

# OTTERPOOL PARK

Framework Masterplan Report

15/03/18



## **CONTENTS**

1.0	<b>Executive Summary</b>		3.0	Land use Framework	
		pages			
1.1	Introduction	5	3.1	Housing	74-75
1.2	Background Status and Purpose of Document	6-7	3.2	Non-Residential Mixed Use	76-77
1.3	Planning Context	8-10	3,3	Retail and Mixed Use Local Centres	78
1.4	Masterplan Concepts and Evolution	11-15	3.4	Community and Social infrastructure	79
1,5	Masterplan Vision	16-18	3.5	Commercial and Employment	80-81
1.6	Masterplan Framework land use content	19			
			4.0	Delivery	
2.0	Masterplan Strategies				
			4.1	Implementation Strategy	83
2.1	Location and Context	21-27	4.2	Phasing and Programme of Development	83
2.2	Community Engagement and Inputs	28-29	4.3	Conclusion	83
2.3	Evolution of the Masterplan	29-31			
2.4	Response to Context	32-35			
2.5	Masterplan Indicative Layout	36-37			
2.6	Character and Placemaking	38-41			
2.7	Transport Strategy	42-47			
2.8	Green Infrastructure Strategy	48-57			
2.9	Water Strategy	58-59			
2.10	Sustainability Strategy	60-61			
2.11	Place-making Strategy	62-73			

## 1.0 Executive Summary

## 1,1 Introduction

The Otterpool Park Framework Masterplan represents a key milestone in the development of a proposed garden town in Shepway, Kent. Proposals for a garden town at Otterpool Park received Government support in November 2016 and the Framework Masterplan sets out the current position based on ongoing technical evaluation, design work and community engagement commissioned by landowners Shepway District Council (SDC) and Cozumel Estates. The Framework Masterplan represents the conclusion of the second stage of a three-stage process to prepare a planning application for Otterpool Park, due for submission in 2018.

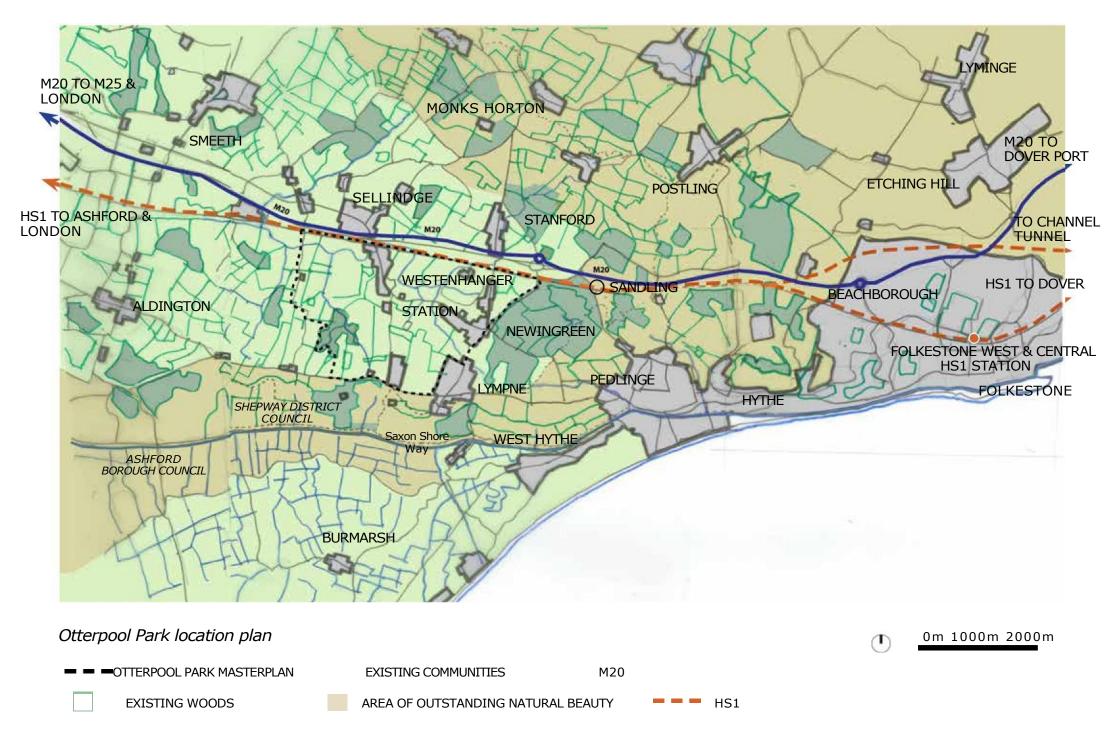
The Framework Masterplan builds upon the Stage 1 Feasibility and Capacity Study which set out the opportunities and constraints identified for Otterpool Park. This document is divided into four sections, summarised in the following:

**The Executive summary** sets of the background status and purpose, planning strategy, concepts, evolution, vision and content of the Masterplan Framework.

**The Masterplan Strategies** for Otterpool Park sets out the context, community involvement to date, takes account of the relevant constraints and opportunities presented by the site and the objectives for a new garden settlement presented by the landscape, heritage and infrastructure.

**The Land Use Framework** provides description of the various land uses proposed in the masterplan Framework

**The Delivery and Implementation Strategy**, includes proposals for the phasing of development over a 30+ year period.



# 1.2 Background, Status and Purpose of Document

The Framework Masterplan has been prepared by the consultancy team on behalf of landowners Shepway District Council (SDC) and Cozumel Estates as part of the preparation of a planning application for a new garden settlement called Otterpool Park. The consultancy team is led by Arcadis and includes Farrells as masterplanner. The Arcadis team was appointed in August 2016 and prepared an initial Stage 1 Feasibility and Capacity Study dealing particularly with the site constraints and opportunities within an area of search of some 700 hectares. Since then more detailed work has been carried out in relation to the potential for the site to accommodate a new garden settlement and the masterplan strategy. Two rounds of public engagement (November 2016 and June 2017) have been carried out.

The consultancy team were requested by SDC and Cozumel Estates to prepare a Framework Masterplan and as part of the joint discussions that the consultancy team has had with SDC as Local Planning Authority (resulting in the signing of a Planning Performance Agreement (PPA)), the submission of a Framework Masterplan document also features within the PPA. The purposes of the Framework Masterplan are as follows:

- To provide SDC and Cozumel Estates with a report of the direction of travel of the potential masterplan for the new settlement and the likely capacity of the area of search to accommodate levels of residential, employment and related development (including open space) taking into account the constraints and opportunities identified.
- 2. To provide the LPA with a position statement on the constraints and opportunities existing in the area of search and how they can be addressed in the preparation of the masterplan.
- 3. To identify issues that may be relevant to the planning authority:
  - to inform its draft policies for the potential new garden settlement as set out in the Regulation 18 draft Core STreategy Local Plan review; and
  - in pre-application discussions up to the submission of the application.
- 4. To provide SDC, Cozumel Estates and the LPA with the likely scale of the new settlement; the indicative timetable and content of the planning application and initial views on delivery strategy.
- To reflect on relevant matters confirmed in various documents published by consultants acting for the LPA that will act as part of the evidence base for the Core Strategy Review.
- 6. To set out the vision and objectives that will establish a high quality new community with its own unique identity.

The content of this document reflects the proposed structure contained within the PPA. The PPA was also signed by Kent County Council both as strategic highway authority and responsible authority for a number of areas of infrastructure provision (education) and policy matters across the county as a whole.

# 1.3 Planning Context for Proposed Garden Settlement in Shepway

## **Background**

The need for a new garden settlement in Shepway arises from the acknowledged housing crisis across the country due to the severe lack of house building over a 30 year period. The Government, following the publication of the NPPF in 2012, has sought to significantly boost housing land provision across the country through a number of measures. One such measure is the identification of sites for the provision of new garden settlements. In 2016 the Government published a prospectus to local authorities asking them to express an interest in provision of such settlements within their administrative areas. After considering the potential of Shepway District to accommodate such a settlement to meet the local housing need, an Expression of Interest was submitted by SDC to the Government in July 2016 proposing Otterpool Park as a new garden settlement. On 11 November 2016 the Government announced its support for Otterpool Park. The priority on providing more housing in the UK was also emphasised in the February 2017 Housing White Paper "Fixing our Broken Housing Market".

## The Planning Performance Agreement (PPA)

As well as landowner and promoter of Otterpool Park, SDC has a separate and distinct role in relation to Otterpool Park as the Local Planning Authority (LPA). The SDC LPA will consider the planning application when submitted and the landowners are engaging proactively with them in pre-application discussions. These discussions are arranged through a Planning Performance Agreement (PPA). The PPA is agreed with both SDC LPA and Kent County Council (KCC) as planning authorities.

The PPA sets out the programme for future works

leading up to the submission of the planning application in 2018. There are regular meetings which take place with relevant council officers so that as many of the issues that are arising relating to the new settlement proposal can be discussed prior to the submission of the application.

## Planning Policy - Core Strategy Review and evidence base

The current development plan in Shepway comprises its Core Strategy which was approved in 2013 and plans housing delivery to 2026. The NPPF (2012) encourages LPAs to have an up to date policy framework that allows up to fifteen years of land for housing to be identified (paragraph 47). As such, SDC recognises that there is a need to review the Core Strategy and to extend it until 2037.

The Core Strategy Review process requires SDC LPA to produce an evidence base to support its proposals. In 2017, SDC LPA published a Strategic Housing Market Assessment (SHMA) and Growth Options Study to establish the scale of future housing need and how this need can be accommodated within the Shepway District up to 2037. SDC LPA's evidence base documents have considered at a high level the constraints and opportunities for development at Otterpool Park and are discussed in further detail below.

Emerging Policy SS6 of the Core Strategy Review has identified Otterpool Park as a suitable location for a new garden settlement and emerging Policy CSD9 has identified land to the south of Sellindge for additional housing. Consultation on the emerging policies will be undertaken by the LPA in the course of the Core Strategy Review.

Strategic Housing Market Assessment Report 2017 (PBA)

In support of the Core Strategy Review process, Peter Brett Associates prepared a report, published in April 2017, which calculates the proposed amount of new housing thought to be required in Shepway in the Core Strategy review period up to 2037. These figures will be tested through the Core Strategy review process but currently conclude that in the period 2014 to 2037 SDC will require 14,600 new dwellings in the district (633 per annum). SDC considers it already has about 8,000 of these dwellings 'committed' through planning permissions and proposed allocations so this will require the Core Strategy Review to allocate new land for 6,600 dwellings across the plan period.

Growth Strategy Options and Related Reports 2017 (AECOM)

Three reports have been produced by consultants, AECOM, for SDC LPA that identifies options that the SDC has for the accommodation of the level of growth identified up to 2037 in the SHMA report. These documents also covered landscape issues. These are strategic in their consideration and conclude that Otterpool Park is the most appropriate location to accommodate growth in the future because it is the least constrained of six areas identified throughout Shepway. Initial work carried out by AECOM identifies, at high level, constraints and opportunities within the Otterpool Park area which is broadly contiguous with the area of search assessed by the Arcadis team on behalf of SDC/Cozumel Estates. The Otterpool Park consultant team has considered the high level AECOM views in its more detailed work for the masterplanning and constraints/ opportunities studies.

Otterpool Park Garden Town Employment Evidence Base (NLP)

Nathaniel Lichfield and Partners (NLP) have prepared the employment evidence base work and are reviewing employment options for the Otterpool Park area. This work has informed the emerging proposals in this Framework Masterplan document.

## A Charter for Otterpool Park November 2017

As well as the above evidence base documents produced to support the Core Strategy Review, SDC have also published a Charter for Otterpool Park that sets out SDC's aspirations for the garden town. It expands on the principles set out in the Expression of Interest submitted to the Government in 2016 to provide more detailed guidance and advice on how the new settlement should be planned, built out and delivered so as to create the foundations for a truly sustainable new community. This has been taken into account in developing the proposals contained within this Framework Masterplan document.

### **Otterpool Park Planning Strategy**

In order to deliver the overall vision for the Otterpool Park development, an outline planning application will be prepared, consistent with the general terms and vision of the agreed PPA and this masterplan framework. The outline planning application will include the general principles of how the site will be developed, with matters to be reserved for each defined phase for example, Access, Appearance, Landscaping, Layout and Scale. For each detailed phase of the development, applications for the approval of reserved matters will then be submitted over a fixed period of time to enable flexibility of delivery within identified tolerance levels. This approach will ensure these future phases are both responsive to market needs at the time of delivery, and relate directly to the parameters of the outline application masterplan. It is anticipated that the delivery of the overall masterplan for the site will span approximately 35 years.

Further public engagement and pre-application discussions with SDC LPA and other key stakeholders relating to the new settlement



Policy SS6 - Garden Settlement North Downs - Indicative Strategy







Extract from Shepway District Council Cabinet report: 17 January Fig 5.8 page

proposal will take place before the submission of the outline planning application. This consultation process and how it has informed the proposals will be explained in a Statement of Community Involvement which will be submitted as part of the planning application.

## **Planning Policy Considerations**

The national policy context for the provision of new garden settlements referred to above highlights key issues such as the delivery of more housing; the role of new garden settlements in helping meet future housing needs; the successful expression of interest submitted by Shepway District Council and the underlining of

Otterpool Park's importance as one of the chosen garden settlements. These are all important factors which the Council as planning authority will take into account in formulating its future planning policy for its district. The NPPF seeks to encourage local planning authorities to have an 'up to date' Development Plan. The current development plan in Shepway comprises its Core Strategy approved in 2013 that plans housing delivery to 2026. The NPPF generally (paragraph 47) seeks to encourage Councils to have a policy framework that allows up to fifteen years of land for housing to be identified, therefore the Council recognises there is a need to review the Core Strategy and to extend it until 2037.

### **Core Strategy Review**

It is important to note that SDC has a separate and distinct role in relation to Otterpool Park as the Local Planning Authority (LPA) which will consider the planning application when submitted. The landowners are engaging proactively with the LPA in pre-application discussions, an arrangement formalised via a Planning Performance Agreement (PPA). The PPA requires submission of the Framework Masterplan to the LPA in order to consider progress made on the potential planning application and help formulate the policy for Otterpool Park as part of the emerging Core Strategy Review.

The Core Strategy Review process requires the LPA to produce an evidence base to support its proposals. The LPA has published reports to establish the scale of future housing need and how this need can be accommodated within the Shepway District up to 2037. The Garden Settlement and North Downs Indicative Strategy Policy SS6 has identified Otterpool Park area as the most suitable location for growth and the Sellindge Strategy Policy CSD9 has identified land to the south of Sellindge for housing. The LPA's evidence base documents have considered at a high level the constraints and opportunities for development in this location.

This is a separate exercise to that which has been carried out by the Arcadis consultancy team on behalf of SDC and Cozumel Estates as landowners.

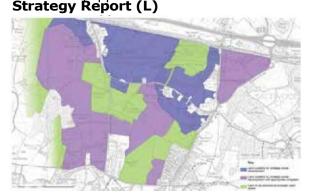
# Strategic Housing Market Assessment Report (PBA)

In support of the Core Strategy Review process, Peter Brett Associates prepared a report, published in April 2017, which calculates the proposed amount of new housing thought to be required in Shepway in the Core Strategy review period up to 2037. These figures will be tested through the Core Strategy review process

but currently conclude that in the period 2014 to 2037 the Council will require some 14,600 new dwellings in the district (633 per annum). The Council considers it already has about 8,000 of these dwellings 'committed' through planning permissions and proposed allocations so this will require the Core Strategy review to allocate new land for up to 6,600 dwellings across the plan period.

# **Growth Strategy Options and Related Reports (AECOM)**

Three reports have been produced by consultants, AECOM, for the LPA that identifies options that the Council has for the accommodation of the level of growth identified up to 2037 in the SHMA report. These documents also covered landscape issues. These are strategic in the consideration and conclude that the area including Otterpool Park is the most appropriate location to accommodate growth in the future because it is the least constrained of six areas identified throughout Shepway. Initial work carried out by AECOM identifies, again at high level, constraints and opportunities within the Otterpool Park area which is broadly contiguous with the area of search assessed by the Arcadis team on behalf of SDC/Cozumel Estates. The Arcadis team has considered the high level AECOM views in its more detailed work for the masterplanning and constraints/opportunities studies. **Economic** 



Lichfields (L) have prepared a report on the potential employment land strategy to be accommodated in a new settlement in the Otterpool Park area. These conclusions have also been taken into account in the emerging proposals in this Framework Masterplan document.

# The Planning Performance Agreement (PPA)

The PPA agreed with the LPA and Kent County Council as planning authorities sets out the programme for future works leading up to the submission of the planning application in 2018. There are monthly meetings which take place with relevant officers so that as many of the issues that are arising relating to the new settlement proposal can be dealt with prior to the submission of the application.

## **Otterpool Park Planning Strategy**

In order to deliver the overall vision for the Otterpool Park development, an outline planning application will be prepared, consistent with the general terms and vision of the agreed PPA and this masterplan framework. Further public engagement relating to the new settlement proposal will take place before the submission of the application and the proposals, as well as formal engagement with the LPA in respect of the formal scope of the outline planning application and associated Environmental Impact Assessment (EIA). This will be included into a Statement of Community Involvement being submitted as part of the application documents.

Extract from AECOM report: Suitable land for development with strategic open space

# 1.4 Masterplan Concepts and Evolution

The identification of land at Otterpool Park as a garden town, in response to the Government's Garden Cities Prospectus, was initially considered by Shepway District Council (SDC) with the assistance of Homes and Communities Agency (now Homes England) and Turley undertaking early work in 2015-6. This work identified this location as the most suitable area in the distruct for strategic growth andidentified a search area of land withihn which the noew community could sit.

SDC and Cozumel Estates as two major landowners within the area of serach have entered into a collabiation agreement to jointly promote the site and appoint a consultant team to prepare a masterplan and planning application for its development.

A masterplan brief was prepared and agreed by the promoter to guide the process. This brief set out the aims and objectives which incliding included the Guiding Principles set out in the original Expression of Interest to government. Fundamental to this was that the masterplan should be landscape led.

The formulation of the masterplan has evolved through a series of workstream groups and discision withrelevant stakeholders and consultees. The output of the workstreams formed strategies which serve to underpin the masterplan as now presented. These strategies are submitted in support of the masterplan.

The December 2016 Stage 1 Feasibility and Capacity Study for Otterpool Park reviewed the previous capacity studies for the search area (approx. 700 hectares) against the brief for up to 12,000 homes against a wide range of constraints and opportunities:

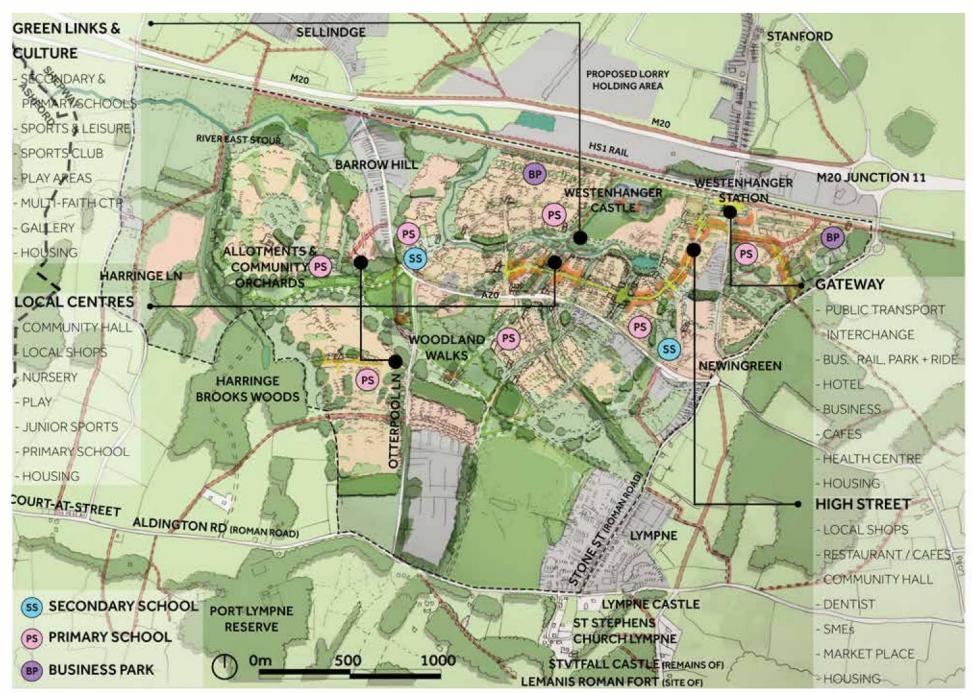
- Concentrating development on the least sensitive parts of the site from a topographical and landscape perspective.
- Taking advantage of the location of Westenhanger Station immediately to the north-east of the area of search, including a potential gateway/ interchange.
- Promoting sustainable travel and movement with a priority network of cycle ways and footpaths through the settlement and linking to nearby settlements and uses.
- Having regard to the likely capacity of junction 11 of the M20 to accommodate additional traffic without significant change.
- Creating a balance between the development of employment in a business park and the integration of employment uses in local centres to create a wide variety of opportunities for new enterprises.
- The need to respect the setting of Westenhanger Castle and other heritage assets within the area of search.
- The need to provide an effective sustainable urban drainage system based around the River East Stour and the existing pond in the eastern part of the site.
- The need to respect existing ecological assets on the site.
- The need to respect the amenity of existing residents including at Barrow Hill, Sellindge and Lympne.

## **Masterplan Densities and Place Making**

References to densities are used as a comparative measure for residential dwellings per hectare. A garden town does not have a specific minimum or maximum density, requiring a balance to suit local context and housing need. Further description of proposed residential density and district density comparisons for the masterplan are provided in section 2.11 of this report.

Higher density does not necessarily mean smaller homes and gardens or increased height. Although there may some areas in the masterplan where higher buildings are appropriate, higher densities could be achieved where required through a balance of measures including increased number of flats, terraced dwellings of three storeys, integrated car parking and generous amenity space provided for homes in roof terraces and balconies.

The masterplan aims to achieve a garden settlement by proposing a careful balance of landscape character and response to the local area context, with an appropriate range of homes in densities which achieve walkable neighbourhoods. This response to context and approach to place making are described in detail in section 2 of this report.



Masterplan for up to 12000 homes, as displayed at June 2017 Consultation

### **Masterplan Evolution**

Following a stage 1 preliminary data and site investigation and capacity study the initial masterplan spatial layout proposed a Garden Town with capacity for up to 12,000 homes, with an indicative layout presented during consultations in June 2107.

From summer 2017 through to early 2018, taking into account fresh consideration of opportunities and constraints, further stakeholder consultations and emerging market testing, the brief for the masterplan capacity was tested for a range of approximately 8000, 10,000 and 12,000 homes.

#### Three scenarios were considered:

One scenario explored housing numbers up to 12,000 with a proportion of green infrastructure of up to 40% within the search area. This scenario required higher densities to achieve the balance of numbers and green space. Local housing market area testing and place making considerations suggested this option with higher densities would not deliver an appropriate quality and range of housing.

A second scenario explored predominantly medium to lower housing densities with lesser proportion of high density housing. This scenario would have accommodated up to 8,000 homes whilst maintaining the proportion of green infrastructure up to 40%. For the housing numbers of 12,000, however, this would have resulted in a significant reduction of green infrastructure or an increased proportion of land area required above the search area.

These scenarios indicated that a settlement of the scale and quality to achieve the objectives of a Garden Town prospectus with numbers up to 10,000 required an increase in the land area above the original search area.

Studies undertaken identified two potential additional land areas: to the south west of Harringe Brooks Wood adjacent the masterplan search area and land to the south of Sellindge; both were considered sufficiently important considerations to test a third scenario.

The third scenario explored housing numbers of approximately 10,000 with predominantly medium to lower housing densities, a lesser proportion of high density housing and the proportion of land for green

infrastructure approximately 40%. The masterplan boundary would be extended in the south west. Both response to context, quality of place making and market testing supported this scenario would deliver an appropriate quality and range of housing.



Revised strategy including wider masterplan framework site area



Masterplan framework for around 10,000 homes with a wider masterplan site area

## Preferred option for Masterplan Framework:

Following further testing with stakeholders the third scenario became the preferred option for the Masterplan framework to provide approximately 10,000 homes.

A revised masterplan boundary, extending to include land to the south west of Otterpool Lane between Harringe Brooks Wood and Aldington Road, is proposed for the masterplan framework. This revised masterplan boundary broadly reflects the area of the Garden Town Allocation in the Shepway District Council LPA draft Core Strategy Review (Regulation 18 consultation) document.

The proposed additional land for a housing extension at Sellindge has been included to ensure the cumulative impact on infrastructure is taken into account. The two settlements will remain distinct, each retaining their own character.

The Otterpool Park masterplan framework will provide approximately 10,000 homes and approximately 40% of land for green infrastructure. This will provide quality of place, and opportunities to mitigate any challenges in response to the context, creating a settlement which meets the criteria set out in Garden City Principles and the Government Garden Town prospectus.

Taking account of the appropriate density of development to achieve garden settlement objectives and a deliverable scheme over the long term, the following represents a summary of the likely proposals to be included in a masterplan framework for Otterpool Park Garden Town:

- Approximately 10,000 new homes across a range of types, sizes and tenures.
- Approximately 40% of the masterplan comprising of green infrastructure (excluding private gardens).
- Education provision of up to six primary schools, up to two secondary schools and eleven nursery schools.
- A hub of commercial and community development (including a health centre) together with retail uses around Westenhanger station.
- Further local centres mainly corresponding with primary school locations in other parts of the development.
- Employment uses comprising circa 15 hectares of B1 and B2 uses in a commercial/light industrial business park with circa 10 hectares of new business park and up to 5 hectares light industrial park together with a hotel. Together with local centres and home working this could create approximately 8,000 new jobs.
- A network of public open spaces

including along the River East Stour.

Wider consultation and engagement linked with the evolving detail of this masterplan and planning application detail continues.



Ingress Park, Gravesend Kent

## 1.5 Masterplan Vision

The Masterplan Vision for Otterpool Park is to create a place and a community which is led by landscape and integrates with the existing communities as well as the rural surroundings, to provide new homes, employment facilities within a community structure that demonstrates and achieves the highest level of sustainability, in a manner that integrates and benefits the wider district.

The Otterpool Park masterplan creates a new landscape-led community; that integrates green and blue infrastructure with the existing historic assets and communities. This results in creating a 'complete place' and a continuous human landscape which not only provides new green spaces, parks, allotments, sports facilities, a nature reserve, a woodland country park and a riverside landscape for the new community but more importantly increases the provision of and access to, green spaces, amenity facilities and the countryside for existing residents in the surrounding areas.

The Masterplan Vision is for a settlement that is visually legible as a town, rather than simply an extension to existing built up areas. This legibility means the creation of distinct centres, edges and quarters. It also means distinct built form character that distinguishes the settlement from others of equivalent size and form in the surrounding area, whilst being respectful of the local vernacular of the Holmesdale Vale and Kent Downs.

The existing rural farmland within the Otterpool Park masterplan is private and not widely accessible to the general public. By strengthening links, improving and upgrading footpaths and the addition of new public footpaths and river and woodland walks, access to the countryside is improved for all.

This allows the existing assets including the East Stour stream and existing woodland and hedgerows can be enjoyed by local residents.

While retaining approximately 40% of the environment at Otterpool Park as green space, this ambitious masterplan will not only house a significant new residential community, it will also create outstanding community infrastructure, a business park, and many natural green spaces as well as sports and leisure facilities.

The overall design is focused on the opportunities from excellent transport infrastructure. A network of routes, infrastructure and green spaces will be created which include both direct and leisure routes, accessible to all from home to work, and play.

Key destinations for new and existing residents to enjoy will be the tree-lined High Street, the tranquil Riverside area and the picturesque Woodlands and Hillside areas, each adhering to the masterplan's aim to fully integrate urban and rural character.

Set within this unique environment will be high quality homes that all can enjoy for generations to come - from starter homes, to family homes of all sizes, bungalows, self-build, homes for young and old people with extra-care provision, together with all the facilities needed to create and sustain a vibrant community life.

Otterpool Park will seek to showcase what a sustainable future can look like by enabling people to live affordable, happy and healthy lives in high-quality homes with social infrastructure that use resources wisely and enhance their natural environment. A smart town will be created that incorporates ultra-fast fibre to all the premises and along with new technology will follow the principles of reduce, re-use and recycle at every level.

Facilities will include new schools, community centres, nurseries, a health centre, a town square, sports pitches, a country park and a nature reserve with a mosaic of landscape in which the local waterways will be revealed and enhanced for everyone to enjoy. To encourage healthy eating, edible landscapes and community allotments and orchards are included for growing local food.

The exceptional green infrastructure will be multifunctional to provide a range of environmental benefits and to encourage healthier lifestyles, promote sustainable transport choices and support start-up business units where sustainable practices are encouraged. In short, this is a community designed to give everyone ample opportunity to stretch their imagination as well as their legs.

The masterplan will create a place with social interconnectivity and walkable neighbourhoods to provide employment land distributed across the masterplan and create a mix of uses. Otterpool Park masterplan provides an accessibility hierarchy to create walkable mixed use neighbourhoods.

- A town centre with high street on a key route linking north and south creating connectivity across the A20 located within 10 mins walk of Westenhanger railway station. This main centre would provide access to services within 800m distance or 10mins walk for a significant number of residents and workers.
- Additional local centres would be linked to the main centre by public transport providing accessibility to services with development of housing and local

employment within 400m distance or 5 mins walk.

 Monitoring the success and challenges from exemplar new settlements such as NW Bicester, Northstowe and Poundbury to influence the evolving design of the Otterpool Park masterplan and achieve a mix of employment and local services in each phase.

The vision for Otterpool Park Garden Town will ensure that a unique and new place is created that has a clear and distinct sense of identity, which builds upon the established and existing qualities and infrastructure of the masterplan area order to create a sustainable and interconnected group of places that are significantly greater than the sum of their parts.

The Framework Masterplan is based upon garden city principles published by the Town and Country Planning Association, adapted to fit with the local vernacular context and circumstances, creating design principles for a high quality Framework Masterplan underpinning the delivery of Otterpool Park Garden Town.



Westenhanger Castle, Otterpool Park, Kent

## 1.6 Masterplan Framework Land Use and Quantum of Development

The total masterplan framework area of approximately 765 hectares south of the railway will have areas for development of approximately 600 to 650 hectares which will comprise:

Approximately 325 to 350 hectares for development including roads and approximately 275 to 300 hectares for green infrastructure.

Within the masterplan framework area there are retained existing uses which comprise:

Approximately 50 hectares of retained agricultural land use and woodland and approximately 100 hectares of existing communities and commercial use.

The masterplan framework provides opportunities for future variation to existing employment use to accommodate alternative uses or enhanced employment use.

#### Residential

Otterpool Garden Town will provide land for approximately 10,000 new homes within the masterplan framework.

- Within the masterplan framework site area approximately 245 to 265 hectares for approximately 8,500 to 9000 Residential dwellings use class C3
- Within the masterplan framework site area approximately 10 to 12 hectares for approximately 500 to 900 Extra care residential dwellings use class C2
- Approximately 600 homes on additional land north of the rail adjacent to Sellindge proposed by Shepway District Council policy CSD9. These homes have been included in the cumulative total for Otterpool Park for the purposes of planning for infrastructure and services.

## **Community**

Community facilities will be provided in the masterplan framework site area. Whilst the exact mix and quantum of such uses is yet to be determined (and will in large part be decided through the ongoing programme of stakeholder engagement), it is anticipated that these could include following uses classes:

- Approximately 2 up to 2.5 hectares with approximately 3,000 up to 4,000 sqm D1 nia for approximately 11-12 nurseries,
- Approximately 1 up to 1.5 hectares with approximately 5,000 up to 10,000 sqm D1 health services, GP surgery & dentist,
- Approximately 1 up to 1.5 hectare with approximately 4,000 up to 5,500 sqm D1 community halls and facilities,
- Approximately 12 up to 13.5 hectares D1 for up to 6 Primary schools, including sports pitches
- Approximately 15 up to 20 hectares D1 for up to 2 Secondary schools/further education, including sports pitches

#### Commercial retail and leisure

The provision of an adequate retail and leisure offering is essential to maintaining the vitality and viability of sustainable settlements and meeting the needs of residents quality of life and these could include within the masterplan framework site area:

- Approximately 2 up to 2.5 hectares with approximately 7,500 up to 10,500 sqm A1 retail floor space to meet local needs for both convenience and comparison goods.
- Approximately 2 up to 2.5 hectares with approximately 7,500 up to 10,500 sgm

- A2,A3,A4 retail/leisure floor space including businesses/cafes/restaurants/pubs/takeaways
- Approximately 1 up to 2 hectares with approximately 5,500 up to 7,500 sqm D2 leisure indoor sports and pavilions

#### **Commercial business**

When combined, the community and commercial land use will create approximately 7.000 to 8,000 new employment opportunities. Business space includes facilities to encourage local services, new employment, small business startups will comprise:

- Approximately 3 up to 3.5 hectares with approximately 9,000 up to 13,000 sqm B1a commercial business in hubs
- Approximately 7 up to 9 hectares with approximately 40,000 up to 52,500 sqm B1b commercial business park
- Approximately 3 up to 5 hectares with approximately 7,500 up to 12,000 sqm B2 Light industrial business park
- Approximately 1 hectare with approximately 5,500 up to 7,000sqm C1 Hotel and ancillary facilities

## New streets, parking and infrastructure

 Within the masterplan framework site area approximately 25 to 30 hectares will provide new streets and parking infrastructure.

The masterplan will create a place with social interconnectivity and walkable neighbourhoods to provide employment land distributed across the masterplan and create a mix of uses. Otterpool Park masterplan provides a walkable accessibility hierarchy to create walkable mixed use neighbourhoods.

## **Masterplan Strategies**

This section report will explain how the masterplan has evolved from a consideration of the context of the masterplan area, the creation of a vision from guiding principles, principles and the response to this context leading to the presenting a masterplan concept. The rest of the chapter describes how the masterplan is created from character areas and the ideas which have been used to create a distinctive place within each character area and legible transitions between each character area. It goes on to describe the straetgies for key themes including transport, water and sustailaibity.

## 2.1 Location and Context

The masterplan has been shaped by a thorough analysis of the character of the area and surroundings and a testing of opportunities and constraints.

#### Location

The brief for Otterpool Park identifies circa 750 hectares of land located in the west of the Shepway district. The towns of Folkestone and Hythe are located to the south east with Ashford to the north-west. The area is bounded by the M20 and Ashford-Folkestone railway line to the north, the A20/Stone Street and Sandling Park to the east, Harringe Lane to the west and Aldington Road to the south.

The Kent Downs Area of Outstanding Natural Beauty (AONB) bounds the area along its eastern and southern edges. It also lies approximately 1.25km to the north.

Four villages are within or adjacent to the area. Westenhanger to the north where, aside from the castle and station, existing buildings are primarily residential use. Lympne is a residential settlement which lies to the south east. Barrow Hill, Sellindge and Newingreen are

small residential settlements to the north-west and east respectively.

Lympne Distribution and Industrial Park (known as Link Park) lies to the south west. A large portion of the remainder of the area is used as agricultural land with small farmsteads.

Beyond lie a number of small villages including Stanford to the north, Sellindge to the north-west, Sandling to the north east, Pedlinge to the east and West Hythe to the south.





Otterpool Park location plan

#### **Otterpool Geography**

The Otterpool Park masterplan has been shaped by its underlying geography, geology and its nearby water courses. It is located in the 'Sellindge Plateau', 'Aldington Ridge' and 'Upper Stour Valley' Character Areas as defined in the 'Landscape Assessment of Kent' published by Kent County Council (KCC) in 2004.

The area is broadly described as having a north sloping landform, with underlying geology of the Greensand escarpment and ridge on the south and the river valley clays on the north, characterised by a fragmented pattern of remnant woodlands and pasture farmland.

The geology of Kent is such that the geological formations lay in bands parallel and sloping north toward the River Thames across the depth of the county. Otterpool sits on a shallow slope between two ridges, the 'Aldington Ridge' of Greensand to the south and North Downs chalk ridge to the north, with the Vale of Holmesdale in between. There is a Geological Site of Special Scientific Interest (SSSI) present in the centre of the masterplan area. This is the former Otterpool Quarry and displays sections through the Hythe Bed Formation which is part of the Greensand Group.

The first settlements at Otterpool are likely to have been located in forest on both the lower clay and, uphill, onto the higher ridge and less flood prone ground.

Despite its predominant northward slope the landform is gently rolling and the localised geology gives rise to the a more intimate landscape character of small streams and springs, running downhill south to north to the clay of 'Sellindge Plateau' of 'Stour Valley' character areas. The water courses historically lead to scattered settlements and farmsteads located near to the water source.

Away from the existing settlements, areas of commercial use and Folkestone Racecourse mixed farmland is the dominant land cover, with arable farming forming the principal use and pasture generally on the steeper slopes. The landscape through this area is generally fragmented, and without a clear pattern. There are many visual detractors associated with road and rail transport corridors and linear development. It contains sparse woodland cover with only occasional blocks of woodland and corridors of trees bordering valley streams. Fields are generally large and occasionally enclosed by hedgerows, with hedgerow trees. The landscape a few kilometres to the west of the site, around Aldington, displays the kind of richer, more intimate and vegetated character sought by the 'Landscape Assessment of Kent' for the site and its surrounds.

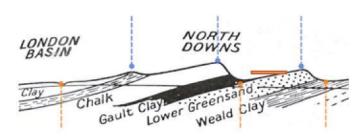
Settlement is characterised by scattered farmsteads with occasional buildings of vernacular character, such as Ragstone walls and structures with slate or clay tiled roofs. These are overshadowed however by the incongruous nature of more recent built development within settlements such as Lympne and at Link Park industrial estate.

## **Otterpool Biodiversity**

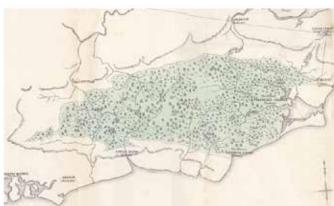
The Otterpool Park Masterplan takes into account the biodiversity of the site, striving to protect and enhance the ecological value of the area.

The area supports a range of habitats, including broad-leaved woodland, hedgerows, ponds, running water courses, mature trees and grasslands. However, the largest areas of the existing site are improved grassland pasture and arable land. Within the masterplan there is extensive opportunity for enhancement of the range, quality and connectivity of habitats across the site.

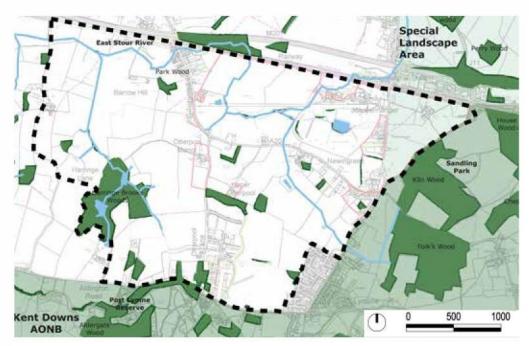
The value of the habitats is indicative of the current and historical usage, driven largely by farming methodologies and management. In many areas, the ecological value has been reduced by intensive farming, removal and degradation of hedgerows and application of fertilisers and other agricultural process.



Section of Geology in Kent



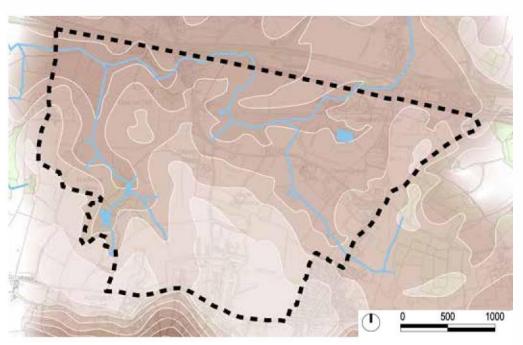
Forest of Anderida during the Roman Occupation of Kent



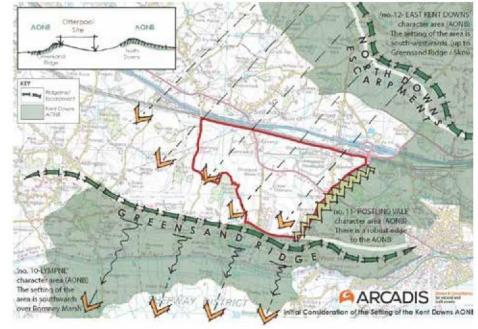
Existing Green and Blue Infrastructure



Kent Downs AONB



Topography



Kent AONB Boundary and site location

### **Social History**

# Otterpool today and in the future – a place which continues to be shaped by its history

The settlements that formed, what is described as Otterpool Park, historically followed a pattern of routes moving west east across higher ground out of the river flood plains and north to south up hill. It is a continuation of this natural progression that sets out the concept for the masterplan.

The routes and landscape were of strategic importance, demonstrated by evidence of Neolithic burial mounds at Barrow Hill, the Roman fortified port at the foot of the Greensand ridge, which lies outside the search area south of Lympne, where the remains of the site and Saxon fortifications are visible today. The Roman port 'Lemanis' was on the former coastline which is now reclaimed land of Romney Marsh, with routes to the north and west-east establishing a roman crossroads at Lympne.

The Saxons moved the fort up hill, with the second fort of 'Stufall' and the 11th century settlement. It grew along the ridgeline around Lympne and two medieval manor houses Westenhanger Castle and Otterpool Manor on the lower slopes which form key parts of today's historic context.

The manors were surrounded by woodland and Westenhanger Castle is noted for having been used as a deer park. Settlements formed along the key Roman and Medieval routes between and around the Stour tributaries. The field enclosure act in the 1800's, consolidate the manors' ownership boundaries with larger farms and field patterns established with loss of most of the woodlands.

The current lopsided growth of villages Sellindge and Westenhanger was a result of the 19th century introduction of the railways from London to Folkestone and Dover which cut across the middle of the Castle grounds which are now confined to the south of the Stour stream. Westenhanger Station was created in 1840s and with this accessibility the creation in 1896 of the racecourse and surrounding development.

Otterpool, since Roman times, has had of strategic importance in the region. During WW1, the RAF opened an airfield on the racecourse and on the upper slopes, which grew in importance for defence in WW2 with buildings constructed which subsequently became the Link Park industrial estate, to the east of Otterpool Lane.

The existing villages within or close to the search area of Lympne, Sellindge, Stanford, Barrow Hill, Sellindge Newingreen and Westenhanger are part of the continuing evolution of the area, with links to history and the 20th century changes. The settlements are dispersed along historic routes, however their connectedness has been constrained by their separation and the effect of the A20, motorway and railway creating barriers to movement. Footpaths which are widespread in the surrounding areas are not connected across the Otterpool Park masterplan area and the masterplan creates an opportunity for improved connectivity between the settlements themselves, to new facilities and open spaces within the masterplan and to wider surrounding landscapes.

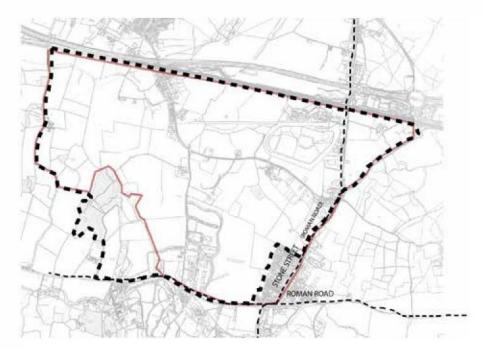


Lympne Church Saxon Ridge

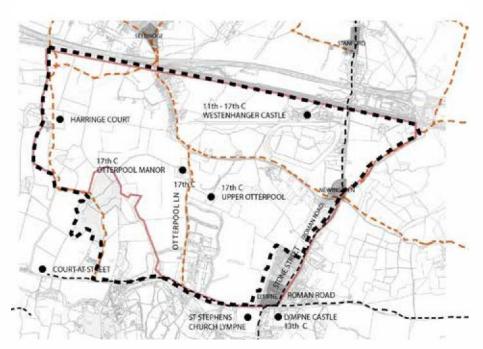


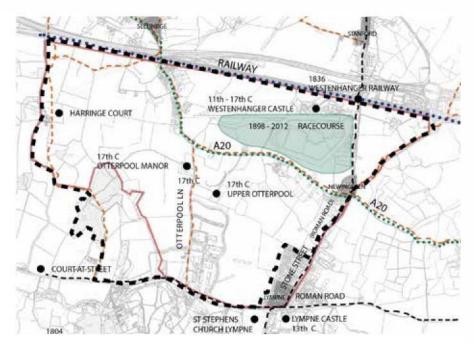
Stutfall Castle Saxon Ridge

The Chronology of the site from Roman times to 20th Century is described overleaf

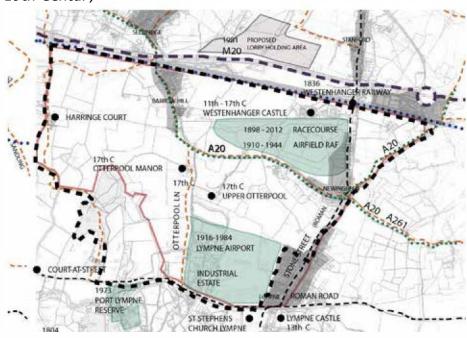


Roman





19th Century



# **DRAFT**

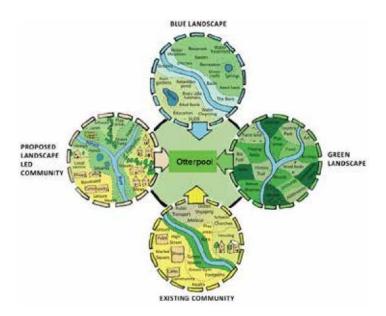
# Key opportunities, and guiding principles for the framework masterplan

The Otterpool Park framework masterplan has taken into account the guiding principles and Garden City principles in section 1.4 of this report and identifies a response to the key unique opportunities of the site:

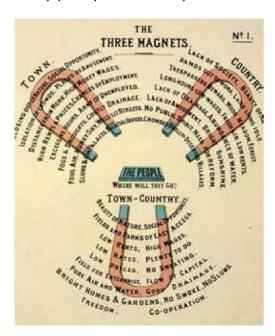
- Close proximity of Westenhanger Station and HS1 and local railway network provides opportunity for housing and employment uses with excellent accessibility to and from the wider region.
- A town centre can be created within walking distances of the railway station with accessibility to proposed housing and employment uses.
- greater connectivity can be provided across the landscape and link the emerging community with the existing landscape assets in the surrounding areas.
- proposed new settlement can be integrated with existing communities socially and functionally but not physically, enabling sharing of new amenities whilst providing separation by strategic landscape buffers or open space to mitigate potential environmental impacts.
- Existing heritage assets, whilst of interest, are not able to be fully appreciated in current land use and will be enhanced with improved landscape settings and an integrated part of the cultural strategy and the open space and

recreational strategies of the masterplan.

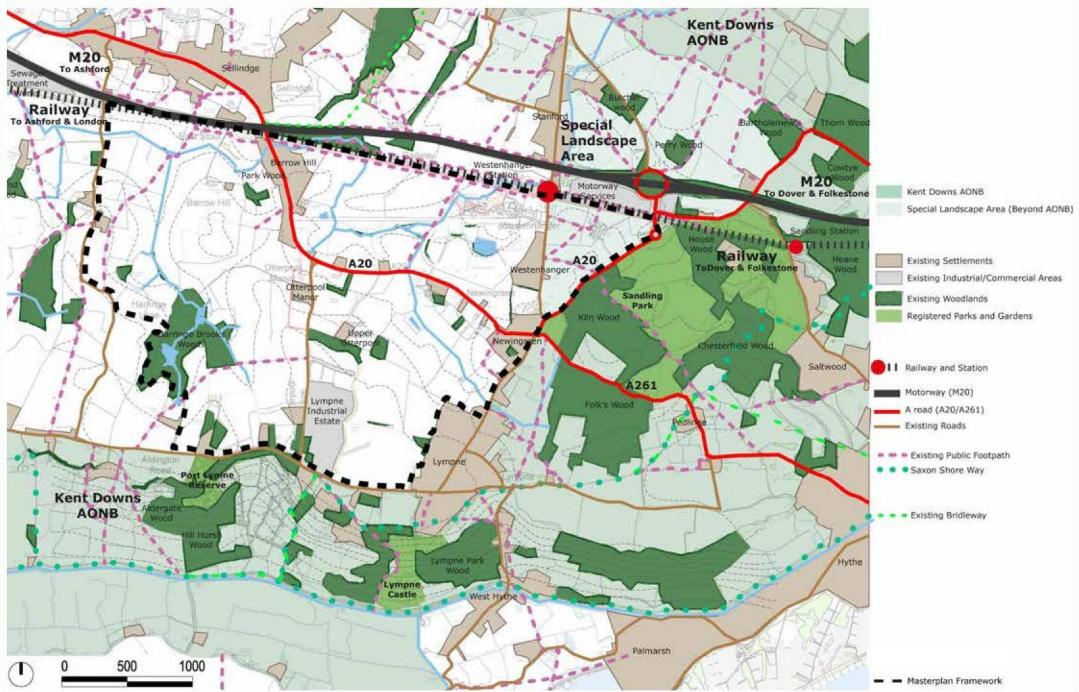
- The fact that the area is controlled by limited number of owners enables masterplan, management structure and phasing to be established to support the long term quality and delivery of infrastructure and public realm.
- The existing water courses can be integrated into a sustainable urban drainage strategy within a new landscape green infrastructure.
- The creation of a stronger, more intimate and richer landscape structure and tapestry, using small woodlands, hedgerows and tree belts, in response to the 'Restore' and 'Create' actions proposed within the 2004 KCC LCA.
- A settlement that reinforces the existing landscape pattern of north-south undulating topography.
- The visual amelioration of existing detracting elements such as the HS1 rail line, Link Park industrial areas, the potential M20 lorry park, and other commercial activity.



Garden City principles for Otterpool Park



Ebenezer Howard's 1898 three magnets diagram explaining 'Town Country'



## 2.2 Community Engagement

There have been two community engagement sessions: in December 2016 and June 2017 which took place in venues local to the masterplan area. engagement was managed by Kevin Murray Associates, attended by the design team and the detailed reports are available to view on the Otterpool Park website. A summary of the key points which influenced the masterplan evolution are described in chapter 2 as follows:

# **Key points from December 2016 Engagement**

**Infrastructure** – There were concerns about pressure on already stressed infrastructure, particularly roads, utilities, and also worries about possible flooding impact. Various suggestion were made to ease congestion, and requests made about improving gas and broadband connectivity.

**Housing** – There were concerns about the numbers of homes above currently committed levels, and also about the affordability of these to local people. There were also comments made that the design and character of the homes will be important, as would energy efficiency.

**Facilities** – People discussed the need for a range of facilities including health (potentially a hospital), local shops, schools, a scout headquarters and a leisure centre

**Environment** - The local environmental quality was a big issue for many, ranging from aspirations for better footpath access, concern about the loss of agricultural land, and the need to improve the general biodiversity of species. Landscape and open space was seen as a key priority.

**Jobs** – Many people wanted to see more employment and jobs were considered as being important for the local area. The questions were around how many and what types of jobs, and

whether they would really be available to local people.

**Accessibility** - Many people identified getting about as their top priority, whether by bus, car, cycle or other mode. New and improved footpaths and cycleways were identified as desirable, while a question was raised about Westenhanger Station becoming a High Speed one.

**Traffic and Bypass** - Many people were concerned about what impact new development would have on the roads and junctions, and when any new upgrades would take place. Several people suggested a bypass was desirable.

**Lorries** – Although this is not strictly part of the Garden Town proposal, concern was expressed about the impact of lorries on the roads, holding area and general quality of life.

**Trust and the Garden Town masterplan process** - There were concerns expressed about the Garden Town process, and criticism made that indicated a general lack of trust in the process, with many stating they would like more information on where this had come from.

**Understanding of the Masterplan and Planning Process** - People wanted to understand more about the masterplan, the planning process and timescales involved. They also asked for more information about phasing.

**Consultation and engagement** - There was a particular request for more consultation in the future, across a wider spectrum of the community, including more business and local groups, with more notice given to people.

## **Key Points from June 2017 Engagement**

The consultation held in June 2017 was targeted at different stakeholder groups and

settlements in a wider context. The response to the indicative masterplan includes many of the same points from Dec 2016, and in addition identifies the following key points:

**Demographic -** Housing, community amenities and employment opportunities which should attract a mixed demographic comprising local people as well as younger people from further afield, taking care not to create a commuter settlement, with the aim of making Otterpool Park a 'whole life cycle development'. Readdressing the age balance locally and creating business communities was seen as critical so that young local people don't leave the area.

**Amenities -** Providing cultural, social and leisure facilities and amenities meeting needs across all age-groups and enabling active lives: encouraging networking links with surrounding towns.

**Work Environment -** Business places encouraging community cohesion, socialising at the workplace between businesses. Changing work patterns, with older people working longer in future, perhaps part time and preferably locally, with homes near jobs will encourage movement, walking and socialising.

**Retail and Leisure -** The retail and leisure offer would encourage a thriving local centre, integrating community facilities to ensure viable delivery of facilities, plus encouraging 'pioneer' new shops possibly concentrated around the station

The indicative masterplan and vision will be forward-looking by challenging and addressing

- Local housing needs of all types
- A range of business premises for start-ups and expanding offices and manufacturing space with equal opportunities for small as well as larger businesses

A high street able to withstand changing retail trends

- Provision for good broadband and similar services
- Addressing Air quality problems that have long-term health consequences
- The provision of multiple local centres to encourage walking and cycling, with the provision of dedicated cycle paths
- New health care facilities would be provided, with a suggestion that two types of health care are needed either integrated or provided separately to include; very specialist care including elderly and acute care issues, such as timely treatment for stroke patients and a second being for doctors' surgery with GPs and non-emergency care
- New faith centres will be provided and a crematorium or burial space

# 2.3 Evolution of the masterplan - Capacity constraints and options studied:

A Stage 1 report in December 2016 provided Initial Capacity Testing Scenarios. This study considered the capacity of the search area to accommodate up to 12,000 homes in accordance with the guiding sustainability and garden city principles. The study identified that the capacity is reliant upon several interrelated factors:

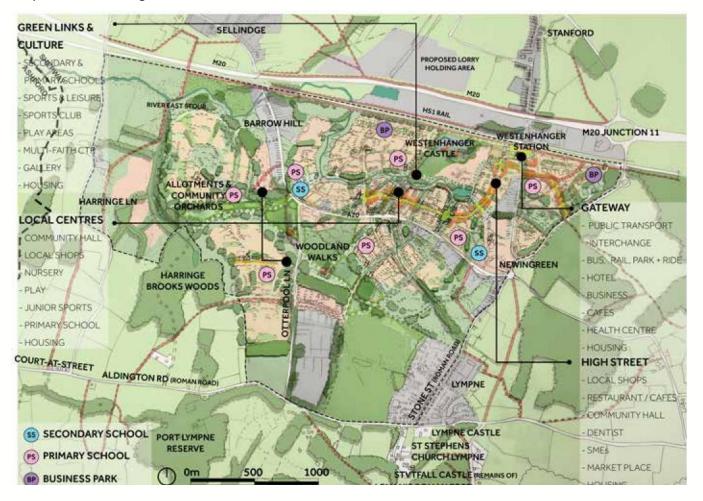
- Existing constraints
- Housing density
- Transport and infrastructure capacity
- Green Infrastructure and open space

provision

Land take / site coverage

An initial high-level assessment of the capacity was carried out as scenarios testing the spatial factors – housing density, green infrastructure and response to context. The importance of the green infrastructure in the

creating value through place making was tested both through considerations of design and through market testing for housing delivery. The objective to achieve approximately 40% of the masterplan area for green infrastructure was supported as an important consideration to create quality and value from place-making and an appropriate response to context.



Masterplan for up to 12000 homes, as displayed at June 2017 Consultation

### Revisions to masterplan from summer 2017 to early 2018

The boundaries and content of the masterplan was revised between June 2017 and 2018.

- finalise masterplan capacity at approximately 10,000 homes and 8000 employed from previous brief for up to 12,000 homes with 10,000 employed.
- Revise mix of housing to reduce proportion of apartments from over 40% to approximately 20-25% overall (excluding extra care homes which increase apartments to approximately 25-30% overall).
- Reduce number of primary schools from up to 7 to 6 to reflect capacity approximately 10,000 homes.
- Additional land added to the masterplan boundary to enable provision for housing of overall 10,000 number at medium density And to reflect the revised boundary in the Regulation 18 Draft Core Strategy Local Plan Otterpool Park Garden Settlement Allocation.
- The masterplan boundary area will be extended to the south west of Otterpool Lane, adding land to the search area between Harringe Brooks Wood and Aldington Road for housing with a defensible landscape edge to the west and south.
- The Lympne Industrial Area and land to the east of Otterpool Lane is included in the masterplan area for housing with a defensible landscape edge to the east and south and separating development from the west of Lympne.
- Harringe Brooks Woods is included in the masterplan area to establish a clearly defined western boundary for the masterplan with

- retained farmland as a continuous defensible landscape edge to the east side of Harringe Lane.
- Land to the south of Sellindge allocated for housing in the Reg 18 draft Core Strategy Local Plan which is proposed to be included in the number of 10,000 homes, although not in the Garden Town masterplan boundary. Sellindge will remain a separate and distinct village.

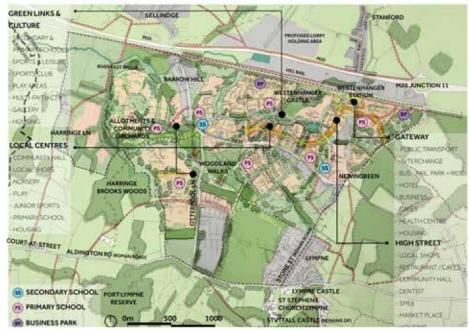
The masterplan of June 2017 suggested an indicative spatial layout with a gateway town centre and satellite villages.

Following stakeholder reviews of the masterplan through summer 2017 and early 2018 the indicative spatial layout evolved and was revised to provide:

- A clearer route network providing a focus for the town centre high street connecting north and south adjacent to the A20 with cycle and bus routes directly linking Westenhanger station to areas south of the A20.
- Integration of the A20 with new routes and crossings to create connectivity, footfall and high quality of place making on both new and existing streets.
- New distributor road loops which enables protection and mitigation of existing local roads and junctions to additional traffic (refer to plan page 43).
- A gateway access from M20 Junction 11 to the east providing improved accessibility and traffic flows to Westenhanger railway station and proposed businesses with landscape mitigation to long views from the AONB.

- A clearer high quality route network for pedestrians and cyclists to key destinations of high street, station, schools and recreation spaces.
- High quality Green infrastructure influencing the distinct character of Local centres to differentiate housing neighbourhoods and assist legibility and footfall.
- Character areas created for housing integrated with distinct landscape: Suggested character areas to be further considered are Gateway, Westenhanger Castle, High Street, Riverside, Otterpool Slopes, Woodland, Hillside, and Valley & Woodland Edges.
- Westenhanger Castle landscape the proposed open space surrounding the castle has been given further consideration to enhance the setting and vistas to the scheduled ancient monument and listed building.
- Secondary school and sports field locations are being given further consideration to contribute to the social infrastructure and healthy lifestyles of the community as a whole.
- Existing communities of Barrow Hill, Sellindge Lympne, Westenhanger and Newingreen are considered in the landscape strategy to provide appropriate landscape adjacent to communities.
- Views of the North Downs from lower
   Otterpool Lane in vicinity of Otterpool Manor
   to be protected through landscape strategy.

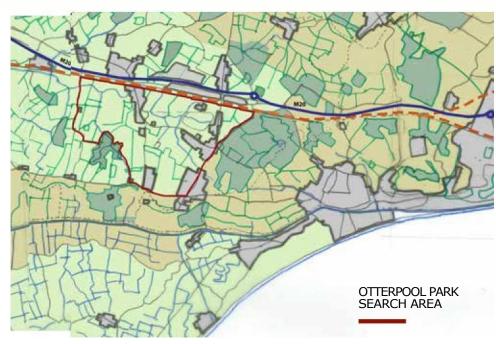
Next page: Evolution of Masterplan framework for up to 10,000 homes with a wider masterplan site area.



## Masterplan framework draft June 2017



Masterplan framework 2018



Masterplan search area June 2017



Masterplan framework area 2018

## **2.4 Response to Context**

he key concepts are derived from the existing constraints and opportunities of the site as discussed above. It is through interaction with the existing context of the site that the design will aim to create a masterplan with distinct character that integrates with the landscape. The driving landscape concepts are as follows:

## **Integrate with Existing Communities**

The masterplan will aim to provide improved transport and pedestrian connections between the existing communities of Westenhanger, Barrow Hill, Sellindge Newingreen and Lympne and Westenhanger Station. Proposed built form will aim to be sympathetic to existing buildings whilst vegetation and green space provide buffers and screening where required.

## **Utilise the Distinct Topography of the area**

The masterplan site sits on the slopes between the Greensand Ridge and North Downs Escarpment, within the Vale of Holmesdale, allowing for expansive views across the landscape to the South. Within the site boundaries there are a series of ridges and valleys that create more prominent areas of the site. Through consideration of the landscape form, open spaces and vegetation will be introduced to help define views into, out of and within the masterplan and integrate the settlement into its surroundings, in particular the impact on the setting of the AONB.

#### **Enrich River Corridors**

The river corridors will be enhanced and incorporated into the masterplan as resources for:

.A rich biodiversity assemblage

- Habitat corridors
- Leisure routes
- Flood alleviation

## Highlight Heritage Assets with Green Space and Green Links

The rich cultural heritage of the site is to be celebrated in the masterplan and incorporated into a network of leisure spaces. Pedestrian links between heritage features and highlighted visual connections will be used to help define a layout that is sympathetic to and highlights heritage assets.

#### There will be:

- Opportunity to improve the setting and access to heritage assets, such as Westenhanger Castle
- A network of bridleways, foot and cycle paths that incorporate heritage features into leisure routes and provide opportunities for running routes and promote healthy lifestyles.

#### **Promote Green Corridors**

The existing woodlands on site will be enhanced through the creation of green corridors and the retention of hedgerows and trees that will serve the following purposes:

- Flood mitigation
- Habitat links and resources, for species such as amphibians, badger, bats; birds, invertebrates and common reptiles
- Pedestrian and cycle routes for both leisure and commuting

- Create distinct character areas within the masterplan
- Provide defensible edges

The corridors will create a network of green routes connecting open spaces that in turn will help to define a housing layout that is integrated with the surrounding landscape.

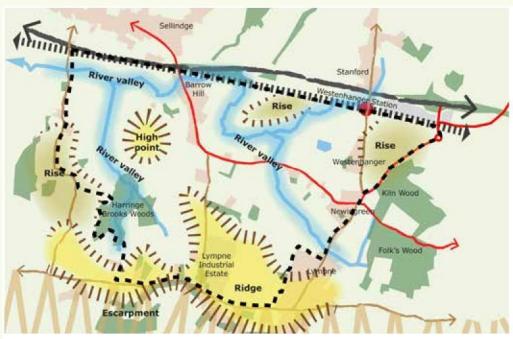
## **Maximise Biodiversity**

The masterplan will retain and enhance valuable habitats within the site and promote the creation of new habitat areas for notable species, benefits envisaged for the site will drive:

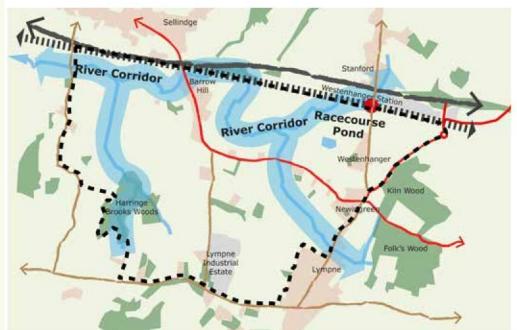
- an improved diversity of valuable habitats across the site;
- better connectivity between valuable habitats to maximise conservation status of species populations;
- an integrated approach to conservation which takes into account the surrounding habitats;
- a habitat creation vision which future proofs the development, allowing opportunities for species ranges to expand into new areas, particularly for notable species such as otters.

## **Masterplan strategy in response to context**

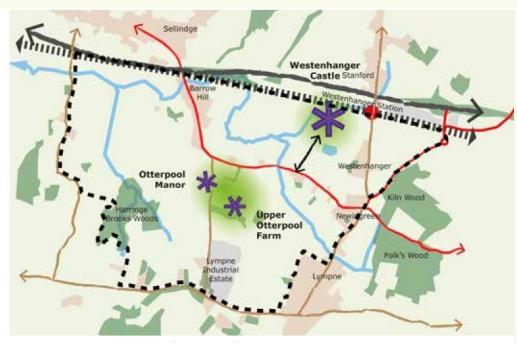
The Masterplan response to the context analysis and approach to place-making and urban design spatial framework provides a strategy for key site specific structuring elements such as gateways, landmarks, views, focal points, local centres, frontages, street hierarchy and interfaces.



Responding to topographical features of the site



Enhancing blue Infrastructure: river and stream corridors



Integrating connections between heritage assets



Strengthening existing green infrastructure links



# Description of key features informing proposed masterplan:

- A gateway at the east will be created with enhancements to access at the railway station, interchange with buses and park and ride, hotels, health facilities, retail, leisure uses and employment uses.
- A town centre, with a high street, close to the transport interchange with a street scale of typical Kent high street such as Tenterden. The town centre will have retail, restaurants, cafes, dentists, nurseries located on street frontages, with flats above and a mix of town houses to create a higher density urban scale.
- Excellent access to public transport services and amenities to support the principles of a sustainable development.
- Bus routes designed to provide regular access to key destinations, such as schools, local centres and employment sites, from stops within 400m of all homes.
- Proposed new access junctions from the main roads will be provided from the east with a new junction from the A20 close to the M20 Junction 11. This will provide new routes through the development crossing the A20 designed for lower traffic speeds and with a permeable network of crossings for pedestrian and cycle streets. Further connections to the A20 will be made to the west at the junction of Otterpool Lane which would enable development to be linked both north and south of the A20. Crossing facilities will be provided across the A20 to allow walking and cycling between the communities.
- A network of footpaths and cycle routes for commuting and school access will be

- integrated with streets and through landscape to create direct access between communities, local centres, town centre, key destinations and railway station.
- Local centres dispersed within housing areas on bus route corridors at optimum distances apart from each other and linked to the railway station. The local centres will provide mixed uses with employment use business space above, services such as retail, restaurants, cafes, dentists, nurseries located on street frontages. Schools would be provided close to local centres to optimise walkable communities and create footfall and shared use for the amenities and services.
- Business parks will be located on the northern edge of the town to create a buffer to the residential from the M20 and railway. A mix of employment uses could be provided, with high quality space attracting new business for high skilled jobs.
- A proposed new landscape of open spaces will created with a wide variety of woodlands, wetlands, meadows, allotments, retained farmland, recreation areas all connected by green routes.
- A 'town park' around Westenhanger Castle taking water, landscape and heritage constraints into an opportunity, provide a distinctive space at the heart of the scheme and reinforcing its importance as part of Otterpool Park's identity.
- A large woodland country park in the central area near Otterpool Manor which provides an opportunity to link to existing woodlands to east and south.

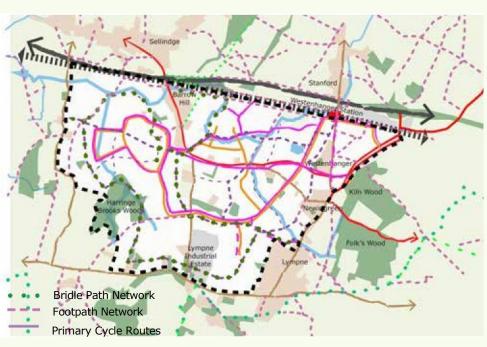
- Village scale pocket parks which are linked with the green corridors and buffers to the surroundings including natural play, allotments and community orchards.
- A cultural landscape around watercourses and open parkland setting for the Westenhanger Castle will create a key destination, with land uses such as cafes, shop, galleries, public art, visitor centre, meeting hall, leisure, secondary school and higher education.
- Footpaths and cycle ways provide a network of leisure routes linked to surrounding footpaths and existing landscape assets.



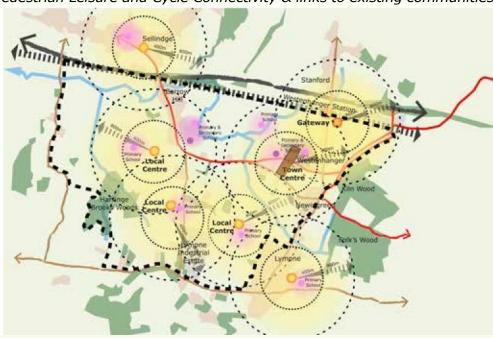
Transport: Bus Routes to Rail Station & Strategic Network



Land Use Framework



Pedestrian Leisure and Cycle Connectivity & links to existing communities



Local Centres & links to existing communities

**DRAFT** 35

# 2.5 Masterplan Framework Indicative Layout

Otterpool Park will create a series of new places, creating a high quality of public realm integrating with existing settlements through new landscape buffers and connecting into new development and communities. Our approach has been to create an overlay of great new spaces, providing the new landscape required to meet the challenges in making Otterpool Park a new and valued part of the landscape character of the district. This goes further than mitigation.

Settlement areas with distinct characters will be created: the "Gateway" with strong landscape edge, "High Street" with tree-lined public space, the tranquil "Riverside" area, the transition through "Otterpool Slopes" to the picturesque "Woodlands" and "Hillside" areas, each adhering to the masterplan's aim to fully integrate urban and rural character.

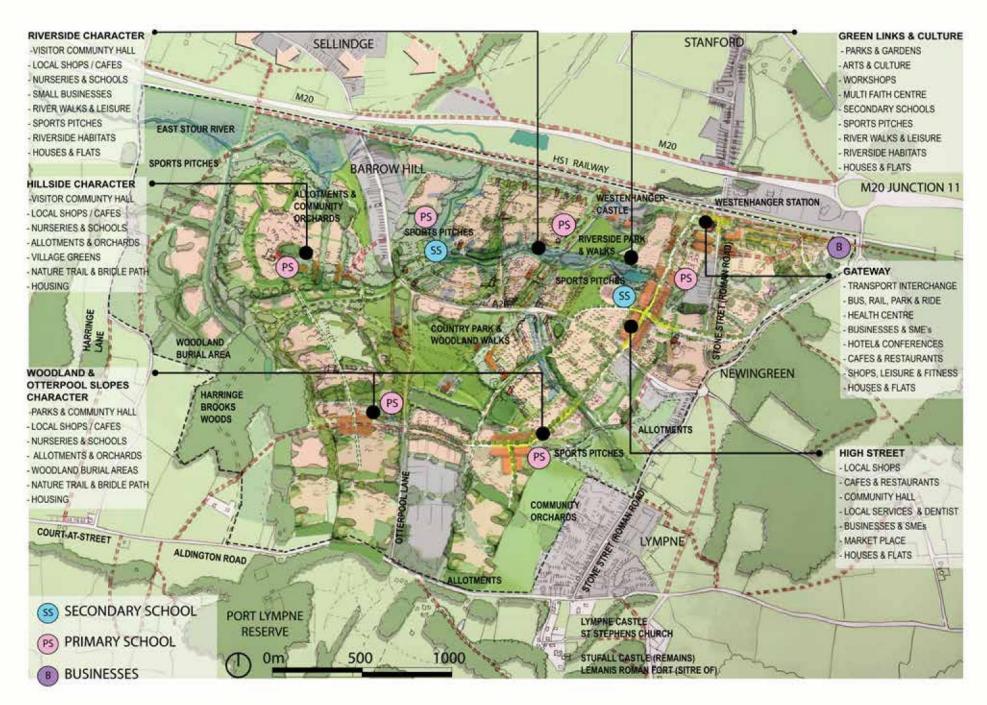
### A coherent place

The creation of the masterplan relies on the successful connection of existing settlements, retail, community and business areas; existing countryside, historic buildings and settings with new development in Otterpool Park creating a holistic place.

Over time Otterpool Park Garden Settlement will combine the best of both places of rural countryside and the closeness of an urban connected place. The success of the development relies on each phase creating a coherent local character and integrating with new and existing links and connections to the existing surroundings. This includes integrating with existing communities and villages as well as making the countryside more accessible to existing residents.

### The surrounding communities

The existing farmland is historically related to a landscape of small villages and farms creating a network to provide food for the local town market. The surrounding communities and villages have played a large part in Otterpool Park's development to date. Local communities include the nearby villages of Lympne, Sellindge, Stanford, Barrow Hill, Newingreen and Westenhanger - historic manor estates and the existing farms on Harringe Lane.



Masterplan framework for around 10,000 homes with a wider masterplan site area

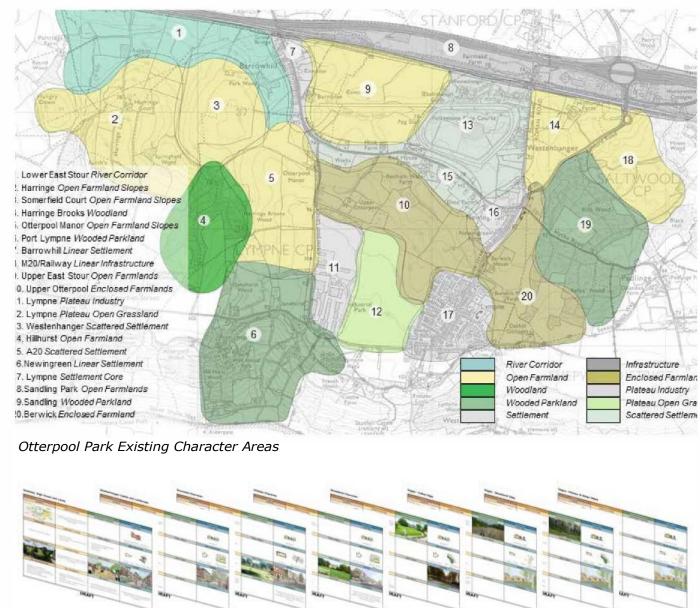
### 2.6 Character and Place-making

It is important that Otterpool Park feels like a place, and legible as a town, with a set of coherent identities and characters.

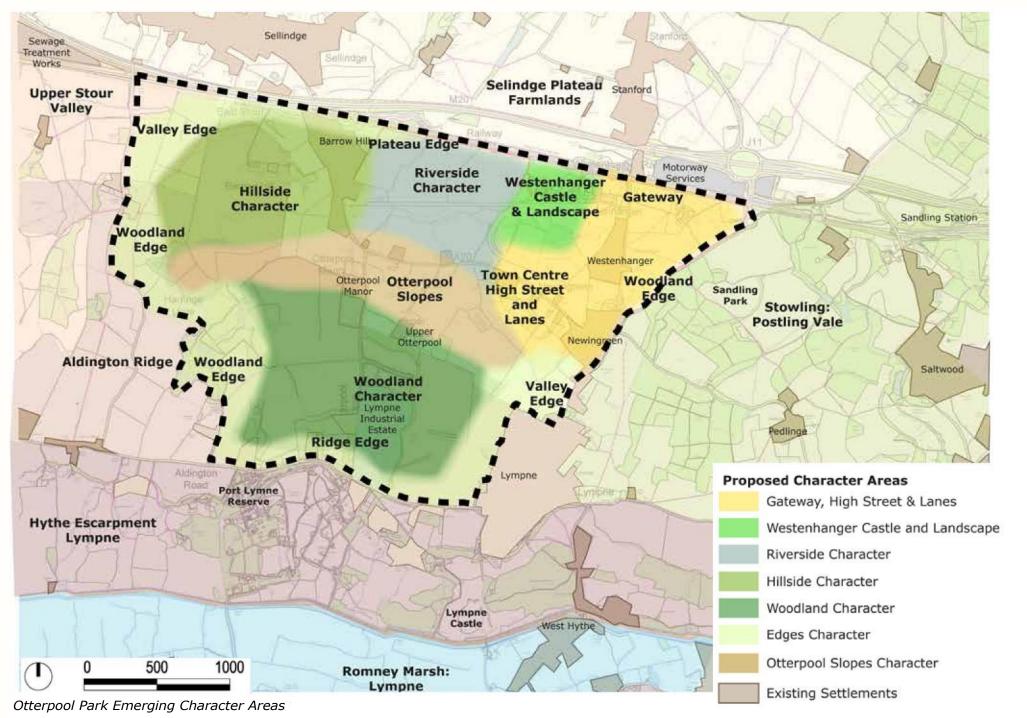
The existing site and its rural and settlement context is made up from a number of landscape character areas comprising of rural and arable farmland, existing communities of Lympne, Sellindge, Stanford, Barrow Hill, Newingreen and Westenhanger the existing historic buildings, the railway, river and M20 corridors, as well as areas of visual detraction. Each of these character areas have many differing characteristics, amongst them; species of trees, ratios of green to urban space, vernacular architecture and materials, habitats and ecologies, micro climates, populations and so on.

By creating a set of new character areas, breaking the masterplan down into areas which are complementary to existing character, relating to and taking influence from the existing landscape characters and retained natural features, ameliorating existing areas of visual detraction, we can begin to grow new places which are more site specific and integrate suitably on the landscape. This will ensure that the development feels like a special place which is heavily influenced by its location and heritage.

To highlight how the masterplan can begin to be broken down with contrasting uses and settings, the principal character areas have been illustrated 'Gateway', 'High Street', 'Riverside', 'Otterpool Slopes', 'Woodlands', 'Hillside' with transition places at 'valley edge', 'woodland edge' areas.



Character Area Design Tables to be developed



#### **Rural meets Urban**

Today, existing communities have limited access to the search area, being limited to a small number of footpaths from Sellindge to the north of the site parallel to the M20 and a path south west to Harringe Lane, and some footpaths from the south and which are poorly connected. The masterplan for Otterpool Park provides an opportunity to better connect the search area to the countryside surrounding it and the residents living in the vicinity.

The new development will be the transition between the existing hard edge created by the rail and motorway, and the rural farming and woodland landscape to the south and east. This will be achieved by pulling the landscape with new woodlands into the area with a series of green links and networks, and allowing the benefits and facilities of new schools, local centres and infrastructure to be shared between the new development and existing villages.

Both new and existing residents will have access to a wealth of green infrastructure such as a nature reserve, parks, sports facilities, allotments and orchards, riverside walks, play areas, rain gardens, woodland and a country park.

### **Creating new connections**

By minimising the barrier of roads and creating a new network of routes which encourages green connections, the transition between rural and urban can be created.

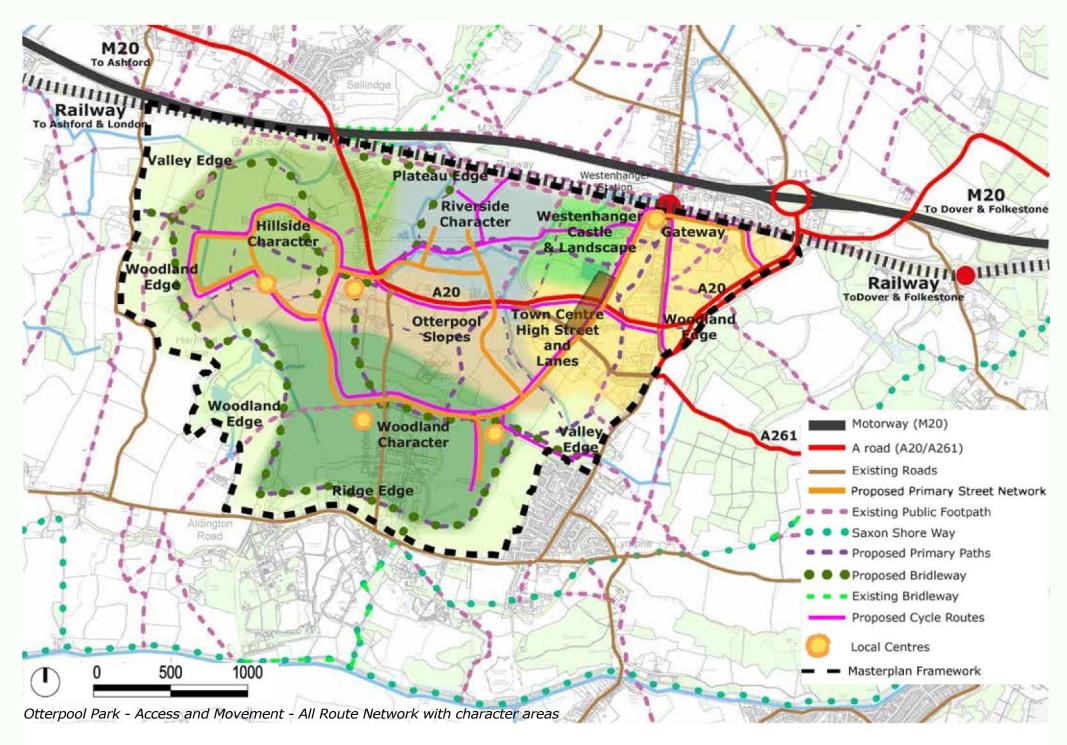
The new high street will provide ground level frontage for small shops, businesses, health, education and community facilities and will create strong pedestrian priority and shared public spaces.

New housing will be integrated with the high street mixed use in neighbourhoods with pedestrian crossings provided on roads within new housing and community infrastructure to integrate the communities providing ease of movement.

A network of new pedestrian and cycle routes will connect to the existing network to create a holistic movement strategy, providing easy, safe and fast access to the railway stations, the high street and town centre. It is key that new routes and connections are legible and easy to understand so that users can easily and safely move through the new development as well as connect with the existing communities.

## Connectivity through shared amenity and social infrastructure

New community infrastructure will be located within close walking distance of homes and key elements will be located with public transport and cycle footpath connections to be shared with existing residents. New social infrastructure will include elements such as local shops, a multi-faith facility, business centres, primary and secondary schools, community centres and health facilities.



### 2.7 Transport Strategy

The location for Otterpool Park Garden Town is defined by its excellent existing transport connections: by road (M20); by rail (High Speed 1 and local lines); and by air (London Ashford Airport at Lydd). Shepway is also home to the Channel Tunnel and Eurostar services at Folkestone and is just a short distance from the UK's busiest ferry port at Dover.

Otterpool Park will be influenced by the travel needs of the existing and future communities. The aim is to strike the right balance between ensuring the Garden Town is a great place to live and work with all the amenities its population needs, while also providing easy connections to and from neighbouring communities.

The Otterpool Park Masterplan and associated access and travel strategy will provide residents, employees and visitors with an attractive and comprehensive network of sustainable travel opportunities to provide viable alternatives to travel by private car. This will be balanced against ensuring that the highway access arrangements are robust enough to sustain additional traffic movements, provide connectivity to existing routes and allow the existing network to function within reasonable limits without causing significant issues for existing and future users.

The infrastructure of the Masterplan will be complemented by bespoke green travel measures, which will build on the opportunities offered by the existing infrastructure and its public transport, cycle route network, public bridleways, footpaths and pavements greatly enhancing accessibility and attractiveness of these modes, thereby reducing reliance on private cars.

### **Principles for Strategic Access and Travel**

- Create walkable neighbourhoods and a town centre highly accessible by walking and cycling
- Provide strong walking, cycling and bus connections to the rail station, employment, town centre and facilities and services;
- Ensure a high level of connectivity to and from Otterpool Park within the sub-region by frequent and high quality public transport;
- Integrate the access and travel network into the existing strategic and local networks;
- Provide connectivity by walking, cycling and bridleways into the surrounding countryside and from existing communities;
- Minimise and manage the impacts of traffic on the existing road network particularly through existing communities and other sensitive areas.

# Summary of evidence base, local and strategic network capacity

Access and travel is a key area of study for the masterplan team which is investigating the following opportunities:

- Planning the location of facilities and services to minimise travel distances and the use of private cars
- Creating safe and attractive walkable routes
- Delivering a comprehensive cycle network and facilities
- Ensuring high accessibility to the bus network for all
- Enhancing bus infrastructure and priority
- Improving access to Westenhanger Station,

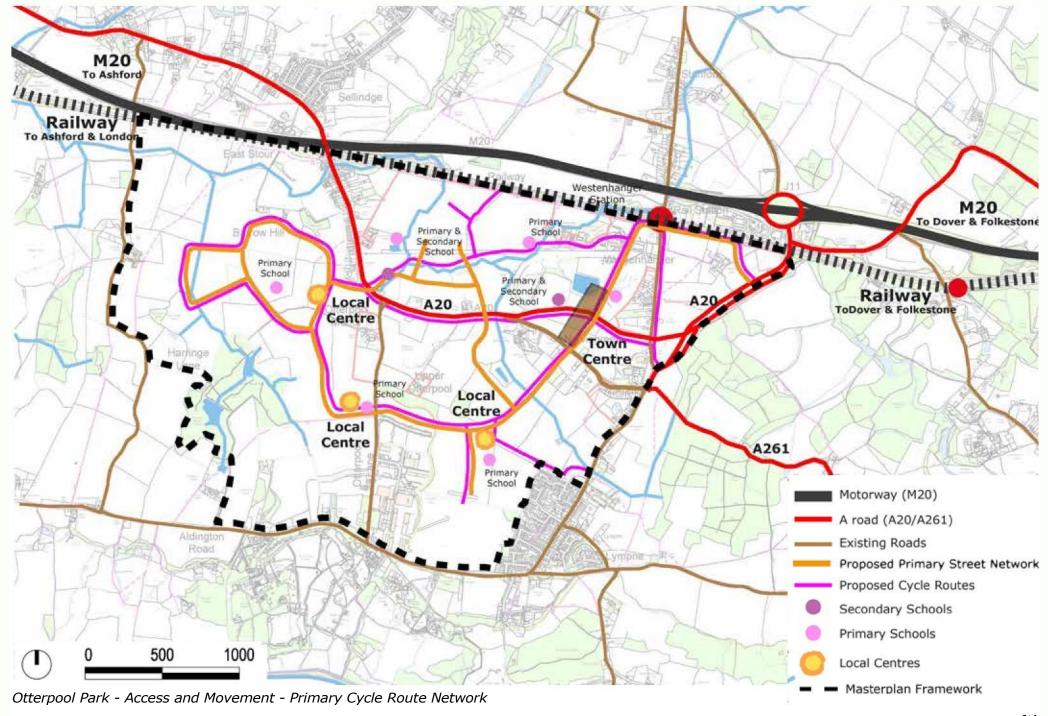
particularly for sustainable modes

- Maintaining and enhancing connections to existing nearby settlements
- Considering levels of parking provision and management
- Working with other stakeholders to support enhanced rail services, including the potential for high speed trains
- Developing a legible street network and associated infrastructure within Otterpool Park
- Identifying on and off site highway and junction capacity improvements to address impacts on the existing highway network and communities
- Provide access for servicing and deliveries that minimises impact on other users

### **Key points from Engagement**

The engagement response to the indicative masterplan identifies the following key points which have been addressed:

- Safer routes for cyclists and pedestrians will be created across the development, with segregated cycle lanes and off-road routes provided as appropriate, while existing routes will be upgraded. New routes will link to existing adjacent settlements which will also benefit from the enhancements
- The need to upgrade Westenhanger Rail Station has been identified. Access to the station for all modes is to be improved, while parking facilities will be reviewed and proposals put forward to manage increased demand
- Levels of parking provision across the site will be considered in balance between the



need to provide for essential traffic and to reduce congestion and pollution. If parking is restricted at locations, alternative means of travel will be sufficiently provided

- Where improvements to the local highway and motorway junctions are required, capacity enhancements will be proposed to alleviate existing problems of traffic management and mitigate the possibility of further congestion
- As well as providing a new internal road network, the existing A20 corridor within the masterplan area will be subject to new proposals to avoid placing development traffic on the existing route in the Newingreen area, and improve capacity where necessary, while providing better facilities for walking and cycling
- Upgrades to the transport networks, including highway capacity and bus service enhancements, will be implemented in phases prior to the demand arising
- proposals for the lorry holding area off the M20 have been withdrawn, but the impacts of any future proposals will continue to be monitored.

### Walking and Cycling Strategy

A Walking and Cycling Strategy will create a network of routes that provides the infrastructure to support the anticipated high-demand from the resident and working Otterpool Park population and also bring benefits to the existing populations in adjacent settlements and leisure users of existing footpaths and bridleways.

To ensure cycle and walking routes are well used and fit for purpose, they will be split into two distinct categories. 'Direct routes' will act as commuting routes to allow direct and fast access between residential areas and the

station, town centre, key local employment areas, local centres and schools. These will be a mix of routes that are adjacent to the road network and off road connections where they are more direct. There will also be a network of 'leisure routes' introduced, consisting of longer, meandering paths which will tend to be more rural and connect the green spaces and Otterpool Park to the wider countryside.

Where walking and cycling routes coincide with vehicular traffic routes, the issue of safety and priority will be carefully addressed through a considered combination of adjacent foot or cycle paths, segregated routing or shared surfacing as befits the natural order created by flow volumes and desire lines.

A series of walking and cycling routes away from vehicular traffic will also be created, establishing a safe network linking the central areas on the east sides of the development into and through the residential areas. These routes will link into the existing footpaths and pavements within the site, which will be upgraded as appropriate to form an integral element that support the Strategy.

There will be a number of locations where key walking and cycling links will connect across the A20 between the northern and southern parts of the development. The provision of waking and cycling facilities will be designed to afford priority to pedestrians and cyclists, with appropriate crossing facilities.

All walking and cycling routes will be of a high-quality with all-weather surfacing, well-lit and easily maintained. The layout of homes and routes will ensure natural surveillance to increase user safety. Safety of pedestrians and cyclists will be ensured by providing routes of adequate widths and with crossing points located on key desire lines that include refuges and other formal crossing facilities as appropriate.

# Public Transport Strategy Westenhanger Station and Rail Services

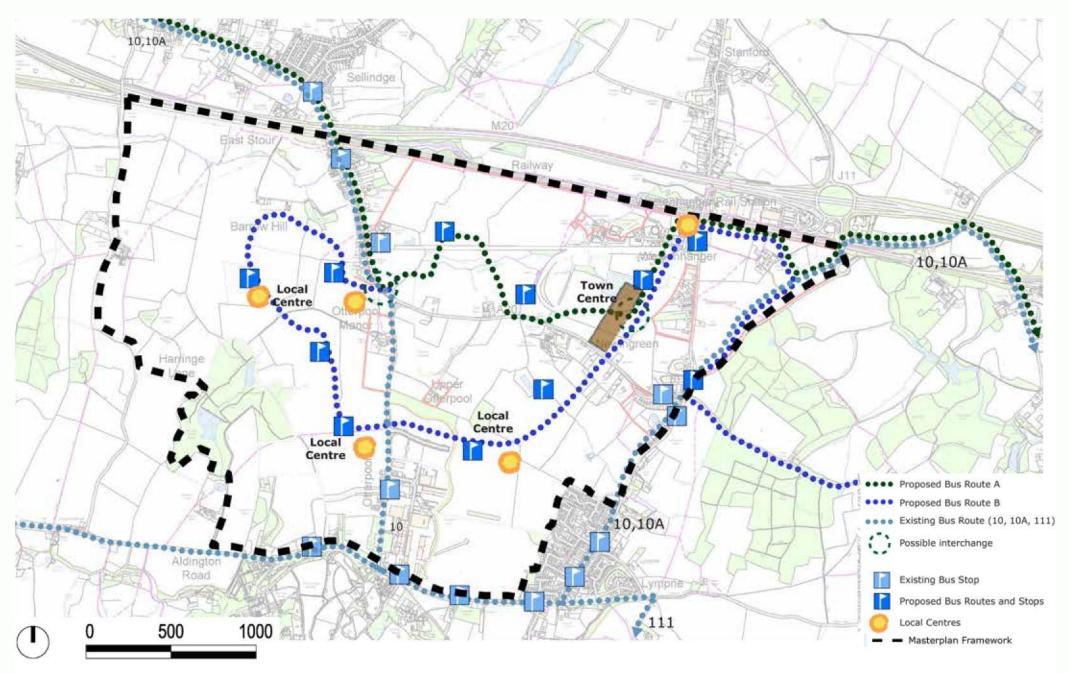
Opportunities to improve the access to and passenger facilities including parking at Westenhanger Station is being sought in conjunction with key stakeholders. The station is intended to provide a majot hub of activity and transport interchange, an identity for commercial, social and residential land uses, a major hub of activity within the settlement and improved linkages for visitors to Westenhanger Castle. .

The potential to enhance rail services with additional direct services to London will be explored with the aspiration of at least hourly direct services of less than 60 minutes journey time.

#### **Bus Network**

Bus routes will be designed to provide residents with access to key destinations including local centres, schools, employment sites and Westenhanger Station. A bus service will be designed to enable bus travel as a viable alternative to car use. Where possible this will involve an enhancement to the existing bus network to assist viability and support connections to and from existing communities and the rail station at Westenhanger. There will be interchange facilities provided to enable integration between routes and services.

Bus routes are being developed in discussion with transport stakeholders, but in principle at the full build out of the development there will be access to Westenhanger railway station through the high street and gateway centre and loops through the development, taking in other key destinations such as schools and local centres, with a regular service frequency. A full loop would be established on both sides of the A20. Destinations on this



Public Transport Access Strategy

loop may be served by a single service or by a combination of new and existing services rerouted through Otterpool Park.

The strategy plan shows two indicative Otterpool Park routes:

- From Sellindge on the A20, routeing through the northern part of Otterpool Park to the town centre and station, and then via the business area of the masterplan to the A20 south to Newingreen and to Hythe (and vice versa);
- From Sellindge on the A20, routeing through the southern part of Otterpool Park, then across to the town centre and station, and then via the business area of the masterplan to the A20 south to Newingreen and to Hythe (and vice versa).

Services may be new services or an enhancement to existing service provision.

The development will be phased and built out in different areas of the Masterplan. There is therefore a need to plan the implementation of bus service changes to reflect the development phasing to ensure that, as new settlement centres are established, walking distances to bus stops are minimised.

High quality bus stop facilities will be provided to make the services an attractive option for short and long journeys. Infrastructure design will take account of the accessibility needs of the mobility impaired.

### **Highway Access Strategy**

The primary access to Otterpool Park will be from Junction 11 of the M20 via the A20. It is recognised that traffic will also use other routes including the A20 from Ashford in the west and Folkestone in the east and the A261 to Hythe. Assessment work is being undertaken to identify the capacity of the junctions and routes to accommodate the development traffic and improvements and mitigation will be developed as necessary in conjunction with the highway authorities. Opportunities for imaginative changes to alignment and treatment of the A20 are being considered to provide mitigation and improve the environment around the existing communities.

The A20 will continue to form a strategic route through the development, with an upgrade south of the M20 junction to facilitate additional traffic, and access into Otterpool Park. On the section from Newingreen westwards there is the aspiration to design speeds down to 30mph with a number of key junctions along the route serving the north and south parts of Otterpool Park incorporating crossings for cyclists and pedestrians. Existing junctions – notably the Newingreen junction and Otterpool Lane – may require reconfiguration for the additional traffic movements. Measures to reduce HGV traffic along the A20 where it should be using the M20 will be considered.

A network of local distributor roads will provide access through Otterpool Park, connecting both sides of the A20 and serving the station, town centre, schools, local centres and employment as well as giving access to the residential areas. These routes will provide for bus movements and have walking and cycling connections alongside.



Workplace Cycling



Electric Car Share - Elmsbrook, NW Bicester



Cycle to School



Segregated Cycle Lanes

### **Sustainable Travel Strategy**

The Masterplan aims to provide excellent accessibility to public transport services and amenities to support the principle of a sustainable settlement. The majority of homes will be located within 400m walk of frequent public transport services and within 800m of primary schools and neighbourhood services to reduce the need to travel by private car. The importance of encouraging walking and cycling to school to develop sustainable travel patterns with children from a young age is recognised. In addition, a low-carbon lifestyle will be facilitated by the introduction of a network of car charging points for electric vehicles, car clubs and car sharing schemes.

A comprehensive range of measures will be developed as part of each phase of the Masterplan to promote sustainable travel and vehicle choices. These will include 'hard' measures such as parking management and cycle storage provision and 'soft' measures such as cycle training, promotional events, walking buses to school and workplace travel planning.

### 2.8 Green Infrastructure Strategy

Otterpool Park is a landscape-led, garden settlement; Green Infrastructure (GI) underpins the tenets of proposals.

'Green Infrastructure (GI) is a network of high quality green and blue spaces and other environmental features. It needs to be planned and delivered at all spatial scales from national to neighbourhood levels. The greatest benefits will be gained when it is designed and managed as a multifunctional resource capable of delivering a wide range of environmental and quality of life benefits (ecosystem services) for local communities.' (Natural England 2014).

Among other key descriptors of Green Infrastructure in relation to Otterpool Park, the SDC Core Strategy Local Plan states:

"For the purposes of spatial planning the term Green Infrastructure relates to active planning and management of sub-regional networks of multi-functional open space. These networks should be managed and designed to support biodiversity and wider quality of life, particularly in areas undergoing large scale change" - SDC Core Strategy Local Plan

Shepway's landscape has a rich history of evolution both from natural forces and human intervention – from the formation of the ridge, through dense forest, to refuge, foraging, agriculture, industry, transport, and settlements. The development of Otterpool Park is part of the next phase in this evolution.

The proposed new green open spaces will create a wide variety of woodlands, wetlands, meadows, allotments, and recreation areas all connected by green corridors with retained trees, hedgerows and water courses.

A network of formal footpaths and cycle routes will be integrated with streets and lit, hard surfaced paths, to create direct access between communities and local centres. An additional network of leisure routes will provide routes with unlit rural paths, linked to surrounding footpaths and existing and proposed landscape assets.

Three park landscapes will provide destination open spaces, connected both within the Otterpool Park settlement and the wider landscape. These are as follows:

### **Westenhanger Town Park**

An urban green open space will create a landscape setting for Westenhanger Castle, creating a cultural quarter including public open spaces associated cafes, visitor centre, meeting hall, and education. The former historic parkland associated with the Castle, will provide inspiration to the setting for a distinctive space at the heart of the scheme, including reinstating the historic access to Westenhanger Castle from the west and linking pathways to the proposed country park on higher land adjacent to Otterpool Manor and Upper Otterpool Farm.

#### **East Stour Park**

A riverside landscape adjacent to the River East Stour in the lower valleys, and connecting into the existing racecourse lake, would provide flood mitigation and preservation of the flood zone, a further landscape setting to the west and south of Westhanger Castle, and a linear park. Additional areas of wetland for sustainable drainage would contribute a landscape of habitat value. Margins to the wetland would provide opportunities for amenity, recreation and food growing.

### **Otterpool Country Park**

A country park on the upper slopes between Harringe Brook Woods, Otterpool Manor and Upper Otterpool Farm will provide an opportunity to create a greenopen space for recreation with links to the wider landscape including the Saxon Way Walk to east and south. The country park could be a mix of retained farmland with footpaths and new parkland and woods.

### **Key points from Engagement**

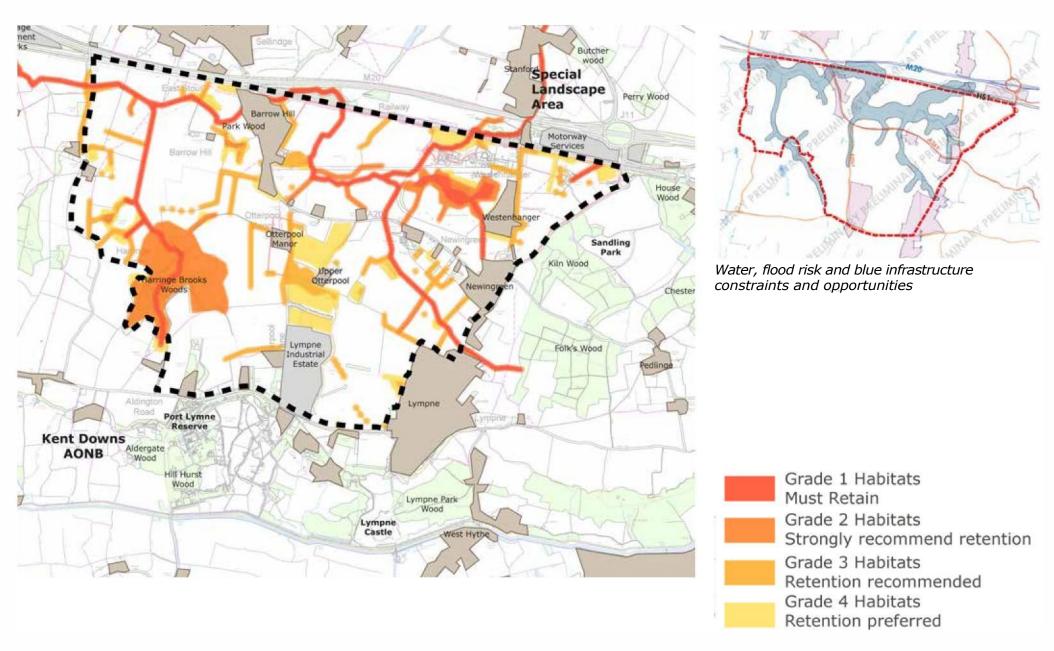
The engagement response to the indicative masterplan identifies the following key points which have been addressed:

- Aspirations for better footpath access which will be comprehensively provided across the masterplan site, connecting the existing settlements to each other and the station as well as proposed amenities and green space.
- The landscape led approach with new woodland planting and enhancement of existing habitats should help maintain and improve the local biodiversity of species.
- Respond positively to the setting the AONB, and using GI to mitigate the impact of development in views from the North Downs.

#### **Vision**

The Otterpool Park Masterplan will provide approximately 40% green space across the development (excluding private gardens). This will comprise a mix of public and private open space and will create an outstanding, nature rich living environment, with the outdoors on the doorstep.

The vision is to emphasise local distinctiveness, celebrate biodiversity, facilitate healthy lifestyles and create enjoyable living environments for the existing and future



Existing Habitat Value

residents of Otterpool Park.

The masterplan aims to achieve the following criteria, which are to:

- Conserve and enhance habitats
- Demonstrate that up to 40% of the site allocated to green infrastructure will provide generous multi-functional landscape assets
- Connect the scheme's green infrastructure with the wider GI network, beyond the site
- Reveal, enhance and integrate the existing watercourses and woodlands
- Utilise the natural topography, landscape character and existing and historic landscape features to retain local landscape distinctiveness, and augment and protect the existing rural landscape.

### **Opportunities and constraints**

Very early in the process, we utilised predicted landscape, ecology and hydrology constraints and opportunities to structure the masterplan.

Whilst subsequent and ongoing findings through survey work and consultation mean that our knowledge of the opportunities and constraints has evolved over time, their use from the outset has ensured that these key influencers have been, and will continue to be, at the forefront in establishing the underlying principles of the layout.

### **Key Structuring Elements**

### Multifunctionality

A primary consideration in the formation of the GI network, is the principle of multifunctionality. Landscape, biodiversity and water management strategies are aligned to

support cohesive proposals that will maximise

the value of all the various components of the GI network.

GI typologies, assets and functions were identified and devised early in the process to inform proposals, and incorporated into a document. This document identifies the key typologies that will make up the GI (existing retained, and proposed), what assets fall within each typology, and the functions they will perform. It highlights the multifunctionality of the proposed GI network.

#### **Access and Movement**

Many of the components of GI have an associated recommended walking distance from homes. The landscape strategy utilises these recommendations to inform the arrangement of services such as allotments and sport and play facilities.

The networked GI will provide pleasant walking and cycling routes via green corridors that link the various assets (parks, play areas, allotments, sports etc.), communities and local centres to homes and to each other. Leisure routes will link into the wider landscape via existing footpaths and bridleways, providing opportunities to enjoy the exceptional amenity provided by surrounding assets such as the Kent Downs AONB and the coastline.

Streets will be designed to create a positive environment for all users – with excellent provision for pedestrians and cyclists encouraging active transport modes. Planting including street trees and soft swales, will provide shade, shelter, habitat and delight.

### **Water Management**

Management of water is a key component of the GI Strategy and the strategy is set out in the following section.

### **Biodiversity**

The Otterpool Park Masterplan will celebrate biodiversity. The design will retain and enhance habitats including hedgerows, the River Stour and tributaries, broad-leaved semi natural woodland, trees, grassland and ponds. Retention of these habitats, design in their vicinity and the introduction of new and supporting habitat will ensure that the land continues to support many notable species.

Ecological surveys are ongoing; species recorded on site to date include kingfisher, water vole, six bat species, turtle dove, snipe, badger, common reptiles including slow worm, grass snake and common lizard, cinnabar moth, dragonflies and great crested newt.

### **Landscape Character**

Development will be located to fit within the existing landscape features and topography, where possible in order to retain natural distinctiveness and augment and protect the existing rural landscape.

### **Views and Mitigation**

Views of the development from the Kent Downs AONB are a key consideration of proposals.

The existing topography will be utilised to integrate the new settlement to best effect, with mitigation (landscape buffers, for example) being used to ensure the new settlement sits well within the local landscape.

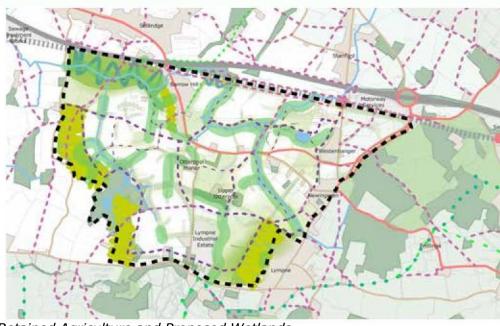
Building design will incorporate measures that maximise their integration with the landscape. Possibilities include the use of earth sheltering for public buildings and green roofs on homes. PV, if used would be oriented south, therefore having limited/no visibility in views from the AONB in the north.



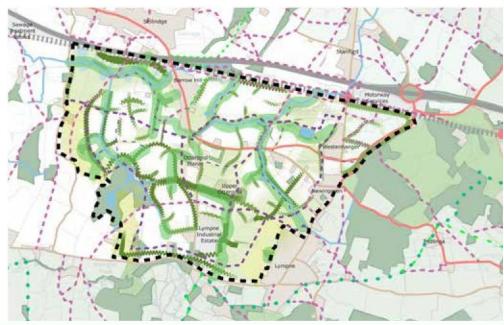
Proposed Key Green Open Spaces



Proposed Green Links



Retained Agriculture and Proposed Wetlands



Planting belt to enhance settlement integration

### **Key Green Infrastructure Themes**

### Ridge

- Formation of the landscape (timeline)
- Landform underpins landscape-led approach
- Feature/opportunity
- Views from public space out to the AONB
- Views of the development from the AONB

### **Forest Garden**

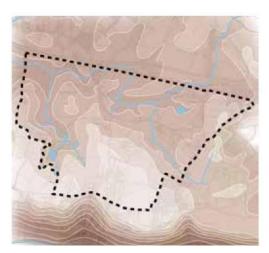
- Reinstating the forest
- Productive landscape – foraging opportunities
- Habitat and Biodiversity
- Linking fragmented forest
- Health and Wellbeing
- Shade and Shelter
- Water Management
- Natural Foraging –

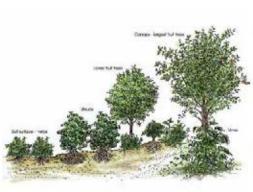
### **Embracing Water**

- Existing watercourses and water management
- Visible, functional features
- Amenity
- Entertainment
- Play
- Education
- Fostering custodianship (through understanding

### **Connected Beyond**

- Strong links to the wider landscape
- For habitat
- For recreation
- North Downs Way
- Saxon Shore Way
- Royal Military Canal Path
- Pattern
- Natural network
- Dhythm and concor









### **Productive Landscape**

- Maximise edge
- Transitions / Interfaces
- Settlement edges
- Community engagement
- Reduced food miles
- Access to nature
- Health and Wellbeing
- Interest
- Amenity
- Yield
- Biodiversity and habitat

### **Settlement Legibility**

- Character areas
- Landmarks
- Views and vistas
- Vernacular references
- Street hierarchy
  - Public Realm
- Distinctiveness

### **Custodianship/Management**

- Community Engagement
- Long term management
- Integrated
- Annual burden vs. Investing in the asset
- 50 years + view

### Sustainability

- Natural solutions
- Design for the future







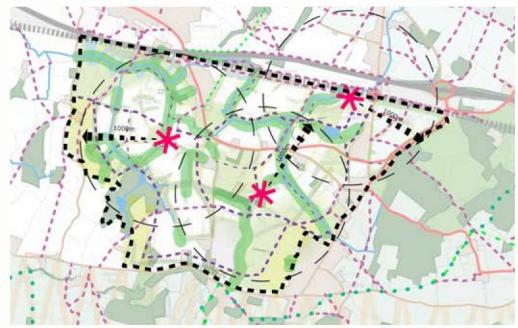


### **Activity, Recreation, and Health**

The GI will be designed to encourage active, healthy lifestyles through active transport modes (walking and cycling), sports and active recreation. Facilities will include formal sports provision, formal and informal play opportunities, food production (allotments, orchards), parks and greenways.

Spaces for sports, education and play will be focussed in central areas, to encourage community use, with facilities also distributed throughout the scheme within appropriate walking distances. They will be linked by green corridors to provide easy access to outdoor activity for residents of Otterpool Park and the surrounding communities.

The GI will perform multiple functions of benefit to human health and wellbeing such as reducing air pollution and providing shade and shelter. The benefits of access to nature to human health are well documented; the masterplan seeks to maximise these benefits by providing access to nature as part of residents' everyday experience.



Potential Location for NEAPS with approximate walking distances



Potential Location for Allotments with approximate walking distances



Potential Locations for MUGAs with approximate walking distances

### **Key Open Spaces**

A number of key open spaces are proposed including:

### **Westenhanger Castle Town Park**

A new cultural quarter will be focussed around a landscape that will form the setting to Westenhanger Castle. Associated facilities such as cafes, visitor centre, meeting hall and educational facilities will tie into the adjacent local centre.

The landscape will reference the historic character, providing a distinctive, meaningful space at the heart of the scheme.

### **Otterpool Country Park**

Linked to the Westenhanger Castle landscape, routed via historic access to Westenhanger Castle, a new wooded country park styled landscape will be situated on the higher land adjacent Otterpool Manor and Upper Otterpool Farm.

The landscape will reference the historic setting and agricultural use of the 'Otterpools', as well as the historic wooded landscape and nearby ancient woodland. It will incorporate the geological SSSI, to be enhanced as a feature of research, educational and amenity value.

### **East Stour Riverside Landscape**

A riverside landscape in the lower valleys would provide highly multifunctional GI with opportunities for active recreation, amenity and leisure, food production, habitat and water management. The landscape could incorporate habitat value for a wide variety of species, with flood mitigation measures and wetland associated with sustainable drainage adding further amenity and habitat value.

### **Open Space and Green Infrastructure**

Underpinning all built development will be approximately 275 to 300 hectares of green infrastructure creating a healthy, biodiverse and attractive landscape for both living and working. This will include:

 Approximately 130 to 160 hectares of natural Riverside
 areas hedgerows, woodlands,

#### Lan

- Approximately 20-30 hectares sports pitches including some school pitches,
- Approximately 35-40 hectares general amenity, gardens,
- Approximately 6-7 hectares equipped play areas,
- Approximately 8-10 hectares parks,
- Approximately 4-6 hectares allotments and community orchards,
- Approximately 4-6 hectares woodland burial ground,
- Approximately 25-30 hectares sustainable urban drainage and wetlands.
- Approximately 10-13 hectares school pitches

In addition to the above some retained agricultural in the masterplan will provide habitats and footpaths linking to surroundings.

A key benefit of the proposal is that land within Otterpool Park will become publicly accessible to assist in unlocking the potential of the Garden Town and in maximising natural capital value; address health inequalities; create a higher quality of life for local people; and boost the ecological value of the land.

A long term stewardship strategy will be prepared that will set out how all landscape and

open space will be managed and maintained to a

high standard for the long term.

### **Protecting existing habitats**

The Otterpool Park Masterplan has been designed taking into account the existing habitats from the outset. Almost all of the existing hedgerows, the woodlands and streams will remain to ensure the site's natural beauty and natural habitats are preserved.

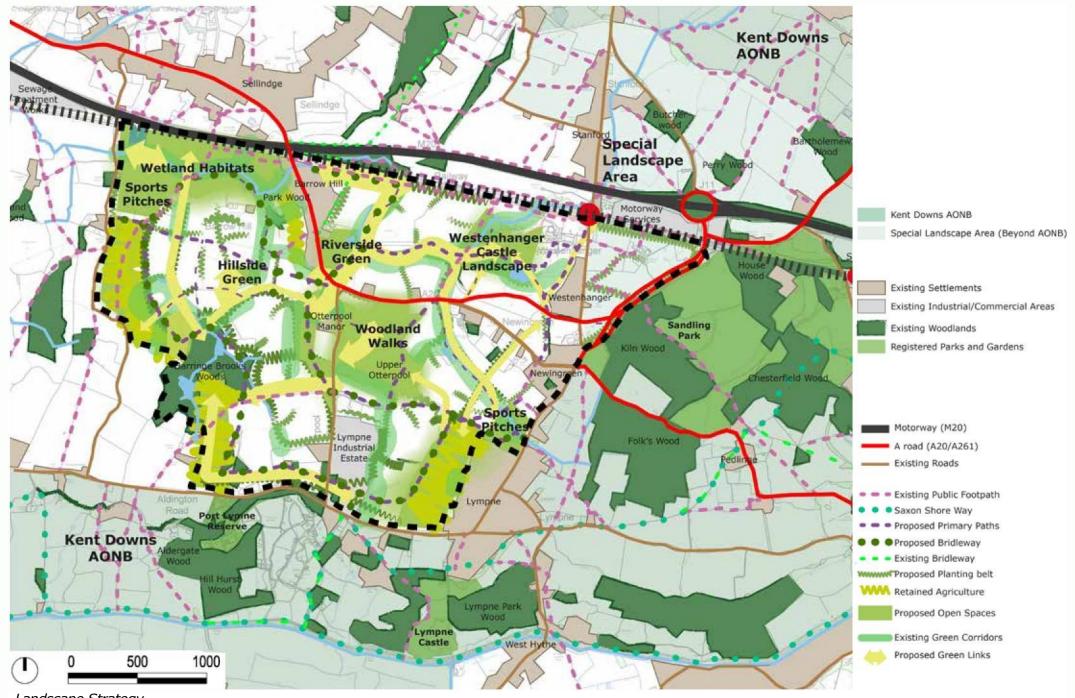
New habitats will also be created, for example in water management measures such as rain gardens, swales and attenuation ponds, encouraging and strengthening species. Grassland areas will be planted to improve grassland quality and species diversity, and allow biodiversity to flourish, especially invertebrates.

Woodland areas are also proposed, which will enhance habitats for a number of less common species that are found in Otterpool Park such as, birds, including turtle dove, bats including noctule and plants, including bluebell. Species specific mitigation measures will also enhance areas of the site for wildlife, including streams and ponds for water vole, great crested newt and bats, hedgerows for bats and dormouse and scrub and rough grassland for reptiles.

Existing footpaths are integrated into the Masterplan providing habitat connectivity with the wider rural area.

### **Hedgerows, Woodlands and Trees**

The hedgerows provide green corridors across the Masterplan site. They are of value to multiple species including foraging and commuting bats, common species of reptiles, breeding birds, small mammals and invertebrates.



Numerous mature trees are present on site, which in addition to their intrinsic value provide habitat for a range of species. Ancient woodlands are present on the periphery of the site, which are a valuable irreplaceable habitat.

All of the key arboricultural features are being identified and the masterplan is being designed to retain these features and integrate them within the development.

### **Hedgerow and grasslands**

Maximising the retention of existing hedgerows and water courses is an important aspect of the biodiversity strategy. They are also a key characteristic of Otterpool Park's landscape pattern, and can beneficially contribute to the character of the development.

By bringing the existing hedgerows into better management and supplementing the hedgerow habitat with adjacent complementary habitat the overall hedgerow corridors can be significantly enhanced. The supporting habitat will often be grassland that will act as a 'buffer' and form part of the longer 'dark corridors' identified for the movement of species, including commuting bats and badgers.

Hedgerows and their associated 'buffer' habitat may also incorporate Sustainable Drainage Systems (SuDS), swales and pedestrian and community routes, natural play and recreation activities.

Woodlands, including ancient woodlands to the south west of the site are to be 'buffered' to ensure that the distinct ecological value of these habitats is not significantly impacted.

Within the masterplan, there is the aspiration to increase the amount of hedgerow and woodland planting and improve the ecological connectivity across the site.

#### Ponds, water courses and ditches

Within the site, there are a number of water courses and water bodies, including the East Stour River, which provide habitat for a range of notable flora and fauna, including water vole, great crested newt and other amphibians, dragon flies and damsel flies and feeding resources for bats and birds.

These features have been identified and are largely being retained, buffered and enhanced as a component of the masterplan design. In addition, the creation of new SuDS around the site will increase the area of aquatic habitats across the site and improve the movement of species between these features.



Grass Snake found at Otterpool



watercourse within masterplan area



Racecourse pond

### 2.9 Water Strategy

The vision for the Otterpool Park masterplan is to achieve a sustainable balance between water resources and demand whilst protecting and enhancing the receiving water environment in line with the Garden Town principles of the development. Strategies are being developed to ensure that the Otterpool Park development also addresses infrastructure constraints relating to water supply and sewage disposal. A key approach for this is to establish principles to reduce the consumption of extra water. This will in turn minimise the risk of water pollution and create opportunities to incorporate new facilities for reusing water and reducing flood risk.

Water plays a pivotal role in place making, by understanding and incorporating the site's existing natural water features such as the East Stour and the Harringe Brook whilst creating new drainage routes and features which will reflect the existing and proposed green infrastructure. Through consideration of SuDS there are substantial benefits that can be achieved for the people that will live in and around the development. When designed well, SuDS can increase property value, mitigate local flood risk, moderate microclimates, benefit ecology, provide new sources of water and create valuable amenity spaces for communities to enjoy.

### **Existing water features**

There are many surface water features within the existing site boundary; these include the East Stour River and tributary streams, ponds and ditches. The large racecourse pond and surrounding watercourse network which served to ensure the racecourse had a constant supply of water is a key feature. This pond and the East Stour River network create an important setting for housing, amenity and recreation in a large central location of the development, providing the opportunity to

promote nature and embracing learning to live with water as an educational resource; with their close proximity to primary and secondary schools to the north of the settlement. Existing streams and ditches will be retained and enhanced to become part of the proposed surface water management strategy and work in partnership with the new SuDS features.

### **Proposed water management**

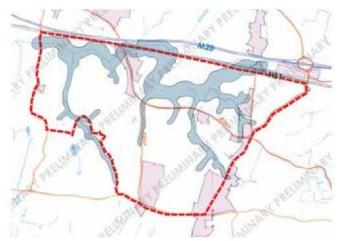
A strategic and sustainable approach will be set out for the management and use of water by strategic stakeholders (including the Environment Agency, utilities companies and Kent County Council as part of the development of the integrated water management strategies for Otterpool Park. The key water infrastructure (potable supply, wastewater collection and wastewater treatment) required to support the housing and employment growth planned for the development and surrounding area is being identified, along with any constraints and opportunities that may impact the integrated water management strategy and water infrastructure design.

Otterpool Park will minimise water demand through the incorporation of extensive water efficiency and reuse measures.

### **Key points from engagement**

The engagement response to the emerging masterplan identifies the following key points which have been addressed:

 An aspiration to work towards achieving a sustainable water use, which could provide Otterpool Park with a unique identity whilst addressing one of the key local concerns. The south-east area is water-stressed with future risks of water shortages. Ongoing discussions with the Environment Agency, Affinity Water and others about how to make Otterpool Park responsive to this are being undertaken.



Water, flood risk and blue infrastructure constraints



East Stour River

 Creating a development which is more water efficient than general existing practice is the aim. The ability to recycle run off water and harness the site's potential capacity for water capture is to be researched further, as well as the ability to store and extract groundwater via the underlying geology. Technical solutions to determine feasibility for water supply will be undertaken and the solution will depend on the outcome of current studies.

- The East Stour River will have a 30m buffer corridor outside the currently published flood zones which will be undeveloped to incorporate SuDS/ enhanced blue-green corridors and provide flood risk mitigation and resilience; with biodiversity and leisure benefits created. SuDS would be used across the development to collect, treat, transport and store water. SuDS will manage flood risk within and beyond the site using effective surface water management solutions to achieve overall runoff capture and infiltration rates better than the existing levels, aiming to reduce overall risk.
- Water efficiency and reuse will be integrated with the surface water management and water resource design. There is further potential for community level treated effluent recycling or rainwater harvesting will be fully investigated and consideration given to onsite wastewater treatment.

### **Sustainable drainage systems (SuDS)**

The widespread use of Sustainable Drainage Systems (SuDS) and rainwater harvesting will provide sustainable storm water management and maximise available water resource from rainfall. Otterpool Park will reduce flood risk and promote good water quality standards, enhancing the local environmental water quality as a priority. A SuDS treatment train will be used to remove any polluted runoff from diffuse sources, such as roads, providing effective natural treatment at source prior to discharge into main watercourses.

The use of SuDS will also allow the creation of new wildlife corridors and spaces

whilst incorporating existing wetlands and ponds, with a variety of flora and fauna, creating valuable open amenity areas. The Surface water management strategy will comprise of chains of linked SuDS components which complement one another, such as; rain gardens, swales, permeable paving with storage, attenuation ponds and ditches.

The use of green and brown roofs is also being investigated as part of the masterplan design. As well as providing ecological and environmental benefits the voids within the roof substrate can provide additional storage of rainfall runoff. This makes a contribution to the attenuation of surface water runoff and complimenting other ground level SuDS drainage facilities.

#### Attenuation and infiltration

Attenuation measures to ensure that an increase in runoff would be located both amongst more urban areas at source, and within the public open spaces adjacent to the development areas alongside roads and at strategic locations to ensure surface water is managed effectively. As such, building layouts and road geometry will also be minded to the natural topography to allow surface flow to be routed away from sensitive receptors. A variety of storage structures will be used, to provide attenuation storage, including ponds, basins, permeable paving and cellular storage.

The surface water management strategy will also aim to return a large proportion of the surface water to the underlying aquifers to recharge the groundwater supplies. This can be achieved through natural infiltration or through artificial injection, which sees water being returned to the aquifer via gravity, pumping or concentrated infiltration.

### Rainwater harvesting

Water resources are becoming scarcer, and water reuse provides an opportunity to conserve water and minimise the demand on mains potable water. Rainwater could potentially be harvested across the site (e.g. at plot level or strategic SuDS features) and make a significant contribution to meet extra the water demand.

Approximately 60% of the total household water use in the UK is typically used for flushing toilets, washing machines and watering gardens. Rainwater that has been collected would be available to be used for these purposes and therefore be an important part of reducing potable water demand and moving towards water neutrality for the site.

Larger facilities within Otterpool Park, such as schools and offices, provide opportunities to harvest rainwater on a large scale for reuse within the buildings for toilet flushing. Rainwater harvesting may also be implemented for irrigation of the local landscaped areas at a strategic level.

#### Water treatment

Potential wastewater treatment options are currently being considered for the development. As part of these, innovative onsite ideas are being explored which could see the wastewater being treated naturally through constructed wetlands or within modern plant that utilises modern secondary treatment technologies. Discussions are on-going with the local public sewerage provider (Southern Water), potential inset water companies and the Environment Agency with regards to these options; to ensure that whichever option is chosen will represent the best overall sustainable long-term solution.

### 2.10 Sustainability Strategy

### **Key Points from Engagement**

The engagement response to the indicative masterplan identifies the following key points which have been addressed:

- Upgrading existing transport infrastructure.
- Sustainable waste management.
- Discussion of possible use of renewable energy and innovative technologies that benefit not only proposed but existing communities.

#### **Social Infrastructure**

Otterpool Park will aspire to showcase what a sustainable future can look like by enabling people to live affordable, happy and healthy lives in high-quality homes with social infrastructure that use resources wisely and enhance their natural environment.

Sustainability is a guiding principle at Otterpool Park. Every new home will incorporate the very latest energy-saving building materials and design to guarantee increased air tightness, super-efficient insulation, solar orientation and cooling, together with the best possible use of natural daylight and ventilation.

Rainwater harvesting will also be incorporated into the design of all residential properties to reduce waste of this precious resource. Otterpool Park's sustainable drainage systems will mitigate any risk of flooding, and the waste and water strategy will follow the principles of reduce, re-use and recycle at every level.

Renewable energy will be integrated in people's homes and businesses, aspiring to be a zero carbon community with local residents and businesses benefitting from reduced energy consumption and help to reduce energy bills.

There will be plenty of opportunities to reduce travel by car and minimise C02 emissions, because every home will be within 400 metres of a bus stop and within an easy ten-minute walk of local shops and primary schools. With spacious green lanes, it will be easy for everyone to cycle to work in and around Otterpool Park. And for those who travel a little further, there will also be improved cycle and bus routes to the station that can connect into improved rail connections to Kent and beyond. Real time travel information in every home will make use of public transport more accessible.

By pioneering the highest standards in sustainable construction, using low-carbon materials; attracting green businesses; and creating demand for more sustainable products and services across the town, Otterpool Park will benefit many future generations through the delivery of educational activities, events and green travel planning initiatives.

The network of rural footpaths and cycle ways and a series of bus only road links will mean public transport is more rapid and frequent; enabling people to make sustainable travel choices including a car club and network of charging points for electric vehicles, for those that do still require cars for longer journeys.

### **Energy**

One of the guiding principles identified in the Otterpool Park Garden Settlement Visioning Summary is to incorporate infrastructure that makes best use of technologies in energy generation and conservation. Potential options for energy generation are being considered for the development:

Otterpool Park aspires to be low carbon, making good use of renewable energy technology. The development could provide renewable energy through various sources such as ground source heat or solar PV. Various



Example Water Treatment

options are being considered, based on evidence from Otterpool Park, including district heating with central heat and power, solar PV on roofs, house-level battery storage, public charging points for electric vehicles.

Using green walls and roofs would be one of the measures used to reduce pollution, aiming to reduce Nitrogen Dioxide and be a 'particulate free' settlement.

The energy strategy should include using only electric buses, installing electric car charging infrastructure across the development from the outset and prioritising parking for electric cars.

A sustainable waste management strategy could involve assigning areas on the masterplan for energy to waste plants, giving a self-sufficient waste disposal system whilst creating a local energy source that would also provide local employment.

The business park could create an experimental technology cluster and to encourage more innovative sustainability

solutions, with building designs encouraging new technologies for heat recovery and cooling.

#### **Materials and Waste**

By pioneering the highest standards in sustainable and alternative ways of construction, using low-carbon materials; attracting green businesses; and creating demand for more sustainable products and services across the town, Otterpool Park will benefit many future generations through the delivery of educational activities, events and green travel planning initiatives.

Moving towards a more sustainable model of resource use and waste management is fundamental to achieving sustainable development. A development of this scale has a significant requirement for construction materials and also presents an opportunity for more sustainable procurement of materials through economies of scale and the opportunity to influence procurement and transportation of materials. Waste should be considered both in terms of reducing the generation of waste associated with demolition, excavation and construction and also in terms of delivering a development that provides efficient systems for waste management during operation.

### **Sustainable Access Principles**

Enabling and promoting low carbon transport within Otterpool Park and to and from the site can support wide reaching environmental and social gains. There will be plenty of opportunities to reduce travel by car and minimise C02 emissions, because every home will be within 400 metres of a bus stop and within an easy ten-minute walk of local shops and primary schools. The transport strategy sets out how sustainable access will be achieved and contribute towards the sustainability of the development.

### **Health and Wellbeing**

The design and layout of the Otterpool Park masterplan as well as the detailed design of individual buildings will positively impact on health. The design will encourage active and social lifestyles and promote health and wellbeing will deliver positive social outcomes for the future population of Otterpool Park. This will also be reflected in the public realm, promoting green infrastructure as active space.

Otterpool Park will aspire to showcase what a sustainable future can look like by enabling people to live affordable, happy and healthy lives in high-quality homes with social infrastructure that use resources wisely and enhance their natural environment.

Sustainability is a guiding principle at Otterpool Park. Every new home will incorporate the very latest energy-saving building materials and design to guarantee increased air tightness, super-efficient insulation, solar orientation and cooling, together with the best possible use of natural daylight and ventilation. The creation of a vibrant urban development that provides amenities for the future population and supports a sense of community will be a key element in enhancing social sustainability.



Example SuDS



Example SuDS

### 2.11 Place-making Strategy Key Points from Consultation

The consultation response to the indicative masterplan identifies the following key points which have been addressed:

- The objective of the masterplan should be to create a sense of civic pride in Otterpool Park, as a good place to for all to enjoy. This will be supported by a strong design guide, demonstrating a wide range of architecture to make Otterpool Park an attractive place to live and work in and contain amenities, leisure and cultural facilities to be proud of, attracting people and helping to create a new identity.
- The layout should take cues and influence from the surrounding local towns and villages and landscape to make the grain and layout of Otterpool Park attractive to local communities, visitors, new residents and people working. A range of wide and narrow streets should be created with the feel of a Cinque Port urban grain or like Tenterden.
- Public green space should be used for events with walkable access and managed by local creative foundations, learning from surrounding groups as partner/stakeholder for how best make cultural use of new green space. A clear strategy for management of the new public resource, with suggestions for setting up a Community Trust in perpetuity using agreements like the Milton Keynes Park Trust.
- The landscape led approach with new woodland planting should provide a sense of settlement and screening, setting the new development into the existing landscape, and responding to cues from its history and topography.

 The edges of the proposed settlement should have improved landscape to improve eroded landscape and in need of enhancement around existing settlements on the A20 at Newingreen and Barrow Hill.

#### **Materials**

Materials forms and characteristic of the locality will used as the inspiration for the proposed Landscape and building elements detail design:

• local Greensand and Kentish Ragstone in Aldington Road, Lympne Conservation Area



Lympne Conservation Area

- the older buildings of Lympne, Aldington and Westenhanger
- red brick in the farms and Victorian railway terraces of Barrow Hill and Sellindge
- Ash, Hazel and Field Maple copses, with distinctive field and hedgerow Oaks
- woodland blocks- at Harringe Brooks and Sandling Park
- numerous small field corner ponds.

Innovation and cutting edge technology should also be a strong consideration, including green roofs, solar panels and use of timber and other sustainable materials.

A high quality Kentish vernacular would be created that is appropriate to the 21st century by combining the twin goals of excellent design and highly sustainable buildings.



Local Greensand and Kentish Ragstone in the older buildings of Lympne, Aldington and Westenhanger

### **Indicative Heights and Density**

Ebenezer Howard's three magnets explain the vision for "Town and Country" yet his Garden City Principles did not necessarily expect nor anticipate the resulting low density uniform, singular housing suburb without facilities that became the norm for much of the 20th century.

Howard's objective to create a new model settlement with the best of both of urban and rural character in close juxtaposition is still a desirable objective which can be achieved at Otterpool Park:

- An optimised combination of urban higher densities and mixed housing type and supporting uses in a lively settlement centre, radiating out with reducing density and a more rural character with local neighbourhood centres.
- Interconnecting tree lined streets, lanes and pathways and landscape, creating walking and cycling connectivity between the main centre, local neighbourhood centres and the surrounding landscape.
- The optimum result would be a mix and hierarchy of housing and supporting uses in a settlement with sufficient scale to provide social interconnectivity yet still creating walkable neighbourhoods, a layout defined enough to create a legible hierarchy and gradation of places, yet loose enough with sufficient landscaped to have variety and quality of place.
- A settlement sized in distance from a centre to edge of up to approximate 1.5 km is considerably more likely to achieve the optimum number of residents and mix of uses to create social interconnectivity and walkability.
- Public transport accessible within the approximate 3km range would encourage patterns of travel with less dependence on

- car and make the provision of alternative public transport and sustainable travel more viable.
- A settlement of scale with self-sufficiency as outlined above could provide facilities that support and provides services for smaller outlying settlements, even allowing new smaller satellites to be created with a local centre.
- A diagram from Garden City Principles illustrates an example of this hierarchy of settlements. Raymond Unwin, Barry Parker, had prepared the master plan for Letchworth Garden City in 1903/4, addressed the problem of extending existing cities with his diagram of 'The Garden City Principle applied to Suburbs' published in 1912 by the Garden Cities and Town Planning Association. This showed linked satellites distanced by green reservations.
- This mixed and graduated urban and rural environment creating "town and country" is a sound principle an achievable objective for Otterpool Park with the amount of space available in the search area.

# The character of Place-making for the proposed garden town masterplan

The town centre will create a defined heart that is within easy walking distance from most homes and with good public transport connectivity to all homes. The town centre concept would comprise a strong urban enclosure such as a 'high street' or market square with retail at ground floor and flats or businesses above. Nearby to the central space would be public gardens with community facilities such as schools, community centre, sports centre etc. The urban design precedents would be based on local examples, such as Tenterden high street.

Smaller local centres would be created to provide local services and primary schools in a wider dispersed area also pockets if mixed use including retail and businesses at ground floor and flats with a green space such as village green to create a focal point.

The streets which connect the town and local centres will have the character of tree lined urban boulevards with homes and some businesses creating active frontages, with segregated cycle lanes and bus stops as well as car traffic.

Within residential areas a permeable network of access streets will create connected walkable neighbourhoods with a mix of residential flats, terraced and semi-detached homes. Some on plot and mews courts with flats over parking will limit parking on frontages with shared surface streets to prioritise pedestrians and cyclists. Home zones, informal green areas with public art, seating and edible planting will provide spaces for play and encourage meeting places for community outdoor activity in streets.

Towards the rural edges the housing access will be scaled down to lanes and paths with restricted traffic and a range of detached and small terraces of homes some grouped as loose courts and some fronting to the open landscape.

### **Examples of Traditional town streets with approximate urban district density**



Example of Town High Street - Tenterden, Kent, Urban district density 12.5 homes per hectare



Example of Town High Street Lanes and Landsape - Hythe, Kent, Urban district density 16 homes per hectare















### **Examples of new developements with approximate residential density**



Example of St Mary's Island Chatham. Kent, Urban district density 12 homes per hectare inc Chatham Maritime; residential density 30 homes per hectare,



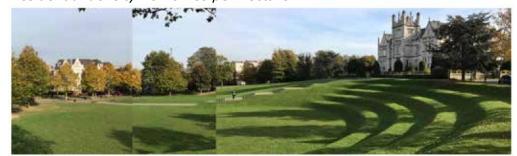








Example of Ingress Park, Gravesend. Kent, Urban district density over 20 homes per hectare Residential density 40 homes per hectare







# Density and scale for the garden town masterplan

Garden City Principles suggest a mixture of densities and character of neighbourhood should be provided. The layout should create a legible hierarchy and gradation of places:

- Highest density in the town centre should have some key landmark buildings with mixed use commercial, community residential use, located as focal points, some with additional height to create character, with all ground floor frontages as commercial use;
- An urban high street should generally be higher density and more homogenous scaled with predominantly mixed use ground floor frontages;
- The medium density mid-town predominantly residential homes of a relatively consistent scale with some varied height as key markers, with a permeable network of streets and some mixed use at ground floor on key intersections;
- The outer edges and some areas fronting most sensitive green spaces should be of a lower density of residential with more variegated scale.

The character and mix of housing could be suggested as follows:

- The higher density on the high street with linear blocks of flats above ground floor commercial frontages fronting the high street and market square.
- High street areas should have car parking in rear mews courtyards with flats above or have car parking in a lower ground level to create a predominantly pedestrian shared surface streetscape

- The urban boulevards fronted with terraced town houses with gardens and some flats with ground floor commercial frontages at key intersections. Urban boulevards should have a tertiary access lane to create frontages with parking predominantly to side and rear mews courts with flats above.
- High to Medium density mid-town houses, mainly short terraces and semidetached with generous gardens on plot parking and some mews courts and flats above.
- Medium to lower density village edge with mainly semidetached and some short terraces and detached with very generous gardens on plot and frontage parking.
- Lower density village edge mainly detached very generous gardens fronting the landscape with on plot parking, with some semidetached and short terraces with gardens clustered in courts.

# Definition of density used for the indicative Otterpool Masterplan framework.

### Net density of residential parcels

The average net density definition used for the density table below is "The Use of Density in Urban Planning, DETR, 1998, paras 8.19 to 8.20", which includes roads within the site, private gardens, car parking areas, amenity landscape and the SuDS within development areas, but excludes non-residential uses, wider areas of SuDS and flood mitigation, proposed woodland and landscape habitat buffers, schools, proposed sports pitches and wider areas of publicly accessible open landscape. This is comparable to the net density suggested in the Otterpool Charter.

### **Gross density of residential parcels**

The average gross density includes a portion of the connecting roads, amenity landscape and SuDSwhich are necessary to provide the residential development areas within the specific context. Typically this is 20% additional land area above net residential density, however it still excludes non-residential uses, sports, schools and wider areas of landscape.

### Urban or district density.

This calculation includes the average density across an entire town or village. It includes connecting roads, non-residential uses, schools and employment uses, amenity landscape and wider areas of SuDS and flood mitigation, proposed woodland and landscape habitat buffers, proposed sports pitches and wider area of publicly accessible natural landscape. For comparison with the Otterpool charter and other settlements, the proposed urban density for the Otterpool Masterplan would be approximately 12.5 homes per hectare, assuming approximately 10,000 homes on approximately 800 hectares.

The proposed average density for residential development dwellings per hectare on the next page refers to blocks or parcels of residential development not the urban or district level.

### Housing low scale & density:

15–25 homes/ha gross; 20–30 homes/ha net Maximum height 12m Average height two storey 9m Height range: three storey (12m) to one storey (7m)

### Housing low to medium scale & density:

25-30 homes/ha gross; 30-40 homes/ha net Maximum height =14m Average height two and half storey =11m Height range: three and half storey (14m) to two storey (9m)

### Housing medium scale & density:

28-35 homes/ha gross; 40-47 homes/ha net Maximum height =16m Average height three storey =12m Height range: four storey (16m) to two storey (10m)

### Housing medium to high scale & density:

32-40 homes/ha gross; 47–55 homes/ha net Maximum height = 16m Average height three and half storey = 14m Height range four storey (16m) to three storey (12m)

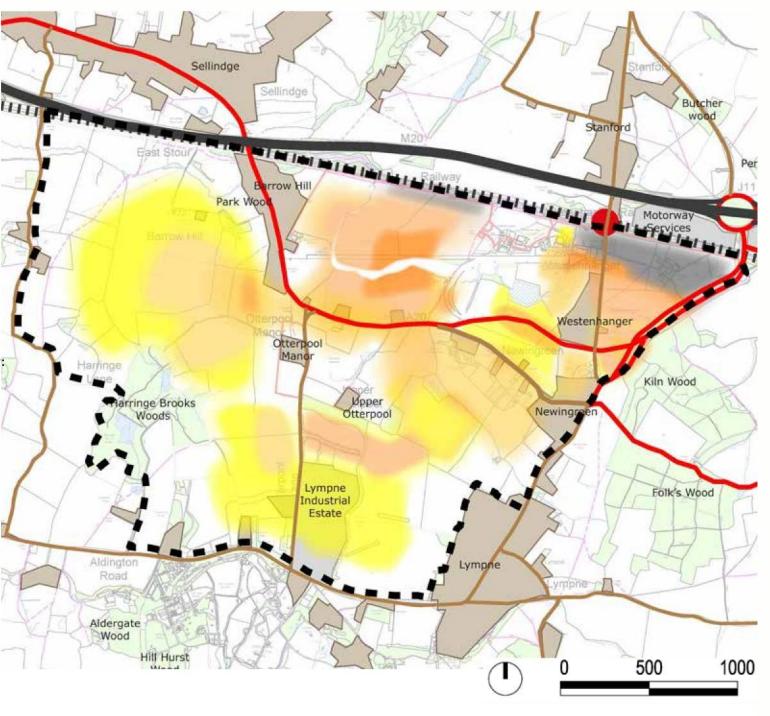
### Housing high scale & density:

35-45 homes/ha gross; 55-65 homes/ha net Maximum height = 18m Average height four storey = 16m Height range: five storey (18m) to three and half storey (14m)

#### **Business scale**

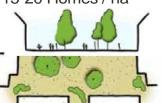
Maximum height = 16m Average height two storey = 12m Height range: three storey (16m) to single storey (6m)

Indicative Heights and Density



## Examples of types of streets and spaces created with varying housing density











Contemporary farmstead courtyard



Edge facing open landscape 15-20 Homes / ha



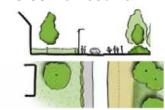




Houses fronting green edges



**Shared street frontage** 25-35 Homes / ha





Contemporary mews houseTenterden

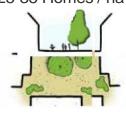


Traditional Lanes Tenterden Kent

### 50m scale



Mews shared frontage 25-35 Homes / ha





Traditional mews houses



Contemporary Mews houses

### 50m scale



Block Urban frontage 45-65 Homes / ha









Lerrace town houses Lenterden Kent



mixed use urban terrace



St Mary's Island, kent



Œ 25

Traditional cottages Tenterden Kent



Green Courtyard Frontage 25-35 Homes / ha







Contemporary terrace town houses

### **Main Streets**

The Main or Principal Streets in the development would function as local distributor roads and carry a higher volume of vehicle traffic and in most cases provide a bus route or routes through the residential development. The Main Street should be designed with Cycle Tracks & Footways on both sides of the carriageway.

- Segregated space for walking and cycling takes more width than that for buses and cars.
- Provide for cycling on both sides (mix of 2 Way & Unidirectional depending on desire lines).
- Area for green space &/or SUDS.
- Multifunctional verge or flexible strip can be necessary in order to accommodate car parking and bus stops.
- The width and space referring to streets of this type means that they have to be used frugally within a Garden City, Town or Village.

### Street character

A hierarchy of street character and access creates a gradual hierarchy of street width, frontage, building scale and landscape detail to establish the primary road, secondary access streets, lanes fronting the wider green open spaces and a loose network of tertiary perimeter green lanes, and short cul-de-sacs linked by paths.

 A loose network of secondary, tertiary streets lanes and paths to create connected neighbourhoods with housing fronting both sides of the street.

- Tertiary streets link together to create either dual frontage streets or short cul-de-sacs linked by pedestrian cycle routes.
- Housing fronts onto perimeter green streets from tertiary lanes, which have a limited number of homes, to reduce scale. They are linked by pedestrian and cycle paths.
- Housing fronts onto primary streets by using tertiary lanes with a limited number of homes linked by pedestrian cycle paths.
- Mews courts accommodate some rear parking; however mews have homes above garages to provide natural surveillance.
- Layouts take into account slopes and topography with a Suds drainage strategy to use streets and lanes in the direction of the slope as conveyance swale. Green perimeter or central breaks between blocks act as collection swales.
- The varied combination of slopes and green spaces introduced as swales, curved streets to accommodate either of the above, or orientation of solar PV or perimeter hedgerows provide many variations of spaces within a reasonable framework principle.
- Fragmentation of block edges on the perimeter, varied field boundaries and specific topographic or physical features such as groups of tress or streams is actively encouraged, provided that the core principles of layout are met.

### 250m Grid of Cycle Streets

The garden town cycle network will be designed based on a 250 metre mesh of cycle streets. A primary and secondary routes grid will create a safe environment where adults and children can move freely and independently on all routes.

A 250 metre mesh is specified for cycling networks and reflects a key objective that no resident should live more than 125 metres from the cycle network. By this we mean a grid of paths and streets where surfacing, directness, legibility, & junction design are optimised for safe and efficient active travel.

The way that the grid is laid out is key to ensuring that it is affordable across a range of local housing markets. Running grid sections through the middle of neighbourhoods can imply building a shorter network comprised of higher capacity sections and more extensive use of cycle streets.

### **Examples of Street character overleaf**

A hierarchy of street character and access creates a gradual hierarchy of street width, frontage, building scale and landscape detail to establish the primary road, secondary access streets, lanes fronting the wider green open spaces and a loose network of tertiary perimeter green lanes, and short cul-de-sacs linked by paths.



Strategic Streets with four, five and six storey flats



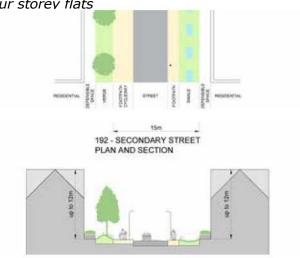
Primary Streets with four story houses and flats Secondary Streets with three storey houses and four storey flats



**Strategic Streets** provide main distributor roads through mixed-use and residential areas. Streets are two single lanes for traffic, segregated pedestrians and cycle lanes with streetscape of trees and green verges.



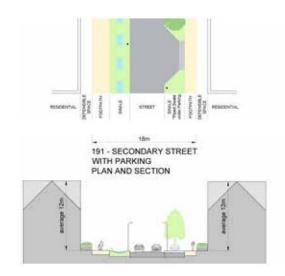
**Primary Streets** provide main transport routes as local distributor roads through mixed-use and residential areas creating active frontage for high levels of footfall. Streets are two single lanes for traffic, segregated pedestrians and cycle lanes with streetscape of trees and green verges.



**Secondary Streets** are routes with predominantly residential character with a narrower street width. Cyclists share carriageway with cars with demarcation of cycleway to encourage a slower pace and allow connection through to tertiary streets. Wide verges provide trees and landscape suds.



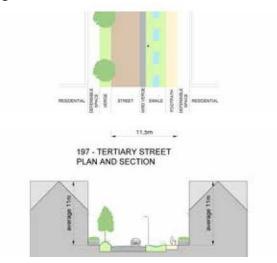
Tertiary Streets with two storey houses



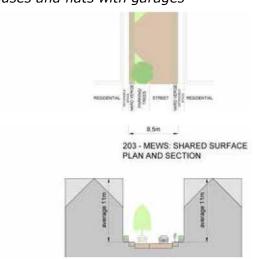
**Tertiary Streets** are residential streets with footpaths one side and wide verges. Some roads becoming narrow, to allow for more planted landscape areas, with passing places for cars. Cyclists share surface with cars.



Tertiary Street with two storey houses and flats with green roofs



Residential mews with two and three storey houses and flats with garages



**Residential Mews & Cycle Streets** are the heart of residential areas with pedestrians, cyclists and mixed traffic using a shared surface. Streets provide access to parking for each dwelling, with restricted through route for cars and prioritise connections for pedestrians and cyclists.



Residential mews with one storey bungalows and car ports



**Residential courtyards** with two storey houses and shared space steets integrated landscape





Green Lane with two storey houses and garages



**Green Lanes** provide restricted access to a limited number of homes to the edges of residential areas. With reduced scale, passing places, shared surface and the green lanes create a rural character and the network is linked by pedestrian and cycle paths.



Commuter cycle routes approx 2.5m wide with Commuter route-25m wide cyc segragated footpath total approx width 4 6m



Scriçor cycleways approx sm snared with rootpath



Leisure cycleways approx 3m shared with footpath

**Cycleways and Footpaths** will be designed based on a 250 metre mesh of cycle streets. A primary and secondary routes grid will create a safe environment where adults and children can move freely and independently on all routes.

# 3.0 Land Use Framework and Strategies

### **Land Use**

The following pages will describe the envisioned land use for the masterplan area as follows:

- 3.1.1 Housing
- 3.1.2 Non-residential Mixed Use
- 3.1.3 Retail and mixed use Local Centres
- 3.1.4 Community and Social Infrastructure
- 3.1.5 Commercial and Employment.

For a summary of quantum of land and development areas refer to section 1. 6 of this report.

Example Housing - Ingress Park ,Kent

### 3.1 Housing

Otterpool Park Garden Town will provide approximately 10,000 homes across a diverse range of types, sizes and tenures.

As well as market housing, there will be a strong commitment to providing a range of tenures, including affordable homes and opportunities for downsizers, including:

- Shared ownership,
- Social rent,
- Starter homes and other below-market housing types,
- Extra care housing for over 55s,
- Private rental housing,

Properties will be delivered by a range of providers, including:

- Small and Medium Enterprises and bespoke builders,
- Local Authority or community land trust,
- Housing associations
- National housebuilders.
- Self- and custom-build homes as serviced plots.

Overall, this diverse mix of housing will seek to create a mixed and balanced community, as well as a greater choice and competition in

the market, and the delivery of homes in both the short and longer terms to meet needs.

Housing design will provide a strong identity based around character areas with a permeable network of streets, courts and lanes providing street landscape that permeates the development.

The proposals will take into account the nature of the surroundings in order to create a sustainable and high quality housing design that responds to the local Kent context.

### **Providing 'Healthy' Homes'**

**Light** – is optimised with generous access to natural light

**Sound Insulation** – and good double glazing to promote quiet & tranquil home environments

**Materials** – and well-designed ventilation systems that promote good indoor air quality

**Resilience** – designed in with homes able to adapt to changing occupants

**Comfort** – using passive design to prevent both overheating and excessive heating costs

**Sensors** – that monitor indoor conditions and increase resident awareness

**Bedrooms** – that promote healthy sleep, relaxation and respond to circadian rhythms

**Systems** – are energy efficient and lowemission heating, cooling and ventilation systems

**Security** – is built in: home environments are safe and secure



Example Housing - Ingress Park ,Kent

**Storage** – and space provision to promote stress-free functional living

**Connected** – to local amenities, public transport, and pedestrian routes wider communities?

**Living Space** – that provides stimulating environments for social engagement and play

**Windows** – and layouts that maximise views out and natural ventilation opportunities

**Quiet Space** – provides settings for focused work, privacy, thinking, relaxation and reflection

**Kitchens** – that promote positive family interaction **Laundry** – provision to avoid moisture, mould growth and pollutant build-up in the home

**Home Working** - space in the home for working with fibre broadband to the premises FTTP?

**Age Friendly** - Encourage access to outdoors & physical activity, providing space for mobility aids and avoiding isolation.



Example Housing - Kings Hill, Kent



Example Housing - NW Bicester, Oxfordshire



Example Housing - Horsted Park, Kent



Example Housing - Ingress Park ,Kent

### 3.2 Non-Residential Mixed Use

The Masterplan will consider the lifestyle and needs of the community. Community facilities are intended to benefit both the Otterpool Park residents and existing communities. As each phase of the masterplan develops, a socially mixed community will be incrementally created through each phase and neighbourhood as it grows.

### **Creating new facilities**

New local centres will provide a strong community focus, and be located close to existing and proposed connections and housing to maximize footfall and viability. Community facilities across the Masterplan area will create vibrant and mixed use local centres which complement the existing retail and associated services in the local area. Primary schools will be located close to the local centres and green spaces with the secondary schools located in accessible locations close to the bus route, walking and cycling network and with playing fields forming part of the green space. New community halls, nurseries and health facilities will be provided as required.

### Improving the areas' existing facilities

The need to provide for or improve existing facilities such as libraries, adult learning, day care and health care centre providing diagnostic and appropriate emergency health care, special education needs, museum resources, skills and training will be considered and brought forward where appropriate.

### A Great Place to Live

Approximately 10,000 new homes will be provided, at a range of tenures and forms to meet the needs of the community and seeks to ensure:

- That new homes are provided in a form that meets the needs of the community over the lifetime of the development;
- That the strategy is sufficiently flexible to accommodate the changing needs of the community;
- That the design of the new homes provides for new greener and sustainable ways of living, both based on current and also future technologies;
- That the design and form of new homes meets the needs of the market and community;
- That the development is viable and achievable.

# **Community-Led Local Management Structure**

From the outset, the promoter has sought to encourage discussion of a community-led local management structure at Otterpool Park represented by a cross section of local stakeholders and residents that will:

- Progress low carbon, well-being and healthy living, encouraging growth in a sustainability culture
- Give people the opportunity to make decisions on management of community assets
- Support the creation of social capital and community cohesion
- Respond effectively to the changing needs of occupants
- Ensure owners and developers take

consideration of the community benefit over all stages of development, enhancing the wellbeing of those who live and work there

Much depends upon the appetite and desire of the community. Accordingly, the process would be designed to be flexible.

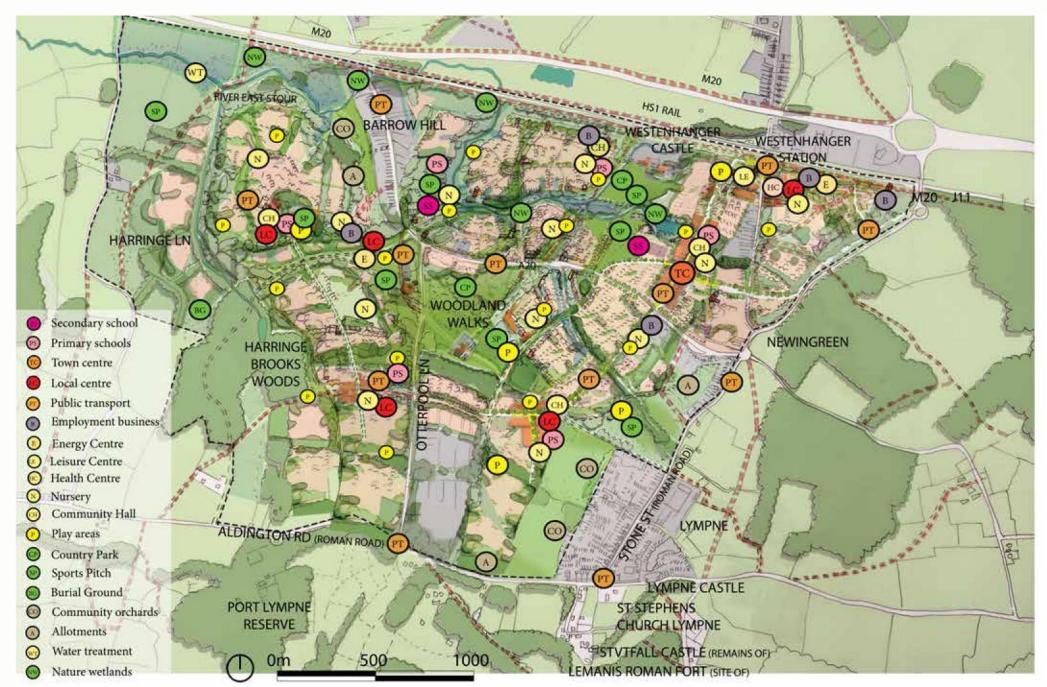
### A Great Place to Learn

The Otterpool Park masterplan has been developed to provide for new primary and secondary schools. KCC as the Local Education Authority have been consulted to consider the provision of new primary schools, and new secondary schools. The timing and final level of school provision will be the subject of further testing and analysis. The school sites have been located to maximize the benefit that schools can bring in terms of acting as a focus for the community and supporting the local centres.

### A Great Place to Work

The Otterpool Park masterplan will encourage and stimulate transformational change in Shepway's employment and economy, through:

- The aspiration to match new jobs with growth in homes – which will support local employment rather than depending on commuting out of the area to work;
- The creation of a strategic location for employment clustered around the railway station and the M20 J11;
- Provision of facilities to enable local employment within local centres and for businesses to grow from home;
- Local employment opportunities with cutting edge technologies.



**Masterplan Framework Indicative Mix of land use** 

### 3.3 Retail & mixed use local centres

Local centres will be located within the neighbourhoods and on public transport corridors linked to the railway station. Centres will be at optimum distances apart from each other to create walkable neighbourhoods whilst providing critical mass and footfall for the viability of commercial uses with variety and distinctiveness. The local centres will provide mixed uses with employment use business space above, services such as retail, restaurants, cafes, dentists, nurseries located on street frontages. Scale of buildings will be two to three storey street scale and a width and sequence of typical Kent villages such as Hamstreet.

Schools would be provided close to local centres to optimise walkable neighbourhoods (approx. 800m from all homes) and increase footfall and shared use for the amenities and services.

Sustainable walkable neighbourhood centres will be located at the heart of a network of good footpaths and segregated cycle routes connecting residential communities to local centres and schools.

A larger town centre will be created in a central location within the settlement within 10 minutes walking distance to the railway station and transport interchange with a range of associated uses such as hotels, health practice, and a wide range of larger retail, leisure and employment uses (Refer to plan page 41). The town centre will have an urban boulevard for traffic and bus routes with segregated cycle routes and footpaths with street trees. The scale of buildings will be three to five storey street scale and a width and sequence of a typical Kent high street such as Tenterden. The town centre will have mixed uses located on street frontages,

with flats above and a mix of town houses to create a higher density urban scale.

### **Community and Healthcare**

Community and healthcare facilities will be provided in an integrated way to provide a strong platform for people to manage their own health and care. Considered as a whole health care provision within the masterplan will be more closely linked to other services and broader wellbeing interventions creating links between healthcare and voluntary and community sector services, such as befriending.

### **Extra Care Housing**

There is the prospect of creating a 'health village' combining intermediate and long-term care facilities with residential units, linked with a community health centre. Community health housing for key workers will be provided alongside 1 and 2 bed extra care homes designed to help vulnerable people live independently with enhanced support integrated into the site.

Within each extra care local centre there will be a reception and square linking by level access lifts to internal circulation streets, glazed gallerias and winter gardens.



Example of High Street, Henley Oxfordshire



Example of creative workshops, London

### 3.4 Community & Social Infrastructure

Creating a vibrant community is at the heart of the vision for Otterpool Park, ensuring the most valuable resource will be its people. This visionary place will encourage active involvement from every generation, developing pride in their community and sharing in its success. The community will also have strong connections with the wider area through effective partnerships, ensuring that it is seen as part of the district, not separate.

Residents will be engaged in community life and have a strong sense of identity and belonging built upon the integrity of Otterpool Park, with places for everyone to enjoy the environment – nature trails, sports and leisure parks, attractive walks to the shops and schools, characterful places to meet in the new town square, public art spaces and new community halls catering for residents of all ages. Space will be provided for growing and selling locally produced food, including edible landscapes to encourage foraging and understanding of wild foods.

New employment opportunities will be provided to complement the needs of the market and long-term aspirations of Otterpool Park and existing employment opportunities in the local area. The masterplan will be supported by a business park and local centres, and both homes and businesses will benefit from a fast fibre-optic broadband network. A flexible layout of homes should create extra space for working from home, which will in turn reduce travelling needs and encourage people to tap into the local economy.

Our whole vision is about creating a

community infrastructure that will provide sustainable ways to live and work for people of every age.















Sports & Activities

### 3.5 Commercial and Employment

The Otterpool Park masterplan supports the creation of approximately 8000 jobs, within a sustainable travel distance. The employment proposals will be designed to complement provision elsewhere in Shepway, not compete with it. A Business Centre will provide flexible accommodation and supporting facilities and services for firms and homeworkers, potentially attracting jobs in sustainable construction, and environmental goods and services.

The target mix of jobs on the site may include high performance engineering, other knowledge intensive activities, and business financial and professional services. The masterplan includes accommodation for a variety of firms in a mixed employment area in the north east corner of the site, which can accommodate up to 4,000 jobs and will be designed to be in keeping with the wider masterplan principles with design parameters which will ensure it fits well with surrounding uses, and contribute to the vibrancy of the town and local centres. This area was chosen as the most accessible location, close to public transport, motorway and town centre, with flexibility to expand if required. In addition, jobs will be created in constructing the garden town, local service jobs will be provided in local centres, community and business hubs distributed across the site, including offices, retail, health centre and schools. Some jobs will be based in homes on the development, facilitated by careful design of homes and by universal access to a fast broadband network. There will be jobs maintaining the homes and open spaces.

Some jobs serving the future residents are better located off-site - particularly in the surrounding towns and on other employment sites which are accessible from the railway station. A wide range of measures will be taken to support job creation and growth. In addition to physical provision of business space, a partnership with local public and private sector training providers will encourage the provision of apprenticeships and other training courses, to enable existing and new local residents to develop the skills needed by local employers. The Otterpool Park brand will be used to support the promotion of Otterpool Park as a business destination, and links will be created with local universities, for example through the support of research and innovation into sustainable buildings and communities, using Otterpool Park as a demonstrator.

It is envisaged the new garden town will include jobs based on the following use classes:

### Residential

- Approximately 1000 up to 1200 jobs C3 Home Working
- Approximately 350 to 400 jobs C2 Extra Care Housing
- Approximately 100 to 120 jobs C1 Hotel

### **Community and Commercial**

- Approximately up to 220 jobs D1 (nursery)
- Approximately 200 to 300 jobs D1 (health services including local GP surgery and dentist)
- Approximately 50 to 60 jobs D1 community, town and village halls;
- Approximately up to 240 jobs D1 Primary schools
- Approximately up to 140 jobs D1 Secondary schools
- Approximately up to 100 jobs D2 leisure indoor sports and recreation
- Approximately up to 500 jobs A1 retail floor space to meet local needs for both convenience and comparison goods.
- Approximately up to 450 jobs A2, A3, A4 retail/leisure floor space including businesses/ cafes/restaurants/pubs/takeaways

Approximately up to 750 to 850 jobs B1a commercial business in hubs

- Approximately up to 3500 jobs B1b commercial business park
- Approximately up to 250 to 350 jobs B2 Light industrial business park

### When combined, these uses will create

- Approximately 8,000 new employment opportunities, creating jobs and facilities to provide local services and new employment.
- Investment in broadband infrastructure network and flexible business space to enable start-ups, encourage small business growth and enable home working.
- Flexible business and employment floor space, incorporating live-work capabilities and an investment fund for innovation and business expansion.
- Education, employment training and enterprise opportunities integrated with a business hub and schools.
- The early delivery of infrastructure and community facilities including schools, health centres, dentists, nurseries, community centres sports provision and meeting halls.
- Sufficient retail space to create a local high street which meets local needs for convenience and comparison goods, with cafes, restaurants and facilities to create a lively and thriving local centre for all ages;



Example of business park, Cambourne, Cambridgeshire



Example of business in residential street, Poundbury Dorset



Example of business on ground floor mixed use, Poundbury, Dorset



Example of business courtyard, Poundbury Dorset

# 4.0 Delivery

### 4.1 Implementation Strategy

A strategy for delivery, phasing and implementation will be submitted with the planning application and will be based upon the masterplan proposals in terms of both land use and phasing.

An outline planning application for the delivery of the bulk of the masterplan area will be submitted, providing a detailed, yet illustrative proposed vision for the phased development of the Otterpool Park Garden Town. This application will include necessary details to provide certainty of delivery, within set parameters and specifications, which will be submitted alongside the illustrative masterplan to enable the vision for the new garden town to be realised within a flexible structure, supported by a rigorous set of principles established by the application documentation.

It is anticipated that the phasing plan submitted will complement a Section 106 Agreement that will set out the requirements for development within each phase and the timing of provision for infrastructure to support the numbers of dwellings (and therefore residents) in each phase. This is particular important for the provision of schools and other community facilities in tandem with the phased growth of Otterpool Park rather than at the end of key phases of development. The delivery strategy will include the timing of provision of local centres to ensure that the new settlement has sufficient level of local shopping facilities and services as it grows.

The ability of the applicants to attract and/ or cross-subsidise investment in community, education, health and local shopping facilities is being considered as part of the overall viability study of the project. The applicant will deliver complementary infrastructure necessary to accompany and enable the delivery of the proposed masterplan by phases at the appropriate point, along with community infrastructure and services. Further details of the delivery mechanisms outside the structure of the planning application/Section 106 Agreement will be discussed as appropriate with the LPA prior to the submission of the application.

Kent County Council, working in partnership with Shepway District Council, has submitted a bid to the government's Housing Infrastructure Fund Forward Fund (HIF) for £2.81 million. This fund is intended to help facilitate new strategic housing growth by providing investment in necessary infrastructure up front, to be spent by March 2021. The bid seeks funding for a range of infrastructure including new schools, roads, station improvements, a health centre and advance planting. The viability assessments and housing trajectories being prepared for Otterpool Park will consider scenarios with and without HIF.

# 4.2 Phasing and Programme of Development

An indicative phasing plan will be produced when further analysis and programmes for necessary infrastructure, associated cost and resulting viability assessments are developed.

Each phase will provide the necessary mix and quantum of development to maintain a strong combined trajectory of housing delivery alongside necessary social and physical infrastructure to ensure that each phase is delivered successfully in isolation, but knit well within the wider masterplan vision for the delivery of the Otterpool vision.

The first phases will be broadly located in two areas to establish distinct character:

- To the north and east establishing the Gateway and High Street character areas providing: transport interchange with new infrastructure connections to the M20 and railway station; new alignment of the A20 connected to the proposed high street and mixed use floor space for retail, small business nurseries and community space. New housing will be created in walkable neighbourhoods with pedestrian and cycling links to the proposed high street and public transport. The Health centre, businesses and primary and secondary schools with sports pitches will be included in this phase along with a landscape park around Westenhanger Castle.

- To the west creating the Otterpool Slopes character area with housing and a local centre accessed from Otterpool Lane with enhanced public transport and cycling routes to the high street and railway station. The local centre will provide mixed use floor space for retail, small business and a primary school and nursery.

The subsequent phases will complete the established character areas of the Gateway, High Street and Otterpool Slopes, and extend these with the Riverside, Hillside and Woodlands housing and character areas.

# 4.3 Designed Response & Conclusion

The vision for Otterpool Park will ensure that a unique and new place is created that has a clear and distinct sense of identity, which builds upon the established and existing qualities and infrastructure of the masterplan area order to create a sustainable and interconnected group of places that are significantly greater than the sum of their parts.

The Framework Masterplan is based upon the garden city principles established by the Town and Country Planning Association, adapted to fit with the local vernacular context and circumstances, creating design principles for a high quality Framework Masterplan underpinning the delivery of Otterpool Park Garden Town.

