clubs” which reduce the need for car ownership should be explored. Another option to explore is providing some residential or business space through a management company on a lease basis with any excess revenue being used to subsidise public transport.

4.67 The Travel Plan should include a monitoring strategy in order to ensure that trip generation is within the capacity of the infrastructure at and serving the site. Mitigation measures may be necessary such as increased levels of lease charge for car parking or subsidies to public transport either to reduce fares and/or to improve frequency/penetration and publicity. This approach has been followed for the Dartford Park development at North Dartford.

4.68 One of the main aims of the Council’s adopted maximum car parking standards is to keep car parking provision to the minimum necessary to encourage the use of alternative transport modes whilst managing parking in the urban environment. However, to reduce parking to a lower level before alternative means of travel are in place would simply produce excessive on-street parking. Development proposals therefore, must include a **Parking Strategy** that links a reducing parking provision to the provision of alternative means of travel. In the early stages of development, it may be appropriate for example for some communal parking to be provided that might be removed later as more sustainable travel alternatives are made available.

#### **Structural Design and Landscaping**

4.69 Environmental enhancement and setting new standards of design are key themes arising from sub regional guidance for the development of riverside sites within Kent Thameside. At present, Swanscombe Peninsula West is largely characterised by a relatively wild “forgotten” landscape with flat open spaces dominating. The comments received during the preparation of this brief were divided in terms of how the eventual design of the site should be pursued with regard to its historical appearance. There were 2 main groups of comments advocating different alternative design premises:



- that the new design and landscaping needed to reflect the new topography created with perhaps a tight urban form along linear water bodies akin to canal side development in places like Venice and Amsterdam; or
- that the historic topography of the area should inform the layout and design with old alignments incorporated to provide connectivity with the past.

4.70 The planning policy context for Swanscombe Peninsula recognises that the historical appearance of the site can be an invaluable tool for interpreting a meaningful sense of place, and at the same time acknowledges that the scale and intensity of future development will in essence be quite different. Together with PPG1, Policies DD11, RT1 and the general objectives for the major development sites included in the Local Plan Review contain fundamental pointers for what is expected in design terms. It is crucial that a comprehensive design analysis for the site is undertaken to inform early stages of the master planning process. The Local Planning Authority will expect the developers to demonstrate that they have engaged with local stakeholders in this process. A clear statement of the design philosophy adopted for the site must accompany the master plan – the former needs to be based on an historical understanding of the site and engagement with interested parties, perhaps through an “Enquiry by Design” process. In addition, provision for the future management and maintenance of the development will be required and the development proposals will need to demonstrate how this will be achieved.

4.71 The landscaping parameters for the site should flow from the design analysis which is carried out. At the same time, the landscaping regime will need to take account of the need for sustainable planting areas to be created on the new landforms. Views both into and out of the site will form an important consideration especially with regard to the site’s riverside aspect – this will also guide the development of a lighting strategy for the site.

## **Ecology**

4.72 The Local Plan Review states that one of the key objectives for sites along the River Thames is to: ‘conserve and manage key areas of riverside green space with recognised nature conservation value’. As a result, development proposals must be accompanied by an ecological action plan which should identify priority habitats and species and be used to guide future development. – it will need to identify suitable areas and provide details of the ongoing management and monitoring required. Wherever possible it will support targets contained in the Kent Biodiversity Action Plan. The Thames Estuary Partnership has prepared separate Management Guidance for the Thames Estuary. This guidance sets out a strategy and principles for action and has been developed into an action plan which seeks to promote sustainable development within the estuary and to conserve its resources. Development proposals will also need to support the objectives of this work.

4.73 In preparing the ecological action plan, it is important that the ecology of the Swanscombe Peninsula West site is not considered in isolation, but as part of the ecology of the wider Swanscombe/Ebbsfleet/Eastern Quarry area and indeed the wider Green Grid. Any Ecological Action Plan for the site would therefore need to consider connectivity with other semi-natural open space and how Swanscombe Peninsula West can contribute to biodiversity targets within the wider area. This also needs to include measures to protect the adjoining mudflats from excessive disturbance as these are widely used by birds within the broader Thames Estuary.

4.74 It will be important to ensure that the integrity and functioning of the most ecologically important habitats is not compromised by development outside of their boundaries. This may require the provision of buffer zones in which only low intensity development is allowed. Even habitats of low intrinsic value can be invaluable as wildlife corridors. Development proposals should look to retain areas that provide habitat connectivity through integration into the green grid network. To ensure that maximum wildlife benefits are obtained through the green grid network, it is important that habitat enhancement and creation is integral to the network design and based on sound ecological principles.

4.75 The connectivity and continuity of the watercourses through the site is a very important consideration in ecological terms – a key function being to prevent populations becoming isolated. Any future development of the site should allow watercourses to run through and around the site. The land raising strategy will need to take this into account. The Environment Agency is in general opposed to a net loss in watercourse length and for any losses the Agency will seek compensation in the form of a new watercourse of an equivalent or greater length to that lost. The design of any new ditches is important to provide enhanced and suitable habitat for wildlife and the Agency can be consulted for further advice. The Biodiversity section would not wish to see development within 8m of watercourses. This is to maintain buffer strips of undeveloped, undisturbed riparian habitat, which are vital to the successful functioning of aquatic systems and for the fulfillment of invertebrate life cycles. Additionally, the Environment Agency is in general opposed to the culverting of watercourses because it destroys wildlife habitats, damages natural amenity and interrupts the continuity of this linear habitat.

4.76 There are a number of protected species existing on the site, and development proposals should not adversely affect statutorily protected species or Kent BAP priority species or habitats. In particular the Phase One Habitat survey has identified that Black Duck Marsh and the woodland area on the higher ground around it have significant local nature conservation interest. Development proposals therefore must incorporate the retention and enhancement of the ecological value of the area known as Black Duck Marsh, and the heronry. Currently in this area, water levels are dependent on natural precipitation and evaporation rates. Future wet

habitats need to be designed so that water levels are sustainable, and liaison with the EA will be required in this regard. As a result, this area and the adjacent river frontage are to remain largely undeveloped to allow connectivity between the River Thames, southwards through the marsh, extending to the heronry located in the woodland. Additionally, in terms of accessibility, and the potential for disturbance, careful attention will need to be given to balancing the effects of more intensive built development in close proximity with the need to preserve the integrity of the areas of ecological value. There may also be a tension between ecological objectives and the desire for good linkage between the Peninsula and Ingress, and this will need to be addressed. Provision for positive management will need to be addressed. Where appropriate, planning conditions will be imposed or planning obligations sought to ensure that protected species and habitats are safeguarded and maintained.

4.77 In summary, ecological considerations are particularly important at Swanscombe Peninsula West and, indeed, are one of the major determinants of the development strategy. Development proposals and arrangements for their implementation must:

- be informed by comprehensive baseline data and information
- incorporate appropriate mitigation measures
- provide for monitoring of habitats and populations, and
- through feedback, provide for any necessary adjustment of development form for later phases and of mitigation measures.

#### **Green Grid**

4.78 The Thames Gateway Planning Framework (RPG9a) identifies the concept of a '**Green Grid**' which would join the main open areas with the frontage of the River Thames and link both existing communities and new development areas. The aim of the Green Grid network is to raise environmental quality, provide an attractive setting for new and existing development, accommodate leisure and recreational needs, provide movement corridors – especially for cycling and walking – and provide an ecological resource. Swanscombe Peninsula West has the potential to form an important building block within the Green Grid network and the proposals must ensure that Green Grid provision and connectivity are fundamental to the overall design (see Appendix 2 for detailed Green Grid requirements).

4.79 The Local Plan Review Second Deposit Draft's Policies MDS7, DD6 and DD7 require Green Grid elements to be included in development proposals at Swanscombe Peninsula West. Its function within the Green Grid, in general terms, is primarily twofold. Firstly, with a substantial part of the site proposed for open space, it is an important resource in itself that can accommodate a wide variety of green spaces for example, semi-natural areas around Black Duck Marsh and riverside access along the Thames.

4.80 Secondly, Swanscombe Peninsula West has an important role to play in creating and enhancing linkages within the wider Kent Thameside Green Grid. Within the site, the creation of a public right of way along the entire river frontage is required as a fundamental objective of development proposals on this site (Policies RT4 and RT4a also apply). Development proposals will need to demonstrate clear mechanisms for delivering this objective. From Swanscombe Peninsula West, the Green Grid has the potential to extend further eastwards along the riverside.

4.81 Another important Green Grid-related objective is to avoid the appearance of a continuous expanse of built-up development. The retention and enhancement of important areas of woodland and marsh within the site will assist this by providing a variety of spatially defined character areas and opportunities for capitalising on river views.

4.82 The Green Grid framework also provides the opportunity to enhance the interpretation and management of the archaeology and history of particular development sites and the wider area. The planning of Swanscombe Peninsula West, including transport and access links, should take into account the interpretation needs for heritage in the surrounding area, and the developer should ensure that any surviving heritage features on, or adjacent to, the development site are enhanced as a result of the proposed development – this could be particularly important in terms of industrial archaeology. Specifically, development proposals should safeguard access from the peninsula to both Swanscombe Heritage Park in the south and Craylands Gorge – this needs to be addressed in terms of the overall access strategy, and specific Green Grid provision. Any areas of significant ecological or heritage value that might be identified by surveys will be required to be incorporated in the Green Grid and/or other mitigating measures undertaken.

### Open Space

4.83 The Local Plan Review Second Deposit Draft's Policy LRT12 sets standards for the provision of **public open space** in new development. A clear strategy for its provision, in terms of accessibility, function, practicality, and management needs to be carefully thought out to inform the location and design of these areas. The following table generates requirements (based on a purely mathematical calculation) for both 1,700 and 2,700 units respectively of:

Type of Open Space (Some of the spaces will be capable of "nesting" within the larger spaces)	Swanscombe Peninsula West Policy MDS7 1,700 units	Swanscombe Peninsula* Policies MDS7+MDS8 2,700 units
Major Urban Park (incorporating neighbourhood and local play spaces)	One	One
Local Park (incorporating neighbourhood and local play space)	Two	Three
Neighbourhood play space (incorporating local play space)	Four	Six
Local play spaces	Nine	Fourteen

Playing fields	Four	Seven
Allotment areas of 16 plots each	Two	Three

\* Within Dartford Borough - further discussion will need to occur to establish the position within Gravesham

### Public Slipway

4.84 Policy MDS7's criterion 6 requires the provision of a public slipway from the site on to the River Thames. This is consistent with policies in the River Thames chapter, notably RT1 and RT3. Policy RT3 is particularly important as it permits future recreation proposals, such as slipways, provided they do not conflict with nature conservation interests. Early ecological work, in terms of habitat surveys confirms that this is an important consideration for development proposals on Swanscombe Peninsula West.

4.85 A fully operational public slipway with its related parking and other facilities comprises a clear design challenge for the site, given the ecological assets in existence. The two logical options for locating this facility are the western and eastern ends of the riverside frontage. It is understood that historically, a landing stage was located at the western end. Liaison with the Environment Agency and the Port of London Authority with regard to their encroachment policy, flood defences and navigational / operational safety will be necessary. The master planning process for the site will need to demonstrate how and where the facility can be provided.

### Design Principles and Themes

4.86 Swanscombe Peninsula West will play a vital role in the future urban structure of Kent Thameside as it consolidates riverside development in the east of the Borough. It will be important to provide a comprehensive design vision and framework to accompany any Masterplan for the site (Policy RT1 is of particular relevance in this regard). This should demonstrate how proposals at Swanscombe Peninsula West take account of the wider physical, community and functional context of the Peninsula as a whole and how development can positively enhance this area of the Borough. **Connectivity** within and between communities, **linkage** through *Fastrack* / public transport and the Green Grid network and **high quality sustainable development** must form the cornerstones for designing future development. Beyond these cornerstones and the requirements of Policy MDS7 which embraces mixed use, compact urban village, **public transport orientated development**, the Council does not wish to prescribe a particular design solution for the site. Instead, it will encourage **innovation** to achieve **design excellence**.

4.87 The Council accepts that the existing **power lines** running across the peninsula will remain as a visual feature of the site for the foreseeable future. Careful attention to the design of nearby built form can however, minimise their visual impact. In this regard, the National Grid

has recently published “A Sense of Place – design guidelines for development near high voltage overhead lines”. Additionally, sensitive forms of development or use – typically housing, schools and places of higher education – will be required to be located at least 50 metres away from the power lines.

4.88 To ensure that good design is achieved, a **Design Statement** will need to be submitted alongside the Masterplan. It is important that the opportunity be taken at this key location to take forward the high standards that are now being set within the area to help reverse any remaining negative perceptions of this area of Thames Gateway. An awareness of the profile of the site, particularly from longer views may make the use of “landmark” architecture beneficial, in terms of creating a strong sense of place - the drama of the riverside setting should be enhanced in design terms.

4.89 **Public art** will have a key role to play in the design approach. The Council recommends involving South East Arts and Sustrans as early as possible in the design and masterplanning stages.

4.90 To summarise, it is the Council’s expectation that the development will:

- help set benchmark standards within Kent Thameside for sustainable development by encouraging resource conservation and re-use through such measures as, for example:
  - the minimisation of waste in the design and procurement stages of development;
  - the maximisation of the use of the River Thames for the importation of construction materials to the site thereby reducing HGV movements on local roads;
  - the promotion of energy efficiency in the design and layout of new development;
  - the use of solar energy systems to limit the size of the power network;
  - the use of greywater and/or rain harvesting systems to limit the use of primary water resources;
  - the incorporation of sustainable urban drainage systems in order to address water environment issues in an integrated way; and
  - on site sewage disposal with consequent power generation.
- use innovative design, especially at key points and gateways and public spaces;
- incorporate high quality of life standards throughout the development for example noise attenuation measures where necessary, designs to plan out crime, air quality audits where

necessary, up to date, planned cabling for IT/Broadband access and flexible spaces for multi-use (for example live/work units) and design which maximises accessibility and amenity for people with disabilities, especially in public areas.

- contain an attractive public realm throughout, including high quality, and well-proportioned open space in harmony with both natural and built environments with effective surveillance, together with positive management plans for its sustained maintenance;
- reinforce the role of public transport routes (particularly the Fastrack Riverside Route), along which the centres, higher density development and more intensive uses will be located;
- contribute to the creation and enhancement of Green Grid spaces and places to facilitate increased connectivity with surrounding communities;
- celebrate and interpret the archaeology and heritage of the site;
- use public art and local materials to help encourage a sense of place;
- encourage a sense of place still further by utilising the scale of the site, the new landform and design of key buildings, to create neighbourhoods and clusters of individual identity;
- give appropriate priority to the functional and operational requirements of the river related uses;
- use the backdrop of riverside views for imaginative design solutions;
- enhance the site's unique location on the edge of the riverside yet at the heart of a future, major urban location;
- incorporate high quality landscape design (and provide positive management plans for its upkeep thereafter);
- encourage nature conservation; and
- explore the potential for power generation from wind sources.

## 5. CONCLUSION



5.1 The development of Swanscombe Peninsula West will provide a predominantly residential, mixed use community which takes advantage of its riverside frontage and incorporates a high quality, sustainable environment with excellent accessibility. Strategically, it will realise an important development opportunity within Thames Gateway.

5.2 It will take over 10 years before the full potential of Swanscombe Peninsula as a whole is realised. Mechanisms will need to be put in place as part of any future planning approval for the development of the remainder of the site that are responsive to new ideas and concepts that will inevitably emerge in the later phases of the site's development: it is simply not possible to determine today precisely what will be appropriate in a decade or two decade's time. The guidance contained in this brief is however intended to provide a framework that will facilitate a leading-edge development.

### **Implementation**

5.3 On a mixed use site such as this, it will be critical to ensure that a master plan approach be adopted to ensure that individual components of the overall scheme are planned and delivered in a comprehensive manner. This reinforces the importance of sustainable development. There will be a need for detailed pre-application discussions with the local planning authority, as well as relevant service providers. Preparation of a master plan prior to the submission of any planning application will ensure that broad design concepts can be adequately considered and debated.

5.4 In terms of next steps, it is expected that the developer will undertake and prepare in tandem, an environmental assessment and the master plan for the site which will set out the parameters for development and the overall vision and structural elements that will need to be fixed to guide future development in Swanscombe Peninsula West.

5.5 The Council will want to see that all appropriate community, transport and utilities infrastructure as well as landscaping are provided in line with the construction of the mixed use elements so that adequate services can be utilised by the new occupiers when needed. This allows for sustainable movement patterns to evolve at the outset of the new community.

5.6 A summary of the main pieces of work that will need to be completed as part of the next steps comprises:

- Master Plan - which needs to provide a clear framework for detailed applications to adhere to
- Environmental Statement
- Site Preparation Strategy (4.9 + 4.11)
- Green Grid objectives for the site (4.78 on + Appendix 2)
- Comprehensive Archaeological and heritage assessment and strategy (4.15)

- Ecological action plan (4.73)
- Design Statement and Strategy (4.69/4.70 + 4.88)
- Statement on Community Development and Infrastructure Provision (4.27)
- Transport Assessment (4.60)
- Access Strategy (4.41 + 4.63)
- Parking Strategy (4.19) and Travel Plan (4.66)

The development proposals need to demonstrate to the Council and its consultees that a holistic approach has been adopted with regard to the various elements. Despite the presentation of these as a list, many of these necessarily interweave and overlap, and they need to affect the master plan as well as flow from that process. In order to properly assess any future planning application, the development proposals will have to demonstrate that implementation has been thought through – this could take the form of an implementation strategy covering the broad phasing of the various elements and including such matters as the future management and maintenance of ecological areas and open spaces which will be fundamental to the integrity of the scheme as a whole.

5.7 Once adopted as Supplementary Planning Guidance, the Council's planning functions will use the adopted brief:

- In its dialogue with developers at the master planning stage;
- As a material consideration when assessing eventual planning applications;
- To ensure that the development of the site is approached in a comprehensive manner;
- To ensure that adequate additional information accompanies any planning application;
- and
- When negotiating and drawing up relevant section 106 and other legal agreements.

## **APPENDIX 1: POLICIES IN THE LOCAL PLAN REVIEW SECOND DEPOSIT DRAFT**

This brief should be read in conjunction with the Dartford Borough Local Plan Review Second Deposit Draft. Policies of particular relevance to Swanscombe Peninsula West are:

### **Major Development Sites**

MDS7 Swanscombe Peninsula West

MDS8 Swanscombe Peninsula East

### **Development and Design**

DD1 Public Transport Orientated Development

DD2 Mixed-Use Urban Villages

DD4 Mixed-Use Development

DD6 Green Grid and Development Sites

DD7 Community Woodland in the Urban Fringe

DD11 Development and Design General Criteria

DD12 Access for the Less Mobile

DD13 Security

DD14 Public Art

### **Housing**

H1 Housing Provision

H1a Strategic Sites

H8 Layout, Design and Density

H10 Vehicles in Residential Development

H16 Affordable Urban Housing

H18 Payment in Lieu of Affordable Housing

H19 Special Needs Accommodation

H21 'Lifetime' Homes

### **Employment**

- E1 Provision of Employment Land
- E10 Amenity

### **Transport**

- T1 Fastrack
- T2 Channel Tunnel Rail Link
- T7 Transport Infrastructure and Services
- T8 Off Site Transport Measures
- T9 New Accesses
- T11 Vehicle Parking Requirements
- T13 Parking Strategy
- T14 Parking Layout
- T15 Cycle Parking
- T16 On Site Design and Transport Measures
- T17 Travel Plans
- T18 Transport Assessments

### **Retailing**

- R1 Retail Development: Sequential Approach
- R4 District and Local Shopping Centres
- R5 Takeaway and Drive Through Restaurants

### **Community Facilities**

- CF1 Community Facilities – Siting and Accessibility
- CF2 Utilities Infrastructure – Siting and Design
- CF3 New Development Requirements

### **Leisure, Recreation and Tourism**

- LRT5 New Sports and Recreational Facilities
- LRT6 New Playing Fields
- LRT12 New Open Spaces
- LRT15 Public Rights of Way

### **Built Environment**

- BE17 Overhead Power Lines

## **Natural Resources**

- NR1 Sewerage and Drainage
- NR4 Surface and Groundwater Protection
- NR5 Water Resources
- NR7 Tidal Flood Zone
- NR8 Surface Water
- NR10 Air Quality: Minimisation of Pollutants
- NR13 Noise: Residential Development
- NR14 Noise: Non-Residential Noise-Sensitive Development
- NR15 Noise Impact
- NR16 Noise Assessments
- NR20 Contaminated Land
- NR21 Decontamination of Residential Sites
- NR22 Renewable Energy
- NR23 Energy Efficiency

## **The Countryside and the Villages**

- C12 Legally Protected Species
- C16 Other Areas of Nature Conservation Value

## **River Thames**

- RT1 Riverside Development
- RT2 Ports and Wharves
- RT2a Passenger Transport
- RT3 Recreation
- RT4 Public Access to the Riverside
- RT4a Public Access to the Foreshore
- RT5 Nature Conservation Interest
- RT6 Thames Tidal Defences

Attention is also drawn to Section 1, The Future Strategy for Dartford, and in particular to sub-sections 1.8 (Recycled Land), 1.13 (Social and Community Facilities), 1.14 Green Grid, 1.16 (Future Strategic Patterns of Development) and 1.17 (Future Urban Structure), and Figures 3 (Urban Structure Diagram) and 4 (Green Grid Conceptual Diagram).

## Appendix 2: Green Grid Guidance

The overall vision for the Thames Gateway's Green Grid represents a transformation of the present environment into a highly attractive and distinctive place in which to live, work or invest. Key to this is the provision of a framework of attractive open spaces, linked by a web of multi-functional green corridors. These connections will link existing communities with new development, the River Thames and the wider Kent countryside. Major development sites have a vital role in the development of the Grid as they will provide strategic Green Grid features as well as connections.

Paragraphs 5.57 to 5.61 highlight Green Grid issues with regard to development at Swanscombe Peninsula West. Preparation of the master plan for the site will need to establish the strategic position and role of the site in relation to its wider Green grid context, covering:

- The general landscape character of the surrounding area;
- The wildlife resource of the site and its vicinity – its full biodiversity context and any functional interrelationships;
- Strategic elements of the Green Grid in the vicinity of the site and key linkages;
- The position of the site in relation to “gateways” or strategic transportation corridors;
- Key views to be exploited;
- Key landscape elements which give the site a distinctive character or are typical of the wider landscape context;
- Designated areas or features of positive or negative landscape quality which require protection, enhancement or mitigation;
- The opportunities for wetland creation within areas of the site which will be flooded after ground remodelling;
- The opportunity to take advantage of the site's dramatic landform to create a distinctive and varied new landscape as a major resource and setting for new development, and to tie in with landform features in surrounding areas; and
- Community Woodland – Swanscombe Peninsula West is identified for its potential to incorporate a significant visual and functional buffer of community woodland between the development and the countryside beyond.

The collection of this information and initial design work will need to establish the specific Green Grid objectives for development at Swanscombe Peninsula West. The developer(s) needs to produce a clear statement of:

- Key strengths, weaknesses and opportunities for Green Grid development, taking into account local needs for access, open space and habitat provision and the strategic position of the site within the wider Grid;
- Specific Green grid objectives and aspirations for Swanscombe Peninsula West;

This in turn will lead to the production of 2 key elements of the master plan:

- A clear statement on how the development site should contribute to and integrate Green Grid objectives; and
- A contextual plan

The contextual plan should set out the range, disposition and function of Green grid components (ie spaces, connections and habitat) that are to be included within the site as part of the development proposals. It should describe:

- The range of Green Grid components to be provided and their intended function;
- The relative proportion of the site that will contribute to the Green Grid (including greenspaces, urban spaces, access and habitat corridors and structural landscape) as opposed to built development;
- The disposition of Green Grid components within the site and their connections with each other and other components beyond the site boundaries;
- A statement of the overall character and quality to be achieved for the Green Grid within the site as a whole;
- Descriptions of design themes / character for individual components of the Grid including greenspaces, hard landscape areas, boundaries, wildlife and access corridors etc
- An indication of the type and quality of materials and species to be used within the different components of the Grid and supporting material in the form of indicative lists, cross-sections or other illustrations or descriptions;
- Consideration of the opportunities for innovation in design and the provision of special features to create a distinctive sense of place.

A vital element of any Green Grid components is provision for their implementation and aftercare. The development proposals should set out how the Green Grid is to be implemented as part of the development, and the maintenance and management principles to be adopted. Typical considerations will include:

- phasing of implementation
- co-ordination of connections (levels/design details) with Green Grid components on adjoining sites, or linkages into and out of Swanscombe Peninsula West;
- details of the maintenance and management requirements for individual components of the Grid;
- details of the arrangements for high quality, long-term aftercare, the potential handover to successor bodies and funding mechanisms.

Current work on Green Grid includes developing a Design Strategy and Guidelines, and a Green Links Plan. Development proposals will need to support the objectives of this work. Liaison is advised at an early stage.



## Further Reading

### National Government Publications

- *The Thames Gateway Planning Framework – RPG9a – June 1995*
- *Strategic Planning Guidance for the River Thames – RPG9b – February 1997*
- *Regional Planning Guidance for the South East – RPG9 – March 2001*
- *By Design – Urban Design in the Planning System: Towards Better Practice – 2000*
- *Places, Streets and Movement - 1998*
- *Sustainable Settlements: A Guide for Planners, Designers and Developers - 1995*
- *PPG1 – General Policy and Principles – February 1997*
- *PPG3 – Housing – March 2000*
- *PPG13 – Transportation – March 2001*
- *PPG25 – Development and Flood Risk – July 2001*
- *Circular 1/97 Planning Obligations*
- *Sustainable Communities Building for the Future – February 2003*
- *Channel Tunnel Rail Link Safeguarding Directions – February 1996*

### Kent County Council Publications

- *Kent Structure Plan – 1996*
- *Kent & Medway Structure Plan: Deposit Plan September 2003*
- *Draft SPG1 Landscape Character September 2003*
- *Draft SPG2 Biodiversity Conservation September 2003*
- *Kent Design – 2000*
- *Kent Planning Officers Group' Guide on Development Contributions*
- *KCC Guide on Development Contributions*
- *Kent Biodiversity Action Plan 1997*

### Dartford Borough Council Publications

- *Dartford Borough Local Plan Review Deposit Draft – March 2000*
- *Dartford Borough Local Plan Review Second Deposit Draft – October 2002*
- *Swanscombe Neighbourhood Renewal Action Plan – October 2003*

### Kent Thameside Association Publications

- *Kent Thames-side – Looking To the Future (original) – Autumn 1995*
- *Looking to the Future (social + community aspects update) – March 1997*
- *Looking to an Integrated Future (transport update) – March 1999*
- *Update Winter 2002/2003 – Reporting Progress on Regeneration in Dartford and Gravesham*

### Thames Estuary Partnership Publications

- *Management Guidance for the Thames Estuary 1999*
- *Action Plans – 1999 and annually updated*

### Economic Development Publications

- *Kent Prospects Economic Strategy 1996-2000*
- *Kent Prospects Update 2001 – Draft*

- (see [www.kentprospects.org.uk](http://www.kentprospects.org.uk))
- *Kent & Medway Economic Board's Action Plan*
- (see [www.kmeb.org.uk](http://www.kmeb.org.uk))
- *Economic Development Strategy for Kent Thameside 2001-2006*
- (see [www.kent-thameside.org.uk](http://www.kent-thameside.org.uk))
- *North Kent Area Investment Framework – April 2002*
- (see [www.thamesgateway-kent.org.uk](http://www.thamesgateway-kent.org.uk))