



FIGURE 4.3 NOR MARSH, MEDWAY



FIGURE 4.4 NOR MARSH, MEDWAY

of SUDS. It is noted that large scale strategic development, such as that proposed for Hoo St Werburgh, has the potential to deliver this new water supply and SUDS infrastructure in a more coordinated manner than ad hoc smaller scaler developments.

## Air Quality

The report acknowledges that growth, and the traffic increases associated with it, has the potential to increase air pollution which has the potential to impact upon some of the identified European sites, depending upon the characteristics and sensitivities of the protected habitat.

The report notes that the critical issue is increased traffic along major roads near sensitive areas. However, it is also highlighted that "determining the significance of this impact in relation to the integrity of European sites is extremely complex".

However, it is also noted that the Report highlights that: "Estuarine habitats are generally not considered to be particularly sensitive to air pollution effects, given that they already receive high nitrogen loads in water." (paragraph 3.68). The report goes on to highlight at paragraph 3.76 that "the majority of development options being considered within the emerging Local Plan indicates that it is unlikely that there will be significant adverse effects on the integrity of the estuarine European sites".

Given that the only European sites relatively close to Consortium land are estuarine habitats, it is considered that the proposed expansion of Hoo St Werburgh is unlikely to give rise to any detrimental air quality impacts upon these sites. It is also acknowledged that further assessment should be undertaken by the Council, regarding cumulative

impacts upon particularly sensitive European sites which are proximity to major roads.

The Consortium has also engaged in positive dialogue with Arriva. Form these discussions it is evident that there is a realistic prospect of providing a high quality, frequent bus service to Hoo St Werburgh that will offer a genuine alternative to the private car, thereby providing the potential to further any adverse impacts on air quality.

'Carbon Capture' schemes from extensive tree planting are also becoming widely regarded as highly beneficial to the improvement of air quality. The delivery of a major new country parkland area to the south of Hoo St Werburgh with extensive new tree planting will make a significant contribution in this regard.

In summary, the preliminary analysis set out in the 'Habitats Regulation Assessment: Screening Report' indicates that the proposed expansion of Hoo St Werburgh would be unlikely to have an impact (individually) upon any of the identified European sites. This is principally because the land proposed for development is not subject to any designations, but also because the proposals include the delivery of significant new green infrastructure for both recreational and habitat enhancement purposes. As the assessment is refined as the plan proceeds, it is appropriate that the positive effects of these environmental benefits be considered fully in the context of the overall sustainability assessment.

# CONTENTS

1.0	INTRODUCTION	. 4
2.0	VISION	. 6
3.0	PLANNING POLICY.	11
4.0	CONTEXT	12
5.0	MEDWAY CONSTRAINTS & OPPORTUNITIES	21
6.0	HOO ST. WERBURGH CONSTRAINTS & OPPORTUNITIES	25
7.0	DEVELOPMENT FRAMEWORK	37
8.0	DELIVERY	41
	SUMMARY & CONCLUSION	
10.	TECHNICAL APPENDICES	44
	ECONOMIC BENEFIT ANALYSIS	45
	LANDSCAPE ANALYSIS	47
	TRANSPORT	55
	FOUL DRAINAGE STRATEGY AND ANALYSIS	64

# 1.0 INTRODUCTION

This document has been prepared on behalf of a consortium of promoters with sites around Hoo St Werburgh (hereinafter referred to as 'the Consortium'), in response to Medway Council's Regulation 18 'Development Options' Consultation (DO, January 2017).

The Hoo Development Framework Document (HDFD) sets out the Consortium's shared vision for the expansion of Hoo St Werburgh and Chattenden into a sustainable rural town. The development could deliver approximately 6,500 new dwellings; transport improvements including enhancements to local bus service provision linking with nearby rail services; a new expansive area of community parkland; new employment space; new retail and community facilities including new primary and secondary schools and health facilities; enhanced leisure and recreation facilities; and upgraded services and infrastructure such as high speed broadband.

The HDFD demonstrates that Hoo St Werburgh is the least constrained strategic location in the Borough. The document demonstrates that the expansion of Hoo St Werburgh will deliver genuine sustainable development, ensuring that the delivery of essential infrastructure is secured in concert with the new homes that are required to help meet the needs of Medway Council by 2035.

This approach will enable Medway Council to deliver its housing and infrastructure requirements by 2035, crucially ensuring the soundness of the Local Plan.

#### THE CONSORTIUM

The Consortium comprises four landowners (including promoters) whom have agreed to work in partnership to jointly promote their respective land interests through the emerging Medway Local Plan. By working together, the sustainable expansion of Hoo St Werburgh and Chattenden can be comprehensively planned and achieved, with infrastructure and services delivered at the appropriate times alongside housing.

The Consortium members comprise:

- The Church Commissioners for England
- Dean Lewis Estates
- Gladman Developments
- Taylor Wimpey

The Consortium land is estimated to have capacity for some 6,500 units (including provision of affordable housing) and the associated non-residential development, infrastructure and services

Alongside the Consortium, the Homes & Communities Agency (HCA) is actively promoting the former Chattenden Barracks site currently owned by the Ministry of Defence. The HCA has also contributed to the preparation of the HDFD. The former barracks is estimated to have capacity for up to 5,000 dwellings with circa 3,000 dwellings within the plan period to 2035 subject to review.

This could therefore ultimately deliver up to 9,500 dwellings, and accompanying infrastructure and services/facilities. This Vision document has therefore been prepared on a "with" and "without" basis, ie:

- 6,500 dwellings obo Consortium; and
- 3,000 dwellings with HCA/Lodge Hill

The HDFD has been explicitly prepared to demonstrate how the Consortium land and the former barracks site can be brought forward alongside one another, in a co-ordinated and integrated fashion. It is also important to note that the Consortium land and the former barracks site can also can also be brought forward independently of one another. This is addressed further under Section 8 of this document.

#### **STRUCTURE**

This document is structured as follows:

- Section 2 sets out the vision for the expansion of Hoo St Werburgh;
- Section 3 provides an overview of the National planning policy in respect of Plan making;
- Section 4 outlines the strategic planning context within which the expansion of Hoo St Werburgh is proposed;
- Section 5 sets out why Hoo St Werburgh is the most sustainable strategic location in Medway, with reference to strategic constraints and opportunities;
- Section 6 looks in more detail at the form and scale of development appropriate at Hoo St Werburgh, with reference to local constraints and opportunities;
- Section 7 sets out the proposals for the expansion of Hoo St Werburgh;
- Section 8 explains how the proposals can be delivered; and
- Section 9 sets out why the expansion of Hoo St Werburgh represents the most sustainable and deliverable strategic development option available in Medway for the next Plan period.



FIGURE 1.1: SITE LOCATION PLAN

# 2.0 VISION

#### **SUB REGIONAL POSITION**

The South East has been identified as the gateway to the rest of the UK due to its transport infrastructure, including six International airports, five International rail stations, six major ports and an extensive road, motorway and rail network, including the High-Speed route. The Channel Tunnel has also enabled the region to become more open and accessible to Continental Europe.

The Thames Estuary region stretches 40 miles from Canary Wharf in London to Southend in Essex and Thanet in Kent. With a population of more than 3 million, its unique location and potential means it is a long-term National priority for growth. The region has been identified as having significant untapped potential for both economic development and accommodating housing growth. The focus upon the Thames Estuary region is an evolution of the "Thames Gateway" programme put in place in the early 2000s.

The Medway area covers approximately 100 sq. miles at the heart of the Thames Estuary region. The area consists of attractive countryside, ranging from the North Downs through Medway Valley to marshes around the river estuary. The Medway Towns comprise the second largest conurbation in the South East, performing an important function as a sub-regional hub from employment, retail and leisure. Importantly the Medway Towns also benefit from several major historic assets including Chatham Historic Dockyard, the most complete Georgian Dockyard in the world, and the unique historic urban environment within the centre of Rochester including Rochester Castle, the Cathedral and the High Street.

The Hoo Peninsula is situated to the north east of the Medway Towns, and east of Gravesend. The River Thames wraps around the northern edge of the Peninsula, creating an important wetland and marshland habitat along this northern edge. To the south the Peninsula accommodates some large scale commercial and industrial uses including power stations and Kingsnorth Commercial Park,

important water related activity including London Thames Port, alongside large scale agriculture activity. The Peninsula is well connected to the Medway Towns via the A228 and to the M2/A2 via the A229, providing access to the wider Kent area and London. The location of the Peninsula, alongside its existing economic assets and environmental character and capacity, make it a strategically important location for accommodating growth, with the potential to make a substantive contribution towards realising the Government's objectives for the Thames Estuary region.

Hoo St Werburgh is the largest settlement on the Peninsula, with a population of some 9,000 residents (2011 Census). Hoo St Werburgh performs a Service Centre function for the wider Peninsula, accommodating a large village centre and various social and community facilities including a secondary school and health facilities.

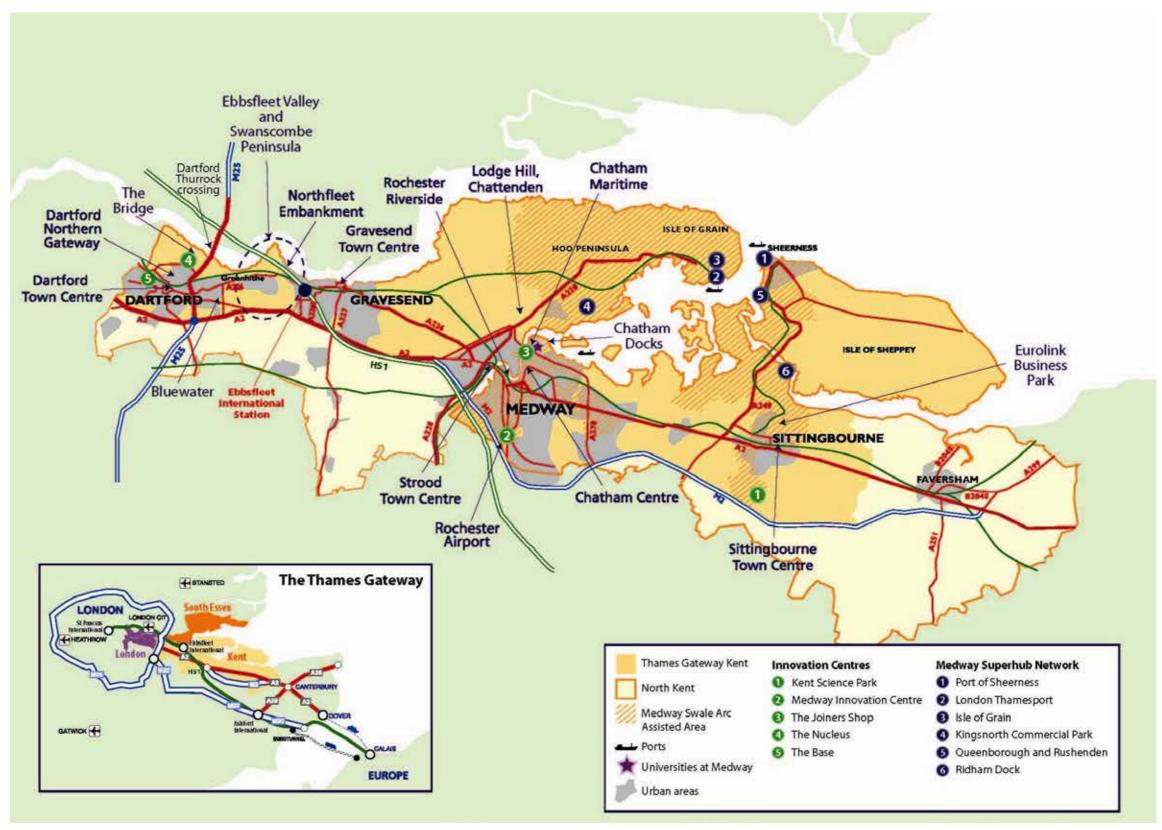


FIGURE 2.1: SUB REGIONAL CONTEXT PLAN

## **CONSORTIUM LAND**

The Consortium land comprises land north, south, east and west of Hoo St Werburgh, extending to approximately 502 ha in total. The site broadly comprises six parcels, defined by distinct physical features but also broadly reflective of the different land holdings:

- Area 1 comprises the land extending west of the urban edge of Hoo St Werburgh, to the A228 dual carriageway to the north-west, and defined by Main Road to the south.
- Area 2 comprises the land to the south of Main Road, which extends south to the River Medway, east to Vicarage Lane and west towards "Searchlights Heights", Chattenden.
- Area 3 comprises the land to the north east of the urban edge of Hoo St Werburgh, extending north of Stoke Road as far as Peninsula Way and east from the urban edge as far as Ropers Lane.
- Area 4 comprises the land to the south west of Hoo St Werburgh, extending east from Vicarage Lane towards the former Kingsnorth Power Station and south of Stoke Road all the way to the River.
- Area 5 comprises the land that extends north east from Chattenden. The southern boundary is defined by Peninsula Way, with the northern boundary defined by field boundaries which broadly relate to the 'Deangate' ridge-line (and also reflects the boundary of the Golf course).
- Area 6 is a small extension of land to Area 1 immediately to the south.

In addition two further parcels, which sit outside of Consortium ownership have been included within the vision.

 Area 7 comprises the former Chattenden Barracks, which is situated north of the Golf Course and extends east from Chattenden Lane to Dux Court Road.

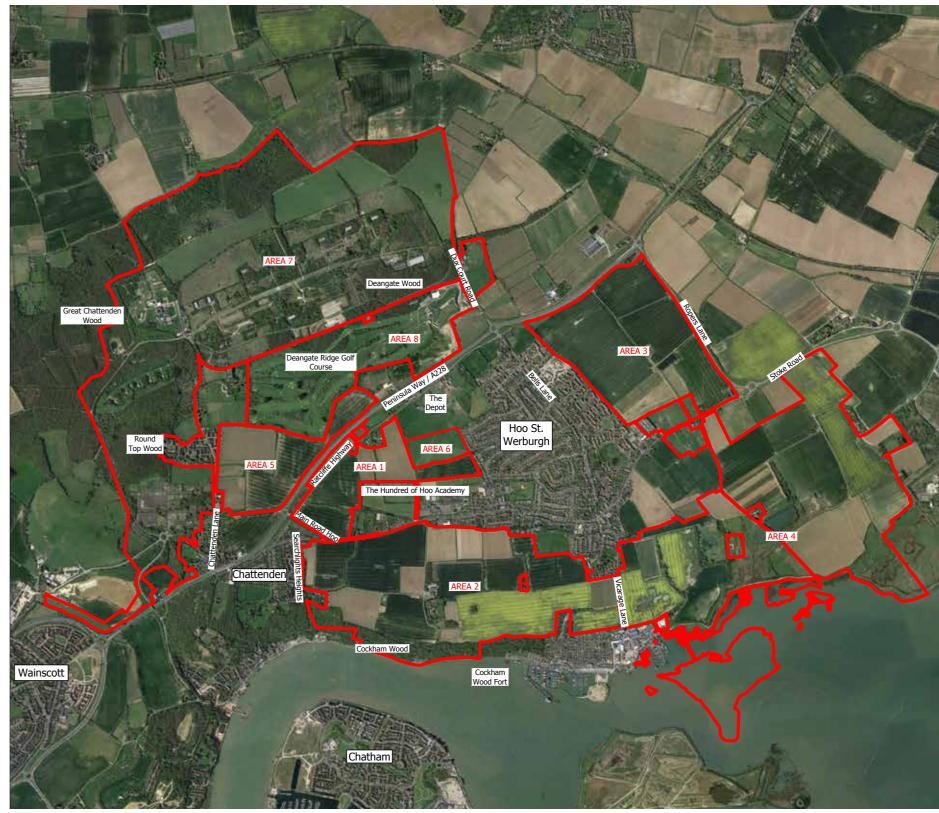


FIGURE 2.2: SITE OVERVIEW PLAN

Area 8 comprises the land which extends south beyond the Deangate ridge-line, and is thereby visually separated from the other areas although physically adjacent. This presently includes the whole of the Golf Course, which is in Medway Council Ownership (although this does not comprise part of the Consortium land holdings).

#### VISION

The Consortium's vision for the sustainable expansion of Hoo St Werburgh is as follows:

"Hoo St Werburgh will become a sustainable, small rural town, sensitively integrated into the Peninsula landscape. The settlement will provide market and affordable housing, play an enhanced service centre role, with improved transport links, shops, facilities and services, sustainably and viably meeting the daily requirements of local residents and nearby rural communities. The settlement will have an extensive green infrastructure network, integrating new development into the landscape, and providing access to the surrounding countryside for residents and enhancing biodiversity."

This document sets out further detail on the vision for Greater Hoo and the opportunity it presents for the Borough.

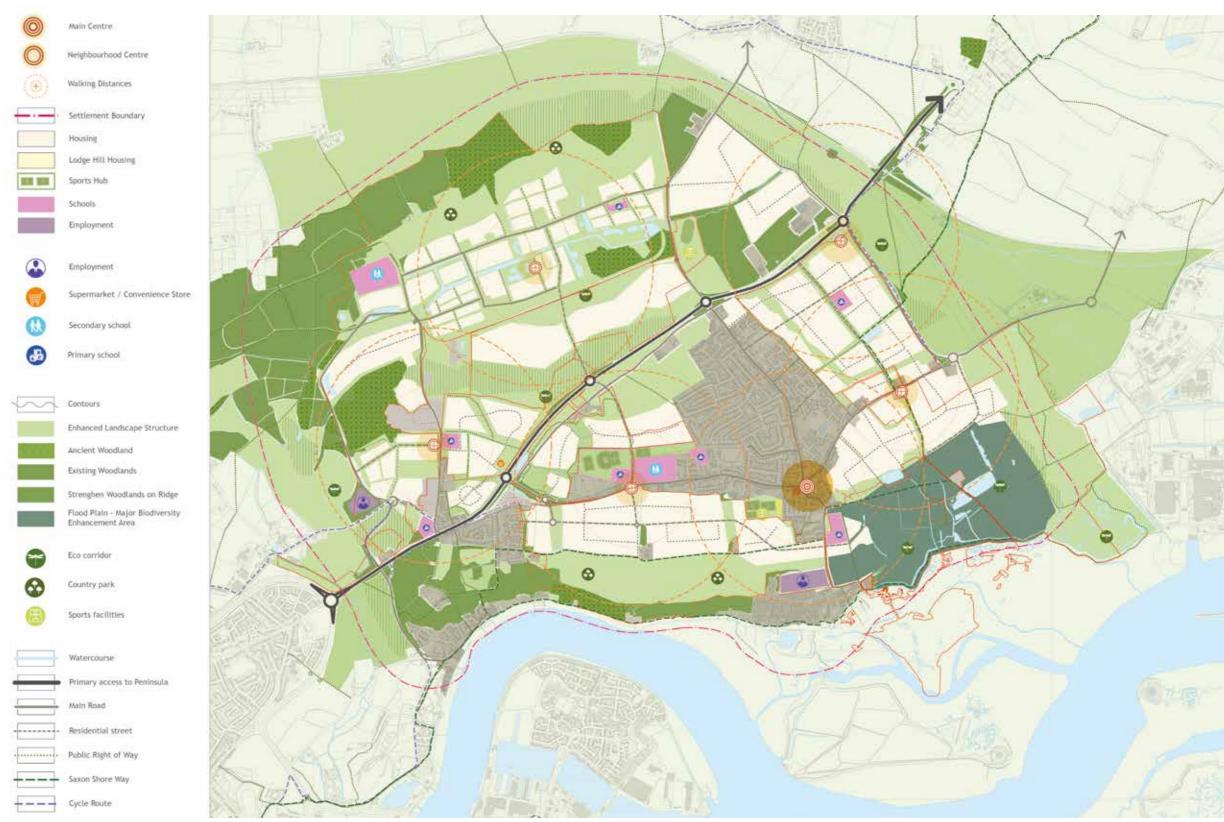


FIGURE 2.3: CONSORTIUM FRAMEWORK PLAN

## LODGE HILL

The Homes and Communities Agency, working closely with the Ministry of Defence/Defence Infrastructure Organisation, are actively promoting the Lodge Hill development as an appropriate location for development through the emerging Local Plan process.

In addition, the extant planning application for the site which was "called-in" for determination by the Secretary of State, will be subject to a Public Inquiry which is scheduled to take place in March 2018. The HCA continues to work actively towards a successful approval of the application from the Secretary of State through that process or via submission of a new application should this prove appropriate.

In the light of Medway Council's continued support for the scheme, including the identification of the site as an option in the Development Options Consultation document, the Consortium has agreed to work closely with the HCA to prepare an integrated Development Framework for the sustainable expansion of Hoo St Werburgh, including the former Barracks site.

However whilst the Development Framework is fully integrated with the proposals for Lodge Hill, it should be noted that the Consortium land, and the vision for the expansion of Hoo St Werburgh, can be delivered even if the proposals for Lodge Hill are not realised i.e. on a "with" or "without" scenario. Delivery issues are discussed in more detail at Section 8.

# 3.0 PLANNING POLICY

#### NATIONAL POLICY AND PLAN MAKING

The National Planning Policy Framework (NPPF) was published in March 2012. In general terms, the NPPF advocates a strong 'presumption in favour of sustainable development' in all planning related matters and places a responsibility on Local Planning Authorities (LPAs) to encourage and support sustainable growth and to plan positively for new development.

The NPPF (para 182) requires that, "A local planning authority should submit a plan for examination which it considers is "sound" – namely that is":

- Positively prepared the plan should be prepared based on a strategy which seeks to meet objectively assessed development and infrastructure requirements, including unmet requirements from neighbouring authorities where it is reasonable to do so and consistent with achieving sustainable development;
- Justified the plan should be the most appropriate strategy, when considered against the reasonable alternatives, based on proportionate evidence;
- Effective the plan should be deliverable over its period and based on effective joint working on cross-boundary strategic priorities; and
- Consistent with national policy the plan should enable the delivery of sustainable development in accordance with the policies in the Framework.

Paragraph 156 of the NPPF states that LPAs should set out the strategic priorities for the area in the Local Plan. This should include strategic policies to deliver:

- The homes and jobs needed in the area;
- The provision of retail, leisure and other commercial development;
- The provision of infrastructure for transport, telecommunications, waste management, water supply, wastewater, flood risk and coastal change management, and the provision of minerals and energy (including heat);
- The provision of health, security, community and cultural infrastructure and other local facilities; and
- Climate change mitigation and adaptation, conservation and enhancement of the natural and historic environment, including landscape.

Paragraph 157 advocates that crucially Local Plans should:

- Plan positively for the development and infrastructure required in the area to meet the objectives, principles and policies of this Framework;
- Be drawn up over an appropriate timescale, preferably a 15-year time horizon, take account of longer term requirements, and be kept up to date;
- Be based on co-operation with neighbouring authorities, public, voluntary and private sector organisations;
- Indicate broad locations for strategic development on a key diagram and land-use designations on a proposals map;
- Allocate sites to promote development and flexible use of land, bringing forward new

land where necessary, and provide detail on form, scale, access and quantum of development where appropriate;

- Identify areas where it may be necessary to limit freedom to change the uses of buildings, and support such restrictions with a clear explanation;
- Identify land where development would be inappropriate, for instance because of its environmental or historic significance; and
- Contain a clear strategy for enhancing the natural, built and historic environment, and supporting Nature Improvement Areas where they have been identified.

The NPPF directs that LPAs should use a proportionate evidence base in plan-making. LPAs should ensure that the Local Plan is based on adequate, up-to-date and relevant evidence about the economic, social and environmental characteristics and prospects of the area. LPAs should ensure that their assessment of and strategies for housing, employment and other uses are integrated, and that they take full account of relevant market and economic signals (para 158).

The NPPF directs LPAs to prepare an evidence base which indicates that objectively assessed needs for market and affordable housing are met. LPAs should plan for a housing mix which takes into account "housing demand and the scale of housing supply necessary to meet this demand." Household and population projections should also be a key consideration, taking into account of migration and demographic change (para 159).

In March 2014, the CLG also published the National Planning Practice Guidance (PPG) to "reflect and support" the NPPF. The PPG provides further guidance on the content of Local Plans, namely that it sets out "a vision and a framework for the future development of the area, addressing needs and opportunities in relation to housing, the economy, community facilities and infrastructure" (PPG Reference ID: 12-001-20140306).

The PPG also contains considerable guidance on the Duty to Co-operate. This is largely due to the fact that the Duty to Cooperate has proved to be a contentious part of the NPPF, with numerous Local Plans being scrutinised at Examination due to failure to fulfil the Duty.

The guidance emphasises the importance for LPAs to work together, actively and on an ongoing basis; stressing that "Cooperation between local planning authorities, county councils and other public bodies should produce effective policies on strategic cross boundary matters" (PPG Reference ID: 9-010-20140306).

More recently, the Housing White Paper (February 2017) reaffirms the Government's commitment to significantly increase levels of housing delivery to meet the widely recognised acute housing shortfall. The Paper refers to Britain's broken housing market as "a national issue that touches every one of us", which needs to be tackled head on by everyone involved in politics and the housing industry.



# 4.0 CONTEXT

## MEDWAY – GROWTH CONTEXT

The Development Options (DO) consultation document sets out that by 2035 Medway will need to accommodate nearly 30,000 new homes, close to 400,000m2 commercial floorspace, some 55,000m2 of new retail floorspace and all of the infrastructure and facilities necessary to service these new homes, jobs and shops. Given the scale of the Borough development requirements, it is encouraging that the Council has set out a very clear vision for Medway:

"By 2035 Medway will be a leading waterfront University city of 330,200 people, noted for its revitalised urban centres, its stunning natural and historic assets and countryside"

It is to be particularly welcomed that the Council is specifically acknowledging the important contribution that new development will make to realising this vision:

"Medway will have established a regional profile for successfully and ambitious growth and accrued benefits from wider strategic developments. New development in Medway's town and villages will have responded positively to the character of the surrounding environment and needs of the existing community"

The Consortium is wholly supportive of the vision set out in the DO, in particular the Council's ambition in seeking to ensure that growth is delivered so that it benefits new and existing residents.

## SCALE OF HOUSING GROWTH REQUIRED

Reflecting the findings of the 2015 Strategic Housing and Economic Needs Assessment (SHENA), the DO identifies a housing requirement of 29,463 dwellings over the Plan period, which equates to some 1,281 dwellings per annum.

The Consortium is focused upon demonstrating how directing strategic growth towards Hoo, can sustainably and effectively help Medway meet this housing requirement. As such the Consortium has not sought to undertake a review of the SHENA. However, it is important that the OAHN remains robust and in accordance with the most up to

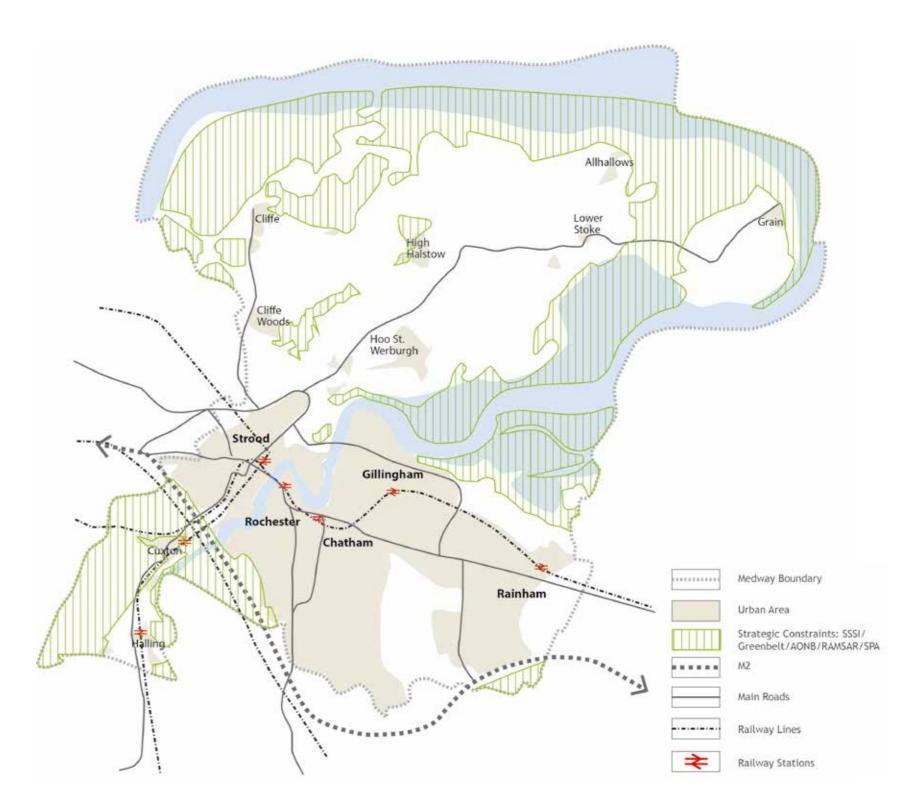


FIGURE 4.1: MEDWAY CONTEXT PLAN

date guidance and has regard to the most recently published evidence.

In particular, it is noted that in the period since the SHENA was produced, revised household projections have been published, and that due regard will need to be had to these to ensure that the Local Plan evidence base remains robust.

# MEDWAY DEVELOPMENT OPTIONS - GROWTH SCENARIOS

It is acknowledged that, given the scale of growth that needs to be accommodated, the Council is seeking to take a positive and proactive approach to meeting the development needs of the Borough, identifying several strategic development "scenarios" in the DO consultation document:

- Scenario 1 Maximising the potential of urban regeneration
- Scenario 2 Suburban expansion
- Scenario 3 A rural focus
- Scenario 4 Urban regeneration and a rural town

Each of the scenarios comprises directing growth to a combination of different strategic locations. The different scenarios make different assumptions about the capacity of these strategic locations. To better understand the capacity of the strategic locations, it is essential that the Council focuses upon the critical issues of sustainability and deliverability. To this end this document is focused upon demonstrating the sustainability and deliverability of an expanded Hoo St Werburgh.

However, and prior to exploring this, the Consortium would like to take this opportunity to offer some preliminary comments regarding the sustainability and deliverability of the different growth scenarios identified in the DO: maximising urban regeneration, suburban expansion and expanded villages. In doing so, it is acknowledged that "no one size fits all" and that the eventual spatial strategy will likely comprise a combination of scenarios.

# Scenario 1 - Maximising the potential of urban regeneration (Appendix 1B)

The Consortium recognises that an expanded Hoo St Werburgh will necessarily have a strong functional relationship to the urban area, and is thereby keen to see the town centres fulfil their potential. However, whilst the Consortium is supportive of the regeneration of Medway's urban area, it is imperative that assumptions regarding the capacity of the urban area to accommodate growth are realistic.

Appendix 1B of the DO explains that maximising urban regeneration comprises "a more radical approach...to deliver a substantial increase in development...building at higher densities...and bringing forward new areas for development". It is suggested that this approach could deliver some 10,500 units through the redevelopment of sites including: Medway City Estate, Chatham Docks and waterfront sites in Chatham and Strood.

It is unclear from the DO exactly how many of these 10,500 units would come forward through the intensification of sites that already benefit from planning permission, and how many would come forward on entirely new sites which are not currently being promoted for development.

As is also significant that, as noted in the consultation document (para. 3.26) the redevelopment of brownfield sites is 'challenging'.

These sites are often the most difficult to develop with fragmented ownerships and technical constraints such as contamination, flood risk and insufficient highways and infrastructure capacity. Alongside these technical issues there are also implications for the character of the urban area, particularly in respect of mix of uses, building heights and impacts upon the historic environment.

It is important that the Council remains realistic about the viability, deliverability and capacity of the sites within the urban areas. It is noted that achieving higher densities on brownfield sites is often challenging, especially in areas outside of London, where constraints can undermine viability and where taller buildings (often with significantly reduced car parking) are often unacceptable to the local community.

# Appendix 1B – Maximising the potential of urban regeneration

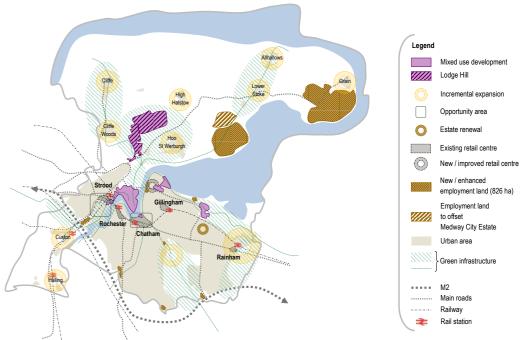


FIGURE 4.2: MEDWAY DEVELOPMENT OPTIONS

It is also noted that the viability of affordable housing can be significantly compromised on challenging brownfield sites which could undermine the abiltiy of the plan to meet affordable housing needs and deliver an appropriate mix of accomodation.

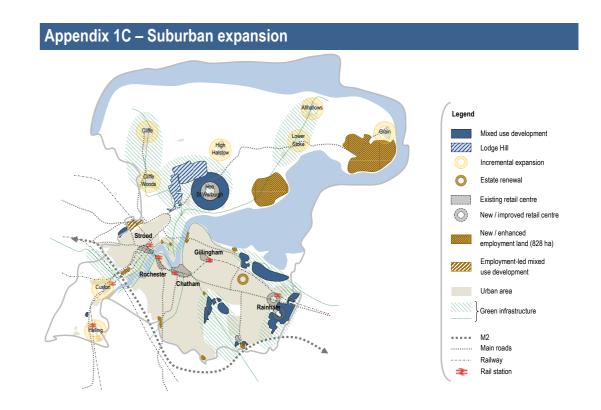
To ensure that the emerging Plan is robust, assumptions regarding the capacity and deliverability of the brownfield sites should remain firmly based upon recent experience of what is being achieved and delivered in Medway. The Consortium is minded that, based on historic development rates and the significant impediments manifest within the urban areas set out in Scenario 1, that the 10,500 units will not be deliverable in its entirety within the Plan period. It is noted that Appendix 1E of the DO suggests that the regeneration sites could accommodate some 6,500 units, identifying similar locations for redevelopment including: Chatham Docks, Medway City Estate, Chatham and Strood Waterfront. This is considered a more realistic assumption.

## Scenario 2 - Suburban Expansion (Appendix 1C)

Scenario 2 suggests that sustainable urban extensions around Rainham, Capstone and Strood, could accommodate some 10,700 units. Scenarios 1, 3 and 4 all assume that some growth would be directed towards these areas, albeit with a capacity closer to 2,000 units.

As noted in the DO, consideration will need to be given to infrastructure planning and the constraints present within the natural environment in order to determine the capacity of these areas to accommodate growth. The DO highlights that highways capacity, in particular, is likely to be an issue in these areas. This will have significant implications for the viability and deliverability of development in these locations.

In addition, it is noted that an urban extension to Strood would require amendment to Green Belt boundaries. The Consortium notes that the Housing White Paper has reiterated that Green Belt boundaries may only be amended in "exceptional circumstances", indicating that this would need to include a full assessment of all other reasonable options before exceptional circumstances could be demonstrated.



#### Scenario 3 - Rural Focus (Appendix 1D)

Scenario 3 comprises delivery of a rural town centred around the existing Hoo St Werbugh. The scenario promotes development including 6,500 homes, investment in transport, a new retail centre and employment land, a secondary school and 5 No. primary schools, community facilities including a Healthy Living Centre, library and community centre, open space including play areas and local amenity greenspaces and two country parks around the Saxon Shore Way and Deangate.

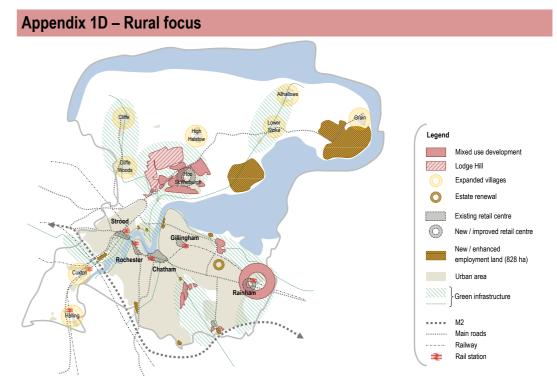
In directing this scale of growth towards Hoo St Werburgh this scenario implicitly recognises that:

- The expansion of Hoo St Werburgh comprises an opportunity to realise genuinely sustainable development, delivering a mix of uses including retail and employment alongside housing, and properly served by infrastructure including transport investment, new schools, health and community centres, and open spaces including a new country park.
- The land around Hoo St Werburgh is largely free from strategic environmental constraints, particularly in respect of International and National landscape designations.
- That the infrastructure serving Hoo St
   Werburgh has the capacity to accommodate
   growth, or the potential for improvement.
   In contrast the suburban expansion is
   constrained by the capacity of the existing
   roads that serve the urban area, which have
   only limited potential for improvement.
- Unconstrained greenfield land is less susceptible to viability constraints, and thereby more likely to secure affordable housing.

The Scenario also has regard to the wider Hoo Peninsula noting that Lodge Hill could deliver up to 3,000 homes, schools, community facilities, including health, library and community centre provision, employment space, retail centre and leisure and open space, play areas and country

park. The regeneration of this former MOD site would be complementary to the development envisaged around Hoo St Werburgh.

It is also suggested that the existing villages of Cliffe, Cliffe Woods, High Halstow, Lower Stoke, Allhallows, and Grain could accommodate around 2,600 homes, primary schools, parks, health and community facilities. It is noted that strengthening the role of Hoo St Werburgh as a key service centre for the Peninsula will help improve access to services and facilities for these surrounding villages thereby further enhancing the sustainability of these smaller settlements.



# Scenario 4 (Appendix 1E) – Urban Regeneration and Rural Town

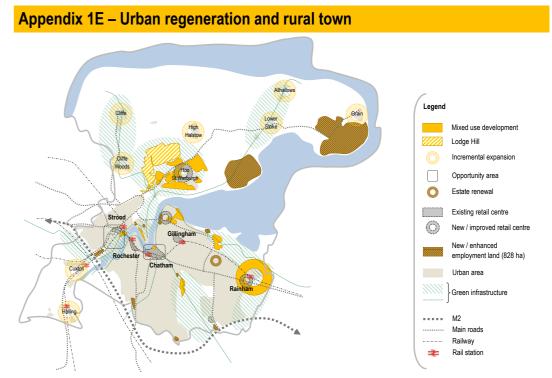
This approach brings together components of the urban regeneration, suburban expansion and rural development scenarios:

- It includes elements of building at higher densities in waterfront and urban centre sites in Chatham and Strood, and seeking opportunities to consolidate development sites in these urban areas and for estate renewal schemes. Notably it does not include an allowance for the redevelopment of Medway City Estate which is recognised as having deliverability issues within the Plan period.
- It includes suburban expansion supported to a level that is considered sustainable, having regard to anticipated environmental capacity, urban sprawl and facilitating sustainable travel.
   It is noted that it does not include the release of land in the Green Belt to the west of Strood.
- It also includes the development of Hoo St Werburgh into a small rural town as well as development at Lodge Hill. It is anticipated that the expansion of Hoo St Werburgh would accommodate some 6,500 units and Lodge Hill would accommodate some 3,000 dwellings.
- It also includes some growth at the villages

The Consortium considers that distributing growth between the different areas, as suggested under this scenario is sensible. This mixed approach supports the regeneration of the town centres, and the social and economic benefits that will deliver, whilst also recognising that to effectively meet the housing requirement, including the provision of affordable housing, for the Plan period a significant amount of growth will nevertheless need to be directed toward sustainable greenfield locations.

Importantly this scenario acknowledges that Hoo St Werburgh is the most sustainable greenfield strategic location in the Borough, with a higher quantum of growth directed to this location rather than towards 'suburban' areas. This scenario also acknowledges that, by directing growth towards Hoo St. Werburgh, the sustainability of the wider Peninsula is enhanced supporting a higher level of growth at the villages.

In summary, it is considered that this scenario represents a balanced and sustainable approach to growth. By directing growth towards the creation of a small rural town at Hoo St Werburgh, alongside continuing to promote regeneration sites and some suburban expansion and growth at the villages, this scenario realistically responds to the strategic constraints and opportunities that affect the Borough. The next section considers these strategic constraints and opportunities in more detail.



## INTERIM SUSTAINABILITY APPRAISAL

Medway Council published its Interim Sustainability Appraisal (SA) on 14 March 2017, as part of the present consultation exercise. Whilst this overlaps with the main Local Plan consultation exercise, it is disappointing that it was not published wholly alongside the main Local Plan. Nevertheless, the Council acknowledges that the Interim SA is very much an early draft, and is yet to be fully informed by the completed evidence base — and in this regard, we recognise its "interim" nature.

In the light of this, we do not propose to comment in detail as the individual scoring of the respective elements of either the Spatial Development Options or the accompanying Policy Approaches. At this stage, we have limited our observations to more over-arching comments relating to the Spatial Development Options, namely:

- Scenario 1 Maximising the potential of urban regeneration
- Scenario 2 Suburban expansion
- Scenario 3 A rural focus
- Scenario 4 Urban regeneration and a rural town

In commenting upon the above, we reiterate our earlier observations insofar as it is likely that the eventual spatial development strategy will not reflect a "one size fits all" approach, but rather it will comprise a hybrid of all of the above options. And when reviewing these in closer detail, it is apparent that "Scenario 4" most probably reflects this presently.

The Interim SA is accompanied by several appendices that collectively provide a detailed analysis of the likely environmental impacts of the various component elements of the emerging Plan against each of the SEA objectives:

TABLE 4.1: SA OBJECTIVES CONSISTENT WITH NATIONAL GUIDANCE TOPICS AND CATEGORIES

CATEGORY	TOPIC	OBJECTIVES		
Economic	Education and Skills	1: To improve skill levels and encourage suitable employment opportunities in accessible locations.		
	Transportation and Accessibility			
	Economy, Enterprise and Employment			
	Economy, Enterprise and Employment	2: To have a successful economic base able to sustain economic growth and competitiveness		
	Transportation and Accessibility			
	Economy, Enterprise and Employment	2. To protect and support the growth vitality and viability of the Daraughe		
	Landscape, Natural Heritage and Open Space	3: To protect and support the growth, vitality and viability of the Boroughs centres		
	Landscape, Natural Heritage and Open Space	A. Consonyo and onhance the existing groon network		
	Biodiversity, Ecosystems and Designated Sites	4: Conserve and enhance the existing green network		
	Climate Change	5: To reduce our contribution to the impacts of climate change		
	Air Quality and Environmental Pollution			
	Waste Management			
	Climate Change	6: To adapt and mitigate the impacts of climate change		
Environmental	Biodiversity, Ecosystems and Designated Sites			
Environmental	Design Quality			
	Water Environment			
	Historic Environment and Archaeology	7: Promoting, enhancing and respecting our historic/cultural heritage assets		
	Design Quality			
	Material Assets, Minerals and Resources	8: Making the best use of natural assets		
	Water environment			
	Landscape, Natural Heritage and Open Space			
Social	Healthy and Safe Communities	9: To facilitate the improved health and wellbeing of the Boroughs residents		
	Landscape, Natural Heritage and Open Space			
	Social Inclusion and Equality	10: Promote strong and inclusive communities		
	Healthy and Safe Communities			
	Transportation and Accessibility			
	Population and Housing	11: To provide sufficient and affordable housing suitable to peoples lifestyles and needs		

In reviewing each of the Spatial Development Options, and in seeking to provide a preliminary comparative analysis, it is not surprising that the "maximising the potential of urban regeneration" scenario scores most favourably given the brownfield focus of this option. We recognise the environmental and economic sustainability merits of regenerating areas of previously developed land, and the social benefits that would also be derived from increasing the vitality and viability of the inner urban areas. However, we are also aware of the challenges associated with the delivery of many of the large regeneration schemes, and the recent (and present) experiences of the Council in seeking to secure the delivery of several highprofile sites in the Medway area.

The accompanying text of the Interim SA does acknowledge some of these challenges (ie. land assembly, site preparation, contamination, impact on highway networks and wider infrastructure services/facilities). However, these challenges. and their implications for sustainability, have not necessarily been wholly reflected in the accompanying "scoring" appendices. In this regard, and by way of a single example only, it is considered that "viability" and "deliverability" are two important considerations that are not directly assessed in the present SA/SEA scoring analysis. These considerations are particularly important in respect of objective 11 "to provide sufficient affordable housing suitable to peoples lifestyles and needs." It would therefore be inappropriate to seek to solely rely upon this spatial option/scenario in the expectation of delivering all of the Local Plan objectives, including housing delivery.

By way of a comparison, the Council's Interim SA scoring results of Scenario 4 "Urban regeneration and a rural town", are shown to provide the next greatest number of "significant positive" or "positive" (green) scores against each of the SA/ SEA objectives. Again, the slightly lower scoring is not unexpected due to the inclusion of greenfield sites within this scenario, when compared to

Scenario 1's wholly brownfield approach, albeit this option provides the most suitable "hybrid scenario".

The accompanying text (to Scenario 4) recognises that the range of broad locations and sites provides a development strategy that would help to meet both short term and longer term needs, alongside investment in services jobs and infrastructure. The focus of "growth to a rural town" is centred around Hoo St Werburgh, and such growth needs to be carefully balanced against the environmental character of the surrounding area, in addition to being accompanied by significant investment in highway infrastructure, utilities and supporting services and facilities (schools, health, recreation, etc.). The Consortium fully supports these objectives, and is committed to ensuring the delivery of a comprehensive sustainable community.

It is also these broad range of sites (in Scenario 4) that provides the greatest balance in terms of managing the uncertainty risks of the "viability" and "deliverability" of the other Options, and thereby providing the best opportunity of securing the actual delivery of much needed housing and economic growth.

In commenting briefly upon the actual scoring of Scenario 4, it is considered that Interim SA has focused too much on the "greenfield" nature of this hybrid spatial option, and has down-played the "brownfield" component of this scenario. By way of an example, Scenario 1 scores consistently "positive" for the majority of the SA/SEA objectives, and in particular the "short term score", albeit such scores are considered to be "neutral" when assessed against Scenario 4 – whereas this spatial option includes the redevelopment and regeneration of many of the same brownfield sites included in Scenario 1. As discussed, we do not propose to interrogate the scoring outcomes in detail at this stage in the light of the "interim"

nature of the SA presently – however, it is important to highlight this potential inconsistency at this stage.

In summary, and whilst Scenario 1 perhaps unsurprisingly scores the most favourable in environmental terms, it is also the Option that has the greatest uncertainty in terms of "viability" and "deliverability". It would therefore be unwise to solely rely on a Spatial Strategy that would result in the failure and under-delivery of the required level of economic investment, supporting infrastructure and levels of housing growth required to meet the Council's very clear "vision" that by 2035 it would have delivered 30,000 new homes, 400,000 m2 of commercial floorspace, some 55,000 m2 of new retail floorspace — all of which accompanied by the supporting infrastructure and services/facilities.

Finally, it is noted that the Interim SA also recognises the present planning uncertainties relating to Lodge Hill, and the need to consider alternatives to Lodge Hill if the outcome of the forthcoming Inquiry is negative or inconclusive. It is evident that the matters surrounding Lodge Hill will become clearer as the Public Inquiry becomes closer, and indeed as the emerging Local Plan progresses, and in this regard any such changes would be reflected in subsequent stages of the next Sustainability Appraisal. These present uncertainties are also reflected in the "with" and "without" scenario set out in this document.

TABLE 4.2: SCORING MATRIX FOR THE ASSESSMENT

KEY	EFFECT	
++	Likely to have significant positive effects	
+	Likely to have positive effects	
0	Neutral	
?	Uncertain/insufficient evidence or information available	
-	Likely to have negatuve effects	
	Likely to have significant negative effects	

# HABITATS REGULATION ASSESSMENT – SCREENING REPORT

Medway Council published its 'Habitat Regulation Assessment: Screening Report' on 18 April 2017 in support of the present consultation exercise.

The Report has been prepared in response to the requirements of the Habitats and Species Regulation (2010, and as amended in 2012), which aims to protect habitats and species of European nature conservation importance. Given the presence of several European sites within the Medway plan area, as well as several further areas close to Medway, the Consortium considers it prudent that the Habitats Regulation Assessment (HRA) process is commenced in support of the present consultation exercise- it is clearly important that the HRA process robustly informs the selection of the preferred policies and site allocations as the Plan emerges.

It is noted that the "screening" exercise that has been undertaken at this stage is an "initial screening and high level assessment of the potential impacts" (paragraph 1.9). Thereby the exercise comprises a relatively limited amount of detail. Given that the Local Plan is at an early stage of preparation, the Consortium considers that this an approach is appropriate, particularly as the report makes clear that "further work will be needed to determine preferred development allocations and policies".

Drawing upon the analysis in the Report the comments below highlight that the proposed expansion of Hoo St Werburgh would be unlikely to (individually) impact upon any of the identified European sites.

#### **Habitat Fragmentation and Loss**

The Report highlights that the most direct potential impact is the fragmentation or loss of protected habitat, and highlights that the Council will seek to avoid this through the allocation of land for development in the emerging Local Plan.

In developing the proposals for the expansion of Hoo St Werburgh the Consortium have ensured that none of the land proposed for development includes areas subject to European designations, protecting against direct habitat fragmentation and loss.

A relatively small part of the Consortium land (the area to the south of the village, adjacent to the River) is within the Medway Estuary & Marshes SPA. As identified in the Development Framework Plan, the Consortium is proposing that this land, which is currently in agricultural use, is given over to green infrastructure, with the specific intention of enhancing this habitat and its ecological interest.

The Consortium is keen to work with statutory agencies and non-statutory bodies to ensure that these areas are carefully managed to contribute toward supporting the stated 'Conservation Objectives' of the Medway Estuary & Marshes SPA thereby delivering a substantive environmental gain as part of the expansion of Hoo St Werburgh. The consortium considers this element of the Hoo St Werburgh Development Framework to be central to the strategy of delivering a genuinely sustainable development.

#### Disturbance

The report highlights evidence suggesting that all development within 6KM of the identified European sites, which means that all the potential strategic development locations in the Borough,

have the potential to increase recreational disturbance upon these sites.

The Consortium agrees that the strategic mitigation approach that the Council has developed with its partners, will ensure that the risks of increased recreational disturbance is properly dealt with, and thereby should not prevent the Council delivering its housing requirement for the plan period.

It is also noted that report identifies the potential for new green infrastructure to "help accommodate recreational activities away from sensitive European sites". Within this context the Consortium notes that the proposals for the expansion of Hoo St Werburgh propose significant areas for new green infrastructure for recreational purposes, notably a new Country Park which will help mitigate recreational pressure arising from the expansion of Hoo, but also given its scale and location, has the potential to mitigate impacts from other housing growth in the Borough as well. It is important to highlight that the areas of green infrastructure proposed for recreation are entirely separate from the areas proposed for ecological and habitat enhancement.

#### Water Resources and Quality

The Report acknowledges that the scale of development that will be delivered in Medway cumulatively has the potential to impact upon water resources and quality. However, it is agreed that by working closely with water providers and statutory agencies, new infrastructure can be delivered in a manged way which will ensure that impacts upon water resources, and thereby sensitive European sites, are unlikely to arise.

Similarly, water quality impacts can be properly managed and mitigated through the proper use



FIGURE 4.3 NOR MARSH, MEDWAY



FIGURE 4.4 NOR MARSH, MEDWAY

of SUDS. It is noted that large scale strategic development, such as that proposed for Hoo St Werburgh, has the potential to deliver this new water supply and SUDS infrastructure in a more coordinated manner than ad hoc smaller scaler developments.

## Air Quality

The report acknowledges that growth, and the traffic increases associated with it, has the potential to increase air pollution which has the potential to impact upon some of the identified European sites, depending upon the characteristics and sensitivities of the protected habitat.

The report notes that the critical issue is increased traffic along major roads near sensitive areas. However, it is also highlighted that "determining the significance of this impact in relation to the integrity of European sites is extremely complex".

However, it is also noted that the Report highlights that: "Estuarine habitats are generally not considered to be particularly sensitive to air pollution effects, given that they already receive high nitrogen loads in water." (paragraph 3.68). The report goes on to highlight at paragraph 3.76 that "the majority of development options being considered within the emerging Local Plan indicates that it is unlikely that there will be significant adverse effects on the integrity of the estuarine European sites".

Given that the only European sites relatively close to Consortium land are estuarine habitats, it is considered that the proposed expansion of Hoo St Werburgh is unlikely to give rise to any detrimental air quality impacts upon these sites. It is also acknowledged that further assessment should be undertaken by the Council, regarding cumulative

impacts upon particularly sensitive European sites which are proximity to major roads.

The Consortium has also engaged in positive dialogue with Arriva. Form these discussions it is evident that there is a realistic prospect of providing a high quality, frequent bus service to Hoo St Werburgh that will offer a genuine alternative to the private car, thereby providing the potential to further any adverse impacts on air quality.

'Carbon Capture' schemes from extensive tree planting are also becoming widely regarded as highly beneficial to the improvement of air quality. The delivery of a major new country parkland area to the south of Hoo St Werburgh with extensive new tree planting will make a significant contribution in this regard.

In summary, the preliminary analysis set out in the 'Habitats Regulation Assessment: Screening Report' indicates that the proposed expansion of Hoo St Werburgh would be unlikely to have an impact (individually) upon any of the identified European sites. This is principally because the land proposed for development is not subject to any designations, but also because the proposals include the delivery of significant new green infrastructure for both recreational and habitat enhancement purposes. As the assessment is refined as the plan proceeds, it is appropriate that the positive effects of these environmental benefits be considered fully in the context of the overall sustainability assessment.

# 5.0 MEDWAY CONSTRAINTS & OPPORTUNITIES

This section seeks to assess the strategic constraints and opportunities within Medway, and in doing so robustly highlights the sustainability credentials of Hoo St Werburgh. Consideration is given to: Medway's economy, and the strategic opportunities for this to be enhanced; and strategic environmental constraints including flood risk, landscape and ecological designations and agricultural land.

#### **EMPLOYMENT & ECONOMY**

Paragraph 7 of the NPPF explains that the planning system should seek to ensure that the "right type of land is available in the right places and at the right time to support growth and innovation". The importance of "co-ordinating development requirements, including the provision of infrastructure" is also highlighted.

The Development Options consultation document explains that Medway is a major economic hub in the South East, benefiting from a number of economic strengths and opportunities including:

- connectivity to the wider economy through motorway and rail networks;
- established distribution routes;
- defined logistics and manufacturing locations;
- proximity to large markets in London and South East;
- the delivery of a second Thames Crossing, alongside existing strategic road connections could enable Medway to play a muchenhanced role in the strategic distribution market (para. 5.16).

The DO consultation document specifically notes: "The large strategic employment sites on the Hoo Peninsula offer particular potential for businesses that could make use of access to rail and water

based freight transport" (para. 5.8). However, it is also noted (para. 5.17) that the supply provided by the large strategic sites on the Peninsula "does not align well to business needs".

Given the proximity of Hoo St Werburgh to the Kingsnorth employment site (also known as London Medway Commercial Park), the expansion of the village into a sustainable rural town has the potential to directly contribute towards realising economic opportunities in Medway in several ways:

- Enhanced Connectivity- It is anticipated that the scale of development proposed would deliver enhanced connectivity from the urban area to Hoo St Werburgh, by way of new highways infrastructure and/ or public transport, which would also improve accessibility to the employment area, making it a more attractive area for businesses to locate.
- Local Labour/Housing Opportunities The opportunity for employees to live locally, or conversely to have a pool of labour living locally, would be attractive to businesses and would thereby make Kingsnorth a more attractive location.
- Complementary Uses & Facilities Similarly, diversifying the mix of uses and facilities available in Hoo St Werburgh with a wider range of shops, community and leisure facilities and open space, could make working in Kingsnorth (London Medway Commercial Park) more attractive, thereby encouraging businesses to relocate.

Taken together these factors could help to change the profile of the Peninsular employment sites, and Kingsnorth in particular, helping them appeal to a wider range of businesses, to better capitalise upon Medway's strategic economic opportunities.

#### SOCIA

Central to Medway's future success is effectively meeting the Borough acute need for housing both market and affordable. Whilst the need is calculated on a Borough wide basis, it is also important to consider the issue spatially, particularly with regard to viability and deliverability.

Whilst directing growth towards brownfield areas has social benefits in terms of the regeneration of town centres, it also has challenges in respect of securing affordable housing, and meeting the need for a mix of accommodation and tenures.

It is thereby important that growth is directed towards locations which can secure a wide range of homes, to create "sustainable, inclusive and mixed communities" as required by para 50 of the NPPF.

The creation of rural town at Hoo St Werburgh presents an opprtunity to create exactly this type of mixed, inclusive community.

#### **ENVIRONMENT**

It is notable that 28% of Medway's administrative area is subject to National or International environmental designations such as Special Protection Area (SPA), Sites of Special Scientific Interest (SSSI) and the Kent Downs Area of Outstanding Natural Beauty (AONB). In addition large parts of the Borough are subject to a high level of flood risk, including some of the riverside, brownfield regeneration sites; and in addition, land to the west of the Borough is designated as Green Belt

Whilst these designations are a constraint upon development, it is noted that the land around Hoo St Werburgh is not subject to any restrictive designations and thereby has the potential to be a focus for strategic growth in the Borough.

#### Landscape

Having regard to the Strategic Land Availability Assessment, it is noted that the Council has sought to draw a distinction between landscape that is more or less sensitive, drawing upon the evidence in the Medway Landscape Character Assessment (MCLA). However, it is noted that all of the strategic locations identified by the Council would be excluded on the basis of landscape sensitivity. In this regard, it is also noted that the MLCA was prepared in 2011, pre-NPPF (March 2012) and its requirement to meet full Objectively Assessed Needs and well before the housing requirements of the new Local Plan were calculated, and therefore needs revisiting. At this stage, it can only provide limited guidance on how best to accommodate the growth now required in the period to 2035. It is thereby recommended that further strategic landscape information is required to understand the development capacity of the strategic locations, having specific regard to the scale of growth that must be accommodated in Medway.

To this end a Preliminary Landscape Appraisal of the area around Hoo St Werburgh has been undertaken, to assess the character and sensitively of the landscape. This has directly informed the preparation of the Development Framework. The Preliminary Landscape Appraisal is included at Appendix 1 of this document and a summary analysis is presented in the next section. The appraisal demonstrates that the landscape around Hoo St Werburgh has considerable capacity to accommodate development.

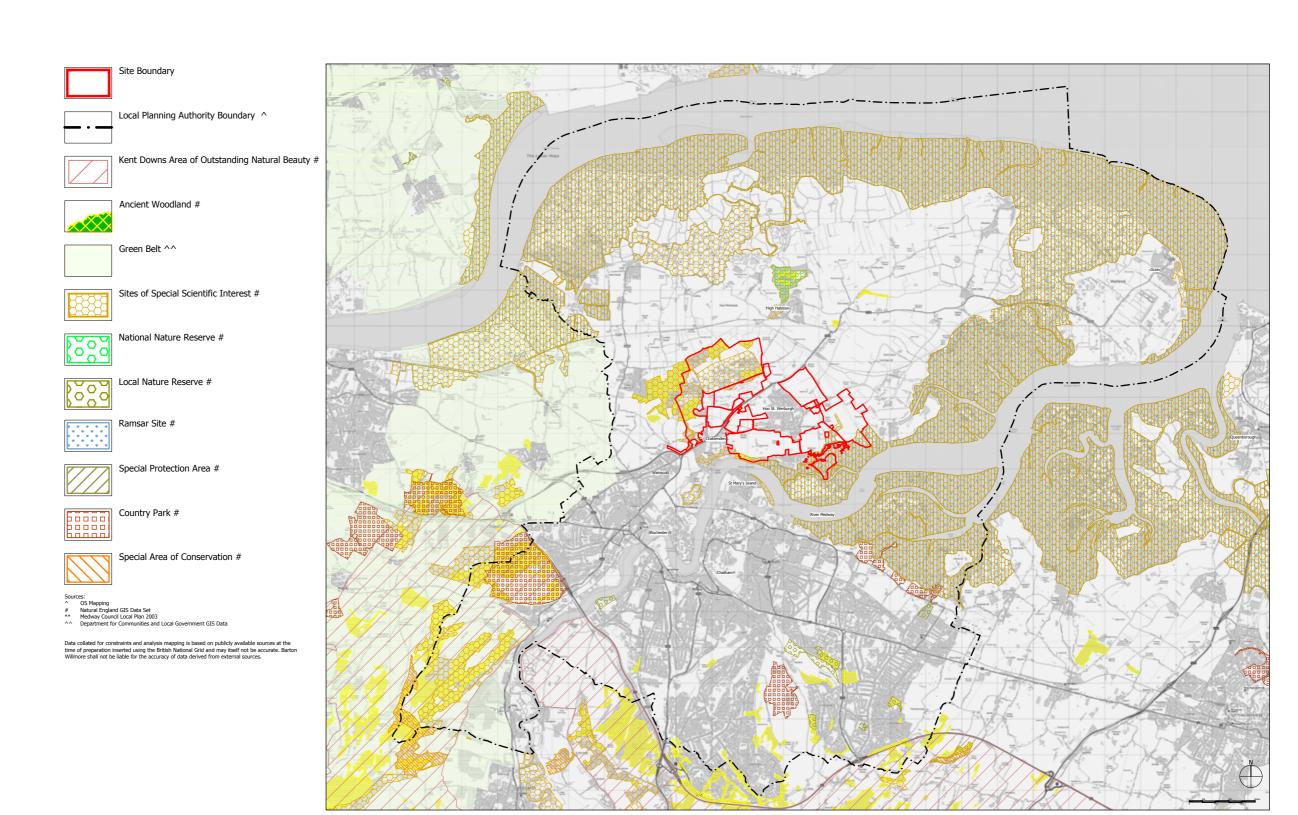


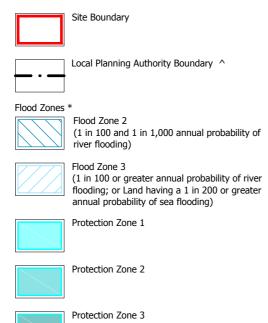
FIGURE 5.2: LANDSCAPE DESIGNATIONS PLAN

## Flood Risk

Paragraph 100 of the NPPF states that: "Local Plans should apply a sequential, risk-based approach to the location of development to avoid where possible flood risk to people and property and manage any residual risk".

The DO notes that "Much of the land along the shoreline of the Isle of Grain, the south side of the River Medway and lower lying land towards Cuxton and Halling is within Flood Zone 3. Large areas of Strood and Medway City Estate lie within either Flood Zones 2 or 3."

The vast majority of the land around Hoo St Werburgh is within Flood Zone 1 and thereby is considered lowest risk and the most suitable for residential development. Although some parts of the consortium land are within Flood Zone 2 or 3, it is envisaged that these areas could accommodate open space and are suitable for accommodating ecological enhancements associated with the marine environment of the River.



1.0000000.120

Sources: ^ OS N

OS Mapping
 Environmental Agency

Data collated for constraints and analysis mapping is based on publicly available sources at the time of preparation inserted using the British National Grid and may itself not be accurate. Barton particular in the li

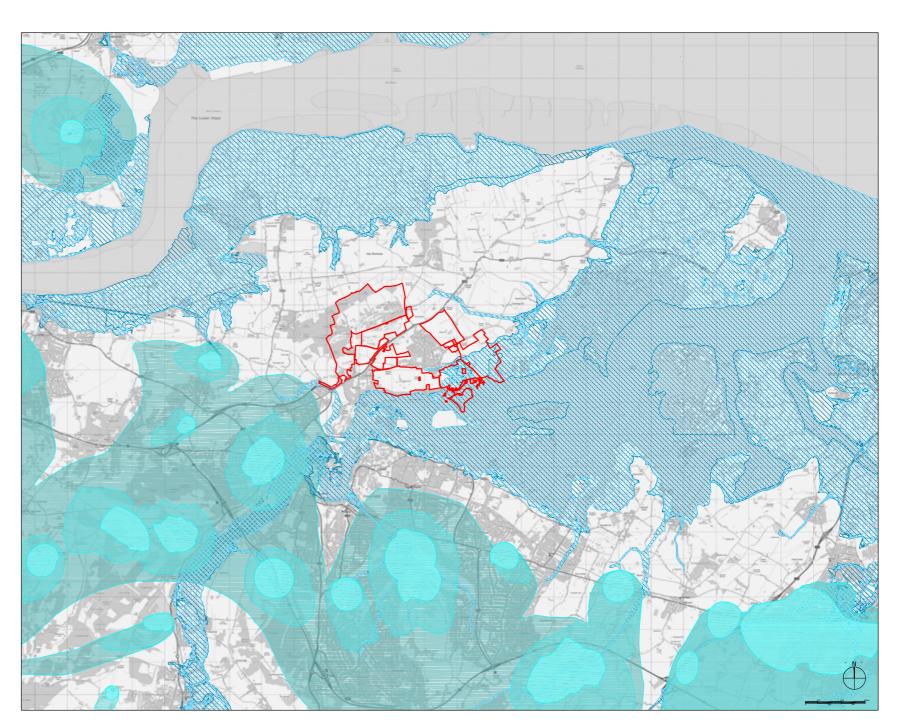


FIGURE 5.3: MEDWAY FLOOD RISK PLAN

#### Agricultural land

NPPF Paragraph 112 states that "Where significant development of agricultural land is demonstrated to be necessary, local planning authorities should seek to use areas of poorer quality land in preference to that of a higher quality."

It is understood that much of the undeveloped land around Medway is 'Best and Most Versatile' (BMV) agricultural land. Accommodating the Borough's housing requirement will inevitably result in the loss of some of this BMV agricultural land. It is noted that growth scenarios involving suburban expansion, the rural town and expanded villages would all result in the loss of at least some BMV land. The Consortium thereby considers this should not be seen as a an overriding constraint upon the strategic distribution of growth in Medway.

Indeed, it is noted that whilst the SLAA identified Grades 1 and 2 as a 'red' constraint, the Council has recently given permission for development on sites which comprise Grades 1 and 2 agricultural land, i.e. when proven to be more suitable in the wider sustainability context. This would seem to reaffirm our understanding on this matter.

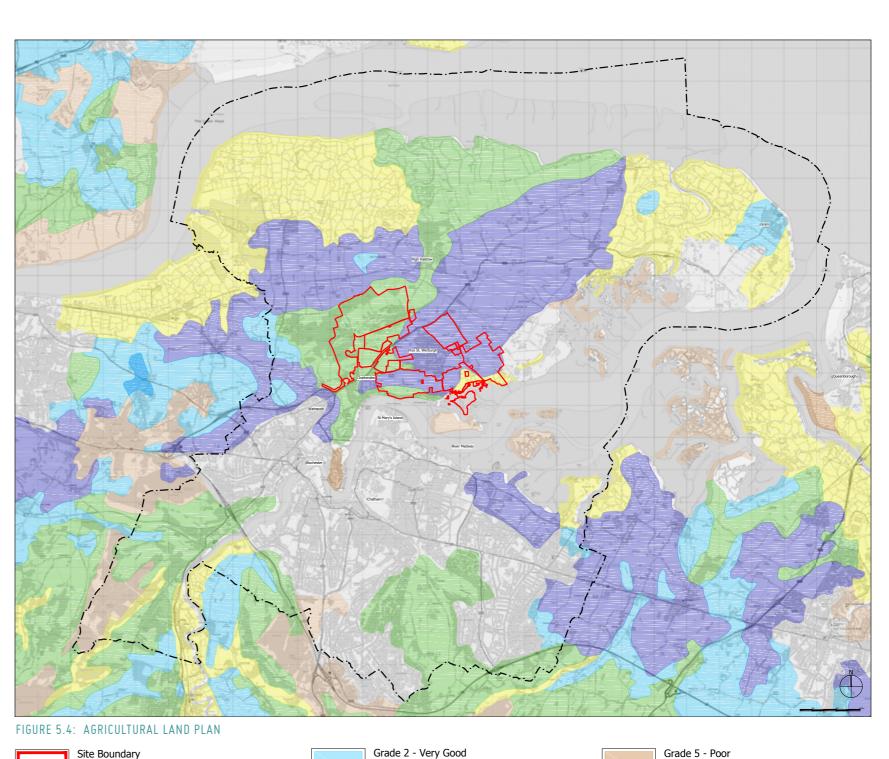
#### Conclusion

Directing housing-led growth toward Hoo St Werburgh presents a unique opportunity to capitalise upon Medway's enviable sub-regional position and related economic strengths whilst also ensuring that the Borough's most environmentally sensitive areas are protected. Building upon these strategic advantages the expansion of Hoo St Werburgh presents an opportunity to realise a genuinely 'sustainable development' which delivers net economic, environmental and social gains. The next Section considers the local conditions and context in more detail to outline how this vision can be realised.

Local Planning Authority Boundary ^

Agricultural Land Classification ~~

Grade 1 - Excellent



Grade 3 - Moderate To Good

Grade 4 - Poor

Non Agricultural

Urban

# 6.0 HOO ST WERBURGH CONSTRAINTS & OPPORTUNITIES

The preceding sections highlighted the strategic potential of Hoo St Werburgh to accommodate growth within Medway. This section builds upon this analysis to provide a more detailed analysis of the Hoo St Werburgh, to explain how the expansion of the settlement could be delivered to create a sustainable, small rural town.

#### LANDSCAPE & TOWNSCAPE

As highlighted in the preceding section, the land around Hoo St Werburgh is free from landscape designations such as AONB or Green Belt.
Having regard to the analysis in the restrictive Medway Landscape Character Assessment (LCA), it is considered that the landscape around Hoo St Werburgh is, in general, of relatively lower sensitivity and thereby has 'capacity' to accommodate development. This is discussed in more detail at Appendix 1.

This notwithstanding it is important that the form and layout of new development has regard to those parts of the landscape that are more sensitive and are of greater importance. To this end, the following comprises a high level, preliminary landscape analysis of the land around Hoo St Werburgh. This analysis informs a discussion of the landscape constraints and opportunities, in turn informing the parameters of a robust landscape framework for the area.

## Landscape Area Descriptions

Area 1 is formed of an irregular shaped parcel of land extending between the existing urban edge of residential properties on Avelling Close to the east and the A228 dual carriageway to the northwest, situated predominantly on a south facing slope of the Deangate Ridge. To the south of Area 1 lie sports grounds associated with the Hundred of Hoo Academy and, further to the west, lies Main Road, which extends between the furthest extent of built development in Hoo St. Werburgh to the east and development in the eastern area of Chattenden to the west. This gap between the settlements is approximately 250m and, as a result of emerging structural planting flanking Main Road, some sense of separation between the settlements is maintained.

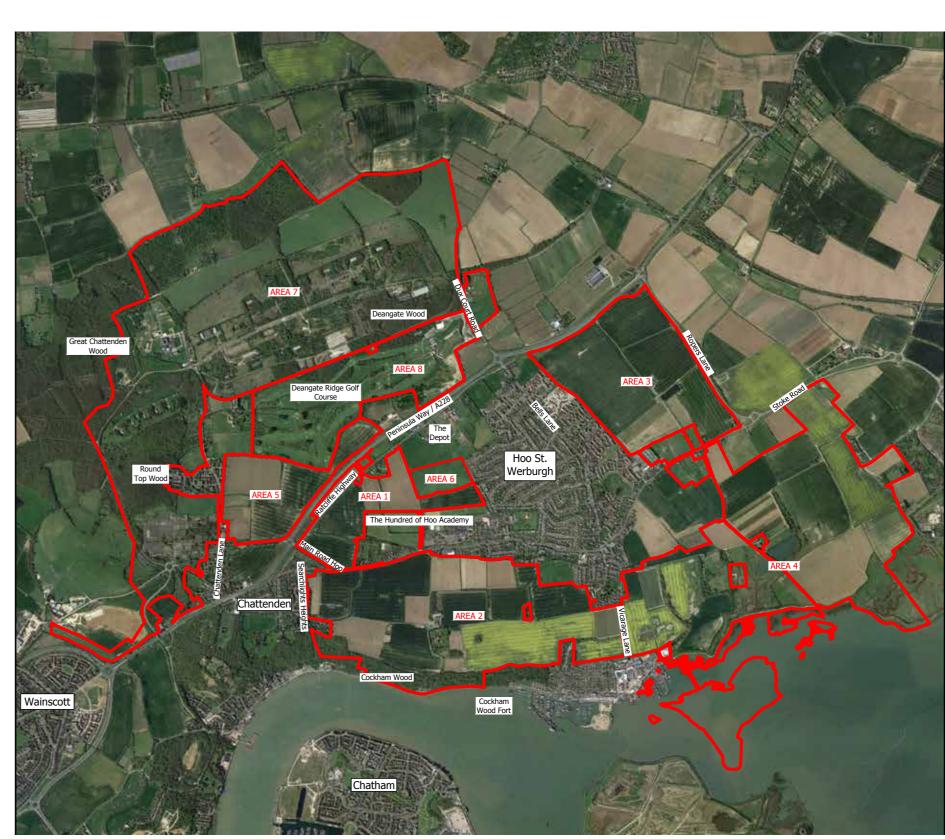


FIGURE 6.1: LANDSCAPE AREAS PLAN

To the north of Area 1 lie agricultural fields, as well as scattered but prominent development of individual residential properties flanking Ratcliffe Highway and emerging structural planting associated with the A228. Long views are obtained from this area to the south, including to the Cockham Farm ridge and beyond to distant urban development on the southern side of the River Medway. The area is compartmentalised by a reasonably cohesive network of dense hedgerow planting with canopy trees. Notwithstanding this sense of containment, from the western extent of this area, long views are obtained along the valley to the east, with St. Werburgh's Church and Kingsnorth Power Station prominent focal points in the view.

The area includes the distinctive, well vegetated stream corridor extending to the south-east of Ratcliffe Highway as far as the northern extent of properties at Broad Street. This area is well contained by landform in views from the north, although views into this area are obtained from elevated land on the Cockham Farm Ridge to the south. Emerging woodland planting in the vicinity of the junctions of Main Road with the A228 and Ratcliffe Highway, provides containment of the south-western extent of this area, as well as some screening of views into the area from Chattenden. This screening will increase in height and density as the planting matures further.

Area 2 is formed primarily of the north facing slope of the Cockham Farm Ridge, with a strong sense of connection with the village, of which there are open views, some presenting an exposed edge to the settlement. These views include those from long stretches of the Saxon Shore Way which extends through the area between Searchlight Heights, Chattenden and St. Werburgh's Church. Views from the western end of the area include St.Werburgh's Church as a focal point, in addition to the dominant form of Kingsnorth Power Station further to the east. The agricultural land has a relatively incoherent landscape structure, with a sporadic mixture of planting types. Visual detractors are present in the form of poorly screened agricultural sheds, notably in the western part of the area.

The area to the north of the ridgeline is well contained in views from the Medway riverside to the south but is prominent in views from the

Deangate Ridge to the north, as well as from the existing settlement of Hoo St. Werburgh. Emerging planting flanking the southern side of Main Road provides a relatively short albeit clear landscape structural distinction between Hoo St. Werburgh and Chattenden

**Area 3** comprises fields, with some secluded developments set within open landscape. There is limited screening provided in the form of a line of trees extending north from Angel Farm to the A228 (Peninsula Way), and landform and vegetation in the southern part of Roper's Lane. As a result, the existing urban edge is prominent, notably in views from Roper's Lane and from the Saxon Shore Way to the north-east, in the vicinity of Sharnal Street. Long views are obtained across the valley to the east. Shallow valleys to the north and south of Angel Farm provide some variation within the landscape as does an attenuation pond to the south of Angel Farm, which drains into a stream extending through the southern part of the area. This area is largely screened from the north by the Deangate Ridge on which large warehousing associated with orchards, north of the A228, are prominent.

**Area 4** comprises low-lying (approximately 2-5m AOD) agricultural land, with a network of ditches and sporadic hedgerows providing limited landscape structure. The development edge of Hoo St. Werburgh is prominent on gently rising land to the north-west, with the spire of St. Werburgh's Church forming a strong focal point, rising out of the low-lying landscape. To the east, the former Kingsnorth Power Station and associated

power lines and pylons, as well as infrastructure associated with the junction of Stoke Road and Roper's Lane, form the dominant visual influences.

Hoo Marina is of distinct character to Hoo St. Werburgh, being primarily industrial/commercial and entirely associated with the Medway estuary, whereas the southern part of Hoo St. Werburgh is defined by the cluster of residential built form around the church, with an open landscape setting to the south and east. Open views towards the church spire are obtained from a branch of the Saxon Shore Way, including those to the west along the corridor of Abbot's Court Road. The central part of the area is relatively well contained in views from the surrounding landscape by existing built form and vegetation, although land to the east of the Saxon Shore Way is more exposed, including views from Stoke Road on elevated land to the east of the junction with Roper's Lane.

Area 5 comprises small to medium scale agricultural fields, to the west of the A228, between Areas 7 and 8. The landform across Area 5 rises gradually northwards from adjacent to the A228 at 35m AOD, towards the Areas 7. The fields are divided by hedgerows with occasional mature trees. Area 5 is visible from close range, specifically from along the A228 and the settlements edges of Hoo and Chattenden, however, its position below Deangate Ridge ridgeline to the north and the Cockham Farm ridgeline to the south means that it is relatively well screened from the wider landscape.

**Area 6** is a small extension of land to Area 1 immediately to the south.

**Area 7** comprises an extensive area to the west and north of Chattenden, including agricultural fields, woodland and the former barracks at Lodge Hill. The landform across this area is varied, rising gradually northwards from Chattenden to form a small plateau at around 40m AOD, before rising to form a ridgeline between Round Top Wood and the Deangate Ridge at approximately 65m AOD. To the north of the Deangate Ridge the landform falls to form a localised valley at 40m AOD, before rising to form Chattenden ridgeline at approximately 65m AOD. The valley floor between these ridge lines consists of built form and hardstanding associated with the former barracks, while the slopes and ridge lines are well vegetated with Great Chattenden Wood. The visibility of Area 7 is therefore also varied, with the lower lying land around Chattenden being visible from the wider landscape, whilst the former barracks are well screened, being located between ridge lines. The woodlands form an important landscape structure within the area and are a notable feature from within the surrounding landscape.

Area 8 comprises the Deangate Ridge Golf Course, which is located either side of the Deangate Ridge line between 55m AOD and 65m AOD, such that the southern part of the golf course is visible from the landscape to the south of the Area 6, whilst the central and northern parts of the golf course are generally well screened by the combination of landform and vegetation. The golf course club house is located at the eastern edge of the area.



#### Landscape Constraints and Opportunities

As a result of the landscape and visual appraisal, it is considered that land within each of the seven areas of the Site has potential for development, set within new Green Infrastructure, without harming the most important and sensitive landscape character and features.

#### Summary of Areas 1-8:

- In Area 1 and Area 6, restrict development to the lower slopes of the Deangate Ridge and maintain a distinct gap between Hoo St. Werburgh and Chattenden, reinforcing the containment provided by vegetation associated with the existing stream corridor and attenuation basin. There may be potential for the re-location of sports pitches from land to the west of the school to the proposed open space immediately north-east of Main Road, which would reaffirm the robust ongoing function of the open space in the gap.
- In Area 2, restrict development to the lower slopes of the Cockham Farm Ridge, reflecting the existing settlement pattern along Main Road Hoo. In addition, maintain a green, elevated backdrop to Chattenden and Hoo St. Werburgh.
- In Area 3, reinforce the existing landscape structure and PRoW, to enhance the urban edge and create a new structural landscape to the east to provide containment of development.
- In Area 4, locate development along the more elevated land to the northwest.
- In Area 5, locate development to the lower slopes, and establish a new landscape structure to contain development and establish a new vegetated edge to Chattenden.

- In Area 7, locate development within the former Lodge Hill barracks, set below the containment provided by the existing vegetated ridge lines, in combination with creating new Green Infrastructure linkages between surrounding settlements.
- In Area 8, limit development so as to prioritise new Green Infrastructure linkages between Hoo St. Werburgh and Lodge Hill, as well as retaining and enhancing the existing landscape character of vegetated ridgelines.

#### Additional landscape and visual considerations:

- Reinforce the containment of the landform which defines the settlement of Hoo St. Werburgh, including through the introduction of structural planting on the upper slopes of the two ridgelines to the north and south, better assimilating existing isolated built forms.
- Better assimilate A228 into the landscape with planting following contours, rather than cutting across them as roadside planting currently does.
- Enhance the definition of the stream corridor extending through the valley to create a reinforced landscape spine to the settlement and accessible green infrastructure corridor.
- Re-assert St. Werburgh's Church as the focal point for the settlement, by focusing views towards it through a landscape structure echoing the contours of the valley sides and retaining open space areas in the immediate vicinity of the church.
- Respect, retain and enhance the landscape buffer between Hoo St. Werburgh and Chattenden.

- Enhance the corridor of the Saxon Shore Way along Cockham Ridge.
- Provide enhanced structural connectivity between woodland blocks on Cockham Ridge.
- Retain the physical and land-use character gap between Hoo Marina and Hoo St. Werburgh.
- Use the network of drains and linear vegetation to the east and south-east of the village to provide green and blue infrastructure linkages and containment of development, defined by the variation in topography to the flat coastal plain.
- Reinforce and link woodlands to the east of Areas 3 and 4, in accordance with Landscape Character Assessment (LCA) Guidelines (see Appendix 1), to reinstate the landscape structure on elevated land, provide containing features to the east of the Site, softening the influence of former Kingsnorth Power Station and the existing roadway infrastructure.
- Define an enhanced settlement edge to the north-east.

## **TOWNSCAPE**

A Character Area Study has been carried out to reveal the development of the settlement and analyse urban form, building types, local materials etc. The broad conclusions include:

- The oldest part of Hoo St Werburgh is situated in and around the Parish Church of St. Werburgh. A collection of historic buildings, as the Chequers Tavern, Ivy House, etc. have been retained within the village centre. Additionally old agricultural buildings can be found along historic routes through the area. The oldest buildings in the area display a wide range of architectural detailing and materials. This variety in vernacular could be used to differentiate between potential development areas.
- Hoo St Werburgh is a large village, mainly due to extensive post-war development. These post-war development areas are predominantly laid out along gently curving roads that follow the contours, with occasional roads across the contours providing views of the river banks. Large front gardens enable transition between levels, and have the potential to give the streets a green character. However because of inadequate parking arrangements, front gardens in these areas have frequently been transformed to car parking spaces in favour of landscaping. Even though little reference can be drawn from the architecture of these post-war neighbourhoods, some reference can be drawn from the former described layout principles.
- The recent development in Hoo St
  Werburgh is typical of its time, but shows
  some good practice e.g. frontage around
  open spaces. However, other areas risk
  appearing as generic housing layouts, and
  little reference can be drawn from this.



Farmhouse with roofscape detailing and dark timber cladding near Cooling



Dark timber cladding on farm adjacent to Cooling Castle



Farmhouse on Stoke Road



Hoo St Werburgh church



Ivy House, with typical Georgian detailing



Continuous rows of housing following the contours. Typical mansard roofs



Typical detail of brickwork



Farm house on Ratcliffe Highway with typical features including mansard/half hipped roof



The Chequers Tavern and Hoo St Werburgh church





Open space in the village centre, recently landscaped



Open space forms a focal point of the development. Variety of materials



Old garden wall next to more recent development



Stronger frontage around open space

# **NEIGHBOURHOODS & COMMUNITY**

The character of the site is varied and lends itself well to the creation of individual character areas that are rooted in their context. At the west of the site the landscape folds in a series of wooded ridges and valleys creating a sense of enclosure and shelter. There is a sense of the organic; softly curved landforms that follow the flow of the river course. To the east, the landscape flattens considerably and becomes much more linear with straight hedgerows and water courses creating an expansive, angular feel. The contrast between the two areas is pronounced and provides the opportunity to create individual neighbourhoods with distinct characters. The morphology of the streets and blocks, the shape and form of the buildings, the architectural elements and the materials used can all respond to their context to create a rich variety of visual experience across the settlement. The images here demonstrate the range of activities and character that individual neighbourhoods could have across the site.

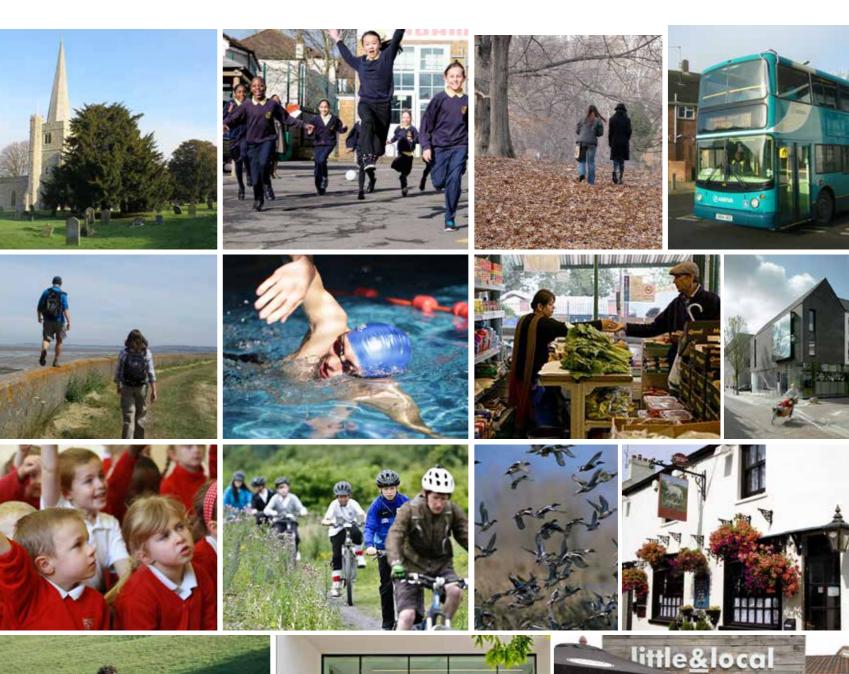




FIGURE 6.2: NEW NEIGHBOURHOOD PLAN



#### **MOVEMENT**

Chapter 5 highlighted the economic opportunities arising from the strategic position of Hoo St Werburgh, particularly regarding its proximity to the strategic highway network, and the opportunities this presents for attracting new employment generating uses to the Peninsula alongside new housing.

This section looks in more detail at the local accessibility, highlighting the opportunities for the new development at Hoo St Werburgh to build upon existing sustainable travel opportunities to provide enhanced connectivity to the Medway urban area, and the existing shops, leisure facilities and employment and opportunities already located there

#### **Existing Local Movement Network**

There are two local distributor roads that connect Hoo St Werburgh to the A228, both of which form a junction in the village centre. Main Road runs to the west of Hoo while Bell's Lane runs to the north. The speed limit of both roads is 30mph in the vicinity of the settlement with traffic calming in the form of raised crossings and build-outs on Main Road and priority chicanes on Bell's Lane. Both roads provide residential frontage as well as collecting traffic from minor residential roads and other accesses. The majority of junctions are priority controlled with some mini-roundabouts also present. Stoke Road runs north-east from the village centre to Stoke via Kingsnorth. The road is somewhat rural in nature but it does provide frontage access to properties and side roads in the vicinity of the village.

#### Pedestrian Network

Within Hoo, streetlighting is present and footways are also provided though they are somewhat intermittent. There are sections north of the recent Bellway development on Bell's Lane where footway is not present on one side, but it would appear that footway could be provided in the highway verge. Footways along Main Road are more contiguous although there are several sections

where they narrow to less than the preferred minimum width of 2m, some of which are due to building constraints while others are caused by street furniture such as streetlighting, signage and guardrails. Footways on Stoke Road are present on the southern side but are intermittent on the northern side. In summary, there are opportunities to enhance the footway network within the settlement to encourage greater pedestrian movement.

In addition to the footways that run alongside the highway, there is a network of off-road footways. There are a number of off-road footways within the settlement that enhance connectivity between residential areas, notably a footpath that runs from Stoke Road to the A228 to the east of the existing residential areas which afford connection to it. Outside of the settlement there are extensive Public Rights of Way (PRoW) that offer leisurely walking routes as well as convenient connections to neighbouring settlements including Chattenden. The Saxon Shore Way is a coastal walking route running south of Hoo St Werburgh connecting the village to Upnor and provides an alternative route to the A228. Again, enhancing these off-road footways presents an opportunity to encourage pedestrian movement, including for leisure.

#### Cycle Network

Cycling facilities in terms of cycle lanes and other facilities in and around Hoo St Werburgh are limited but the volume of traffic on the local roads is generally conducive to cycling. Main Road and a section of Stoke Road form part of National Cycle Route (NCR) 179 which is a circular route connecting Chattenden, Hoo St Werburgh, High Halstow, Cooling, Cliffe and Cliffe Woods to NCN 1, a long-distance route running between Dover and the Shetland Islands. NCN 179 is also known as the "Heron Trail" and runs largely on-road although there are traffic-free sections between Chattenden and NCN 1 and between Stoke Road and High Halstow.

The whole of Hoo is within a 2km radius while Chattenden, Kingsnorth, High Halstow, Lower Upnor and parts of Wainscott are within a 5km radius. The towns just outside of the 5km catchment including Strood, Rochester and Chatham may be within a reasonable cycling distance for some future residents, but with the high speeds along the A228, cycling is not particularly conducive at present.

## **Bus Network**

A summary of the existing bus services in Hoo St Werburgh is provided in Appendix 3. The bus catchment plan has been produced for direct services leaving Hoo between 7-9am on weekdays and is shown in Figure 6.4. This shows that High Halstow, Chattenden, Wainscott and Strood are accessible within a 15-minute journey time. The centre of Rochester and Allhallows in a 15-30-minute journey time, Chatham, Stoke, Wouldham and Grain in a 30-45-minute journey

time and St Mary's Island, parts of Gillingham, Eccles and Aylesford in a 45-60-minute journey time. Notably both Strood and Rochester Railway Stations are accessible within 15 minute journey time allowing for linked journeys.

#### Rail Network

Much like the surrounding Kent area, Medway benefits from high quality and high speed rail services. Strood and Rochester stations are in close proximity to each other, around 4.5 miles southwest of Hoo St Werburgh. Both Strood and Rochester stations can be reached in around 20-minutes by bicycle with the former having 48no. secure cycle parking spaces and the latter 24no. These stations are also accessible by car which can still be considered to be sustainable if as part of a longer journey, but particularly as a car share trip.





FIGURE 6.3: EXISTING BUS ROUTES PLAN

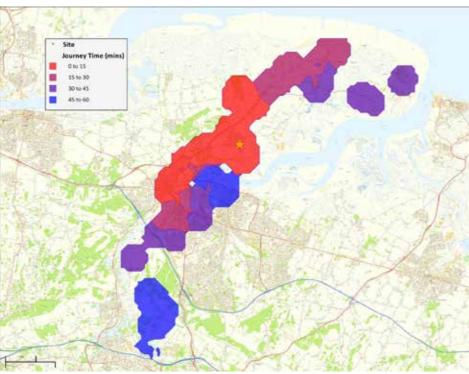


FIGURE 6.4: EXISTING BUS ROUTES CATCHMENT PLAN

## Movement Network – Opportunities

National transport planning policy centres on the importance of sustainable transport. The expansion of Hoo St Werburgh offers an opportunity to enhance sustainable travel networks, particularly through enhanced public transport to deliver sustainability gains, for new and existing residents on the Peninsula.

In support of the initial master planning exercise that has been undertaken, the Consortium has appointed sustainable transport experts (Prime Transport) to identify opportunities for enhancing sustainable travel to and from Hoo St Werburgh. Sustainable travel enhancements that could be delivered in support of the expansion of Hoo St Werburgh include:

- 1. Work with bus operators to deliver 10-minute bus frequencies between Hoo St Werburgh and:
- Strood and Rochester railway stations;
- Strood, Rochester, Chatham and Gillingham town centres;
- Medway City Estate; and
- The University of Greenwich Medway Campus.

- 2. Provide bus priority measures along A228 potentially in the form of bus lanes along links and bus gates at junctions;
- 3. Provide new bus routes stops internal to the development sites;
- 4. Work with Arriva to provide hopper/dial-a-ride services;
- 5. Provide cycle lanes and greenways where possible:
- 6. Provide cycle parking at key destinations within Hoo St Werburgh to supplement the provision of cycle lanes and greenways;
- 7. Potentially upgrade the Saxon Shore Way to provide a traffic free cycle route between Hoo St Werburgh and Upnor as an alternative route to the A228.
- 8. Provide additional secure cycle storage at Strood and Rochester railway stations;
- 9. Incorporate traffic free walking and cycling routes internal to the development sites; and
- 10. Provide new footways in existing highway verges that lack them in Hoo St Werburgh and declutter existing footways.





#### **UTILITIES CONTEXT**

Preliminary enquiries have been made with the main utility companies in respect of the expansion, replacement or supplementing existing services, and initial discussions indicate there are no insurmountable issues relating to electricity, gas, telecoms and water supply.

A more detailed response has been received in respect of foul drainage, which is set out below.

#### Sewers

All foul water flows from public sewers in and around Hoo St Werburgh currently discharge to a large sewage pumping station located to the south east of the existing settlement. Foul sewage is then pumped in a westerly direction via a 250mm rising main (a pipe under pressure) to a 300mm diameter public sewer in Four Elms Hill, Chattenden. This network ultimately outfalls into the Whitewall Creek Wastewater Treatment Works. The pumping station is located on the site of a former wastewater treatment works that was abandoned some years ago, with the pumping regime described above having been installed in its place. This arrangement presents two distinct alternatives to enable the foul water flows from the Hoo Development to discharge to the existing Southern Water public sewerage and sewage treatment system:-

- 1. Increase the capacity of Southern Waters terminal sewage pumping station at Hoo to accommodate the foul water flows from the Hoo Development together with local public sewer improvements if necessary. Capacity at the Whitewall Creek Wastewater Treatment Works would also need to be increased to treat the additional foul water flows; or
- 2. Replace Southern Waters terminal sewage pumping station at Hoo with a new wastewater treatment works to accommodate both existing and proposed foul water flows and abandon the current pumping regime.

Southern Water has indicated a commitment to upgrade foul water infrastructure to accommodate the anticipated growth of Hoo St Werburgh. When clarity on the extent of new development on the Hoo peninsular is available during the preparation of the new Local Plan, the options outlined above will be explored further by Southern Water, with infrastructure improvement planned and designed to support new development in a timely and coordinated fashion.

#### **SOCIAL & COMMUNITY FACILITIES**

The DO identifies that Hoo St Werburgh already performs a service centre role for the wider Peninsula with good local facilities and amenities:

#### Education

Directly adjacent to the Site is The Hundred of Hoo Academy and the new new Hundred of Hoo St Werburgh Primary School. Further primary schools can be found in the surrounding villages and towns, including St Mary Chattenden Primary School, St Marys Island C of E Primary School, Wainscott Primary School, and High Halstow Primary School.

#### Retail & Community Facilities

The Site is within walking distance of local shops, including a local convenience shop, the parade of shops on Knights Road and Hoo village centre. Hoo St Werburgh also provides a range of community facilities and services, including a library, swimming pool, a village hall, various pubs, a fire station and two churches.

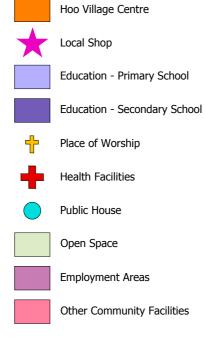
## Healthcare

Various medical and a dental practice are located within Hoo St Werburgh: The Elms Medical Centre, St Werburgh Medical Practice and Hoo Dental Care.

#### Recreation & Leisure

There are limited areas of public open space within the settlement. However, good recreation facilities can be found in the vicinity of Hoo St Werburgh, including Frindsbury Tennis Club, Deangate Ridge Recreation Ground, Deangate Ridge Golf Club and Rochester Sports and Social Club. There is also an extensive network of Public Rights of Ways, providing recreational walking and cycling routes.

However, despite playing this Service Centre role the Village Infrastructure Audit highlights that residents of Hoo are keen to see greater provision of services within the village. Although no specific work has yet been undertaken concerning the capacity of schools and health facilities as of yet, it is understood that there are some capacity constraints within the village.



#### Education

- The Hundred of Hoo Academy (Secondary School) - Hoo St Werburgh Primary School and Marlborough Centre
- Chattenden Primary School
- St Marys Island C of E Primary School
- Wainscott Primary School
- High Halstow Primary School

# Healthcare

- GP Practice: The Elms Medical Centre
- GP Practice: St Werburgh Medical Practice
- Dental Practice: Hoo Dental Care
- St Marys Island Surgery

# Recreation & Leisure

- Frindsbury Tennis Club
- Deangate Ridge Recreation Ground
- Deangate Ridge Golf Club
- Rochester Sports and Social Club

# Other Facilities:

- Hoo Village Hall
- Library
- Fire Station
- Swimming Pool

## **Employment Areas**

- Vicarage Lane, Hoo
- Kingsnorth
- St Mary Island
- Lodge Hill



FIGURE 6.5: EXISTING SOCIAL AND COMMUNITY FACILITIES PLAN

# PROPOSED SOCIAL & COMMUNITY FACILITIES

The expansion of Hoo very clearly offers the opportunity to comprehensively deliver additional services and facilities, not only to meet the needs of new residents, but also to strengthen the Service Centre role that the settlement already performs, thereby benefiting existing residents of Hoo St Werburgh and the wider Peninsula.

It is considered that the following uses would appropriately support the sustainable expansion of Hoo St Werburgh into small rural town, as envisaged by Development Scenario 3 and 4 (Option 1E).

#### Education

- Secondary School- Provision will be made for a new secondary school facility that will serve the pressing needs of Hoo St Werburgh and the surrounding communities on the Peninsula. In addition provision will be made for a secondary school as part of the Lodge Hill development.
- Primary schools- Provision will be made for two 3-form entry primary schools as part of the expansion of Hoo St Werburgh. Provision will also be made for a 2-form entry primary school as part of the expansion of Chattenden. In addition circa 2 (possibly 3) primary schools will be provided as part of the Lodge Hill development.

#### **Medical Facility**

Provision will be made for a new medical centre at Hoo St Werburgh to complement the existing Elms Practice situated off Main Road Hoo. The new medical centre will be integrated with a pharmacy and will also serve the resident community of Chattenden.

#### **Employment Provision**

Provision will also be made for new employment space. The Consortium is keen that this takes the form of 'Rural Innovation Centre' providing serviced office space, let on flexible terms and

will be aimed at new start and small businesses. There are also opportunities to link to provision at Kingsnorth employment area, particularly with regarding to activities supporting the logistics industry.

## Community Building and Day Nursery Facility

Provision will be made for a multi-purpose community building that will also house a children's day nursery. This is likely to be co-located with the new medical facility and employment facility so as to create a 'community social hub'.

#### New and upgraded Leisure facilities

Hoo Sports Centre is currently undergoing some refurbishment works. Provision will be made for any necessary upgrades to the swimming pool and gym facilities. New sports provision will be sited near to the Hoo Sports centre to complement and enhance the range of sports facilities available to the residents of the Peninsula.

#### Retail and Commercial offer

The existing retail and commercial centre lies at the heart of the community and provides essential facilities meeting existing local needs and acting as a focal point for the community. It is envisaged that provision would be made for improvements to the centre to enhance its attractiveness, reinforcing its existing role.

Provision would also be made at Hoo St Werburgh for a new larger food store that will serve the needs of the local community and wider area of the Peninsula. It is likely that this would be located close to Peninsula Way to benefit from passing trade. Presently a weekly food shop generates journeys to Strood, being the nearest destination for a food store. The provision of a food store to meet the needs the community on the Peninsula would offer greater consumer choice but importantly also offer the prospect of reducing the number and length of journeys for a weekly food shop. Importantly this type of provision will not compete with the existing day-to-day retail offer located within Hoo St Werburgh.

Smaller convenience retail stores could also be provided within the new neighbourhoods.

These would serve the local residents of each neighbourhood, with a small retail offer within easy walking distance for day-to-day needs.

#### Country Parkland

As part of the overall provision of public open space and Green Infrastructure, provision will be made for a community parkland in the form of 'Country Park'. This parkland will serve not only as a vital community facility but also as a major environmental asset. It will comprise new areas woodland, informal areas of parkland offering expansive views of the Medway Estuary. The ability to provide a parkland of in excess of 100 acres constitutes an almost unique opportunity for the community of Hoo and the wider Peninsula. It will be an enduring legacy that will be enjoyed by present and future generations promoting health and well-being.

## **Elderly Accommodation**

It is also noted that a development of the scale proposed would allow for a very broad mix of housing to be accommodated, including specialist and supported housing for elderly, disabled and vulnerable people, ensuring that the wide ranging needs of a growing and changing population are met.

#### **CONCLUSION**

This section has highlighted that there are considerable local opportunities to enhance the sustainability and liveability of Hoo St Werburgh through the sensitive expansion of the settlement. In summary:

- the creation of robust landscape framework within which growth can be sensitively accommodated, protecting the most sensitive areas and drawing the landscape into the development;
- supplementing and expanding the Service Centre role the village currently plays by delivering enhanced social and community facilities alongside a strengthened retail provision;
- enhancing connectivity to and from the settlements, through the provision of enhanced public transport provision and cycling. In addition, there is an opportunity for enhancing sustainable movement in and around the settlement through enhanced pedestrian infrastructure.

Building upon this analysis, this section has defined the parameters for successfully creating a sustainable small rural town. These parameters are crystallised in the Development Framework which is outlined in the next section of this document.



FIGURE 6.6: PROPOSED SOCIAL AND COMMUNITY FACILITIES PLAN

### 7.0 DEVELOPMENT FRAMEWORK

The framework plan illustrates our concept for developing a new sustainable settlement on the Hoo Peninsula. It is conceived as a small, polycentric, rural town that is structured as a series of discrete walkable neighbourhoods, each designed to a scale and form that fits with their setting and landscape character. The existing villages of Hoo St Werburgh and Chattenden are incorporated as distinct places within this structure, allowing them to retain their unique identity whilst benefiting from the improved facilities and opportunities that can be supported by the larger settlement's critical mass.

The polycentric settlement pattern is defined by a strong landscape grid that defines the limits of each walkable neighbourhood and connects them through green and blue infrastructure. The landscape character around Hoo St Werburgh is diverse and includes a variety of landscape features and habitat areas that can be protected and enhanced as part of a comprehensive approach to planning and design.

Designing at this scale allows a comprehensive approach to provision of facilities so that schools, shops, health services, community uses, open spaces and sports provision can be planned and located to everyone's benefit. By creating individual neighbourhoods, we are able to develop genuine communities with a sense of place and bring forward local facilities as they are needed as the population grows.

The development framework consists of layered landscape, built form and movement structures that interact to create a sustainable whole. The concepts are explained in more detail below:

#### LANDSCAPE

The landscape strategy aims to protect and enhance existing landscape features and maintain strong linear connections between the various elements to create a green and blue grid that permeates the development and embeds it within the natural landscape and topography of the Hoo Peninsula.

The landscape structure respects the site's topography, retaining the three wooded ridge lines to ensure views from across the River Medway retain their green skyline. Within the western part of the proposed development, a sense of enclosure is created through the wooded ridges and gently undulating landform. As you move to the east this sense of enclosure gradually diminishes and gives way to a more open, flat landscape with wide open views and big skies.

The structure is strongly orientated east/ west tying in with existing topographical features. The River Medway is a strong organising element, running along the southern edge of the proposals and linking the western and eastern neighbourhoods. This is proposed as a country park which will contain a variety of spatial typologies and habitats within it linked by the existing Saxon Shore Way public footpath. Woodland, meadow and wetland and mudflat habitats all feature encapsulating the key landscape characteristics of the peninsula.

To the north, existing bands of woodland are connected by further tree planting to create a continuous wooded edge that both visually contains the development and provides a continuous linear habitat. A second country park is proposed here that will protect and enhance ecological features and provide managed human access to natural open space.

North/ south green linkages are proposed to connect the strong east/west elements. These will take a variety of forms depending on their landscape context. For example, to the west they might have more of a woodland character with footways and cycleways weaving through trees. To the east they might take the form of natural drainage ditches and waterways edged by low hedgerows and meadow grassland, or agricultural field boundaries managed naturally to encourage biodiversity.

#### **ACCESS AND MOVEMENT**

The new settlement is arranged as a series of walkable neighbourhoods, each described by a radius of approximately 400m, which is an average 5 minute walk from edge to centre. This encourages people to walk or cycle to local facilities, leaving their car at home unless for longer journeys. There is a well established network of public rights of way which will be retained within the movement structure, and new footway/ cycleways will be established along desire lines linking residents with schools, shops and community facilities.

The street network is designed as a grid to disperse traffic and provide a choice of routes. This enables traffic management to respond to conditions as they change over time and allows softer modes of transport- bus, cycling and walking- to take priority over the private motor vehicle. A distinct street hierarchy coupled with natural traffic calming measures will help to ensure that through traffic stays on Peninsula Way with only local traffic using local streets.

The grid form provides many options for bus routes to penetrate the settlement and also enables bus routes to adapt over time as the settlement grows. Slower, local bus routes can serve the local population within the Hoo St Werburgh settlement with faster routes provided from each neighbourhood directly onto Peninsula Way and out to the Medway Towns or the Hoo Peninsula.

#### **BUILT FORM AND FACILITIES**

The framework illustrates a rural development arranged as a series of six interconnected walkable neighbourhoods, each with local facilities at their heart. The established village of Hoo St Werburgh forms the central neighbourhood to the South of Peninsula Way and connects to the three new neighbourhoods proposed to the east and the west.

Each new neighbourhood will have a distinct character related to the Hoo vernacular but derived from its local landscape and topographical context. The block morphology, spatial characteristics, visual framework and materials palette can all be designed such that they fit naturally within their context. This will not only provide visual variety and choice but will also help to create a unique sense of place that is rural in its scale and form and distinct to the new settlement.

Each new neighbourhood will have its own local centre catering for residents' daily needs within walking distance of their homes. Typically these would include a primary school, local convenience store, small business space for local businesses such as hairdressers, bakers etc., a cafe or takeaway shop and a pub. The centre of Hoo St Werburgh will remain as a focus for the existing village population with potential for environmental improvements and some small increase in facilities.

An enhanced community hub is proposed around the existing facilities at The Hundred of Hoo Academy. This will strengthen the existing community focus around the primary and secondary schools and swimming pool with land available for a potential new community hall, health facilities and other community infrastructure that can support the increased population.

We currently envisage a larger centre scaled to serve the whole settlement to be located at the eastern gateway on Peninsula Way. This would be located on the main bus route and would be able to serve the whole peninsula, thereby reducing the need for residents to travel to the Medway Towns for their weekly shopping needs.





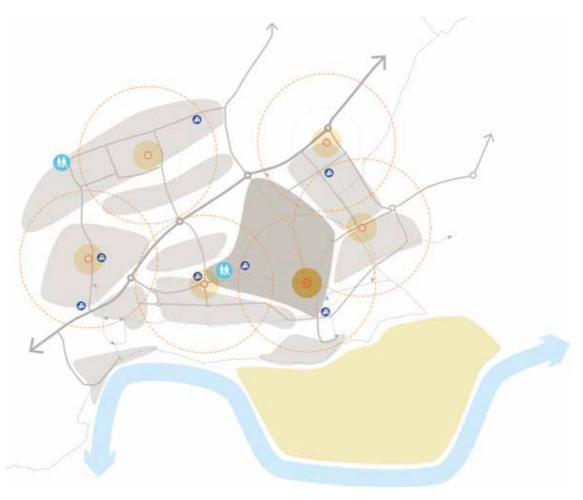


#### Landscape Concept

- Maintain the wooded skyline on the three ridge lines
- Retain and enhance the woodland buffer to the north and plant new woodland to create a continuous structural belt
- Create a country park along the River Medway shoreline that connects the variety of habitats and landscape typologies and manages the transition from woodland to marshland
- Create a wetland habitat in the south east of the site that can be managed to provide long term habitats for local species
- Create a country park that creates a strong east/ west landscape feature to the north of Peninsula Way
- Create north/south linkages that relate to the surrounding landscape character, complete the natural blue and green landscape grid, create linear wildlife corridors and provide greenways between the various neighbourhoods and facilities.

#### Access and Movement Concept

- Walkable neighbourhoods
- Retained PRoW network
- Potential for new fast bus routes linking neighbourhoods directly with the employment and retail opportunities in the wider peninsula and the Medway towns
- Local bus routes connecting local neighbourhoods and facilities
- Connected street grid creating choice of routes and multiple traffic management opportunities
- Clear street hierarchy





#### **Built Form and Facilities Concept**

- Six connected, walkable neighbourhoods, including the existing village of Hoo St Werburgh
- Individual village characters within an overall Hoo 'sense of place'
- Local facilities at the heart of each neighbourhood to provide for daily needs
- Existing village centre protected and enhanced
- New community hub focused around existing facilities and the Hundred of Hoo Academy
- New larger centre providing for the wider peninsula's weekly needs

#### Combined Concept Diagram

- Comprehensively planned small rural town
- Integrated approach to movement, built form and the natural environment
- Six walkable neighbourhoods with local facilities at their heart
- Improved connectivity for walking, cycling and public transport
- Enhanced community hub
- Two new secondary schools and five new primary schools
- Protected habitats and enhanced biodiversity
- Improves sustainability for the local area and wider Hoo Peninsula

## 8.0 DELIVERY - MEDWAY INFRASTRUCTURE DELIVERY SCHEDULE

The matter of the timely delivery of essential community infrastructure required to support growth is crucial to both the soundness and successful implementation of the Medway Local Plan. A key factor that has featured in feedback from local communities within Medway is that development has occurred in the absence of the provision of a commensurate amount of infrastructure necessary to support that growth.

In response to these concerns this document has sought to identify some of the infrastructure that would be necessary to support of the expansion of Hoo St Werburgh, although it is acknowledged that further work is required to fully understand these requirements.

Alongside understanding infrastructure requirements, it is also necessary to examine mechanisms that can be put in place to secure this infrastructure in a timely fashion, to give certainty to existing and new residents alike.

The consortia arrangement that exists between the four lead landowners and developers promoting the sustainable expansion of Hoo St Werburgh signals a major factor in terms of providing the certainty of delivery which must underpin the Local Plan. It is noted that other potential large scale strategic Development Options presently cannot demonstrate the same level of land owner and developer commitment necessary to ensure the successful implementation of the plan.

The following sets out in more detail the approach that is proposed to be taken by the Hoo St Werburgh Consortium to the delivery of infrastructure, providing certainty and underpinning a successful and sustainable Local Plan strategy.

### FRAMEWORK FOR SECURING DELIVERY OF COMMUNITY INFRASTRUCTURE

Whilst it is noted that there are potential changes to the procedures and systems concerning developer funding of infrastructure, as indicated in the Housing White Paper and sister documents prepared by the CLG CIL Review Team, the Consortium notes that the current regime provides a framework for delivery. Medway Council presently does not have a Community Infrastructure Levy in place and therefore, under

the current regime of Section 106 of the Town and Country Planning Act 1990 (as amended), the mechanism of collecting 'pooled contributions' towards the delivery of infrastructure common to a single area is restricted to a maximum of five discreet schemes.

The selection of Development Scenarios 3 and 4 would comprise four strategic sites that would qualify under the Section 106 'pooled contributions' for the joint provision of infrastructure or appropriate commuted sums in lieu of on site provision. There is also scope for HCA participation in the pooling of contributions

in the context of development proposed at Lodge Hill and at Expanded Hoo, given the related infrastructure requirements. The Consortium would thereby work with Medway Council to devise a 'Framework Section 106 Agreement' that, in the absence of CIL, will enable the procurement of on and off-site provision of community facilities together with essential infrastructure. The 'Framework Section 106 Agreement' will secure appropriate financial contributions towards the provision of essential off site infrastructure and will introduce appropriate and realistic triggers for the capture of any such contributions.

The collaborative working approach of the consortium ensures that that this approach is both realistic and deliverable. In summary, the planned expansion of Hoo St Werburgh will provide Medway Council with the greatest degree of certainty of delivering homes and infrastructure within the Local Plan period. It is considered that the selection of Development Scenario 3 and 4 allocation will enable the Council to secure the timely delivery of essential infrastructure in line with the delivery of the new homes that will serve the needs of the community.



FIGURE 8.1: LAND WITHIN CONSORTIUM CONTROL PLAN

#### **Housing Delivery**

The delivery mechanism outlined above means that each ownership parcel can be delivered independently of one another, albeit in a coordinated manner in respect of infrastructure delivery. This provides confidence that, delivery rates can be maintained and enhanced, with five different developers working alongside one another.

This also means that each ownership parcel can be delivered alongside one another, meaning that each neighbourhood could be delivered concurrently. Drawing upon the experience of Taylor Wimpey we would expect each ownership parcel to deliver somewhere in the region of 60-80 homes per annum in this part of the Country. On that basis, we could perhaps expect to see some 240-320 homes delivered a year as part of the expansion of Hoo St. Werburgh and Chattenden. This demonstrates that the realisation of the vision of Hoo St Werbugh has the potential to fulfil a very significant proportion of the Council's annual housing land requirement, providing a robust basis upon which the Council can demonstrate a Five-Year supply and retain full control over the development management process going forward.

In addition, given the unconstrained nature of the consortium land, the development would also deliver affordable housing, in accordance with extant policy requirements.

TABLE 8.1: LAND WITHIN CONSORTIUM CONTROL LAND BUDGET

LAND BUDGET - AREA FOR DEVELOPMENT							
		AREA (HA)	DWELLINGS	DESCRIPTION			
LAND WITHIN CONSORTIUM CONTROL							
Existing Development		3		area associated with existing development within settlement area			
Residential		175	6,125	net developable area, including tertiary roads and local level open space. Assumed average density of 35 dwelling per hectare.			
Education	Primary School	5		total area allocated for 3 no. primary schools			
Mixed Use	Local Centre	3		total area allocated for 3 no. mixed use / community hub			
Employment		4		total area of potential employment only uses			
Strategic Infrastructure	New Primary Roads	11		total area associated with new primary road infrastructure			
Open Space	Public Open Space	179		total area associated with parks, greens, play areas, orchards, allotments, etc.			
	Buffer / Other	121		areas of informal open space, buffer at edges of development, natural landscapes, etc. Allows space for attenuation			
SUBTOTAL		502	6,125				
LODGE HILL	LODGE HILL						
Residential		-	3,000*	*within the plan period (total- up to 5,000 homes)			
Education	Primary School	-		Up to 2 no. primary schools			
	Secondary School	-		1no. secondary school			
Mixed Use	Local Centre	-		1 no. mixed use district centre with retail to serve development			
Employment		-		Sufficient to serve the development			
Strategic Infrastructure	New Primary Roads	-		Sufficient to serve the development			
Open Space	Public Open Space	-		Sufficient to serve the development			
	Buffer / Other	-		Sufficient to serve the development			
SUBTOTAL		326	3,000				
TOTAL		828	9,125				

### 9.0 SUMMARY & CONCLUSION

Over the next 20 years Medway has a unique opportunity to shape the way the area grows. The scale of growth required for the Borough is transformative, and whilst accommodating this level of change undoubtedly presents challenges it also present a once in a generation opportunity. It is within this context that four promoters have come together to jointly promote a vision for the sustainable expansion of Hoo St Werburgh.

Underpinning this vision is the assertion that Hoo St Werburgh is uniquely placed strategically to accommodate genuine sustainable development. Not only is the land around Hoo St Werburgh free from National and International environmental designations, the area is well connected to the strategic highway and rail network providing access to both London and the wider Kent area, and is situated adjacent to one of the most important employment and logistic sites in the sub-region providing an opportunity for integrated housing and employment growth.

Working within this supportive strategic context, the Consortium has looked carefully at the existing character and assets of the area, identifying local constraints and opportunities to define the parameters for the sustainable expansion of the settlement. Through this exercise, the Consortium has identified opportunities to protect the character of the surrounding landscape, whilst also enhancing the functionality of the countryside making it more accessible and useable. In addition, opportunities have also been identified to enhance the Service Centre role that Hoo St Werburgh already performs through the expansion of social and community facilities and retail provision.

But this vision is not simply an aspiration, this document has outlined the mechanism through which the sustainable expansion of Hoo St Werburgh can be realised. With four experienced and willing promoters, the Consortium is well placed to deliver housing, both market and affordable, promptly and to a high standard.

However, housing development cannot be delivered in isolation, and this document has demonstrated how essential infrastructure can be secured alongside new housing, to ensure that Hoo St Werburgh functions well for new and existing residents alike, making it an attractive and sustainable place to live and work.

In summary, this document has demonstrated that directing growth towards Hoo St Werburgh presents a unique opportunity to realise genuine sustainable development, simultaneously achieving environmental, social and economic net gains. The Consortium thereby respectfully requests that Medway Council identifies the expansion of Hoo St Werburgh, as identified in Development Options Scenario 3 and 4, in the Regulation 19 Draft Local Plan as the principal focus for the Local Plan spatial strategy.

# 10.0 TECHNICAL APPENDICES

## APPENDIX 1 - ECONOMIC BENEFIT ASSESSMENT



# HOO ST. WERBURGH EXPANSION

The Hoo Development Framework Document sets out the vision for the expansion of Hoo St. Werburgh into a sustainable rural town.

This infographic illustrates the economic benefits of delivering approximately 10,500 units.

(It also considers the benefits derived from an alternative 6.500 unit scheme overleaf).

The NPPF sets out three dimensions to sustainable development, these being economic, social and environmental.

In its economic role, the planning system is required "to contribute to building a strong, responsive and competitive economy, by ensuring that sufficient land of the right type is available in the right places and at the right time to support growth and innovation and by identifying and coordinating development requirements, including the provision of infrastructure" [para 7, NPPF].

The NPPF confirms that pursuing sustainable development involves seeking positive improvements to people's quality of life, including:

- Making it easier for jobs to be created in cities, towns and villages; and
- Improving the conditions in which people live, work, travel and take leisure; and widening the choice of high quality homes.



### **HOO ST. WERBURGH and LODGE HILL**

### **ECONOMIC PROFILE OF 10,500 UNITS**

#### **CONSTRUCTION PHASE**

The construction phase will generate and sustain direct employment opportunities within the construction sector. Each direct construction job will contribute to economic output in the form of Gross Value Added (GVA). GVA can be used to measure the financial contribution the Proposed Development will make towards the economy, measuring the value of goods and services produced within the construction sector. The Development will also support indirect employment opportunities throughout the supply chain, resulting in economic activity across a variety of sectors.



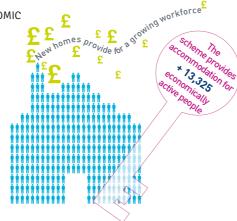




#### COMPLETED DEVELOPMENT

The delivery of new dwellings will generate multiple economic benefits, supporting the local and wider economy. The proposed development will accommodate an economically active population, contributing to the local labour force.

LABOUR FORCE AND ECONOMIC OUTPUT ON COMPLETION





### FUTURE RESIDENT GVA CONTRIBUTION

A growing workforce will deliver economic output in the form of GVA, supporting economic growth.

#### COUNCIL TAX

The Proposed Development will generate in the region of £19m in Council Tax each year.



#### COMMERCIAL EXPENDITURE

Residents will support the local and wider economy through the generation of commercial expenditure on convenience (food), comparison (non-food), and leisure goods.





# HOO ST. WERBURGH EXPANSION

The Hoo Development Framework Document sets out the vision for the expansion of Hoo St. Werburgh into a sustainabele rural town.

This infographic illustrates the economic benefits of delivering approximately 6,500 units.

The NPPF sets out three dimensions to sustainable development, these being economic, social and environmental.

In its economic role, the planning system is required "to contribute to building a strong, responsive and competitive economy, by ensuring that sufficient land of the right type is available in the right places and at the right time to support growth and innovation and by identifying and coordinating development requirements, including the provision of infrastructure" [para 7, NPPF].

The NPPF confirms that pursuing sustainable development involves seeking positive improvements to people's quality of life, including:

- Making it easier for jobs to be created in cities, towns and villages; and
- Improving the conditions in which people live, work, travel and take leisure; and widening the choice of high quality homes.



### **HOO ST. WERBURGH**

### **ECONOMIC PROFILE OF 6,500 UNITS**

#### **CONSTRUCTION PHASE**

The construction phase will generate and sustain direct employment opportunities within the construction sector. Each direct construction job will contribute to economic output in the form of Gross Value Added (GVA). GVA can be used to measure the financial contribution the Proposed Development will make towards the economy, measuring the value of goods and services produced within the construction sector. The Development will also support indirect employment opportunities throughout the supply chain, resulting in economic activity across a variety of sectors.

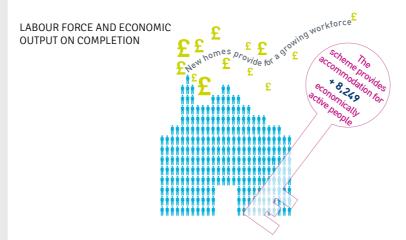






#### **COMPLETED DEVELOPMENT**

The delivery of new dwellings will generate multiple economic benefits, supporting the local and wider economy. The proposed development will accommodate an economically active population, contributing to the local labour force.





### FUTURE RESIDENT GVA CONTRIBUTION

A growing workforce will deliver economic output in the form of GVA, supporting economic growth.

#### COUNCIL TAX

The Proposed Development will generate in the region of £12m in Council Tax each year.



#### COMMERCIAL EXPENDITURE

Residents will support the local and wider economy through the generation of commercial expenditure on convenience (food), comparison (non-food), and leisure goods.



## APPENDIX 2 - LANDSCAPE ANALYSIS

As part of the landscape and visual analysis of the Site to inform the iterative design process, a desk based review of the Site and surrounding area has been undertaken in regards of identifying the topography and landform, vegetation and settlement patterns, existing landscape designations and published landscape character assessments. This information is summarised below and should be read in combination with the relevant plans

#### **HOO PENINSULA**

As demonstrated by Figure 3.2: Wider Context, Hoo St. Werburgh is situated in the southern part of the Peninsula between the Thames and Medway estuaries, which extends north-east from Rochester and Wainscott.

The landform across the Peninsula is varied. There are flat, low-lying extensive marshes across the northern and south-east parts, situated just above sea level at 5m Above Ordnance Datum (AOD). These marshes are crossed by tributaries and narrow watercourses connecting to the estuaries. The central and southern parts of the Peninsula consist of a complex pattern of elevated land above the marshes, between 15m AOD and 85m AOD, consisting of a complex pattern of valleys, ridgelines and hills. This elevated landform continues south-west across Rochester, with the exception of the Hogmarsh valley between Chattenden and Wainscott, situated between 5-15m AOD.

The settlement pattern across the Peninsula is characterised generally by small scale clustered or linear villages including Chattenden and High Halstow, which similar to Hoo St. Werburgh are located across the elevated parts of the Peninsula, such that they are visible from the surrounding landscape, including to the south of the River Medway.

Hoo St. Werburgh forms the largest settlement pattern on the Peninsula, being located to the immediate south of the A228 and to the west of Roper's Lane and Stoke Road, which form the

main road infrastructure across the peninsula. This settlement pattern contrasts with that to the south of the River Medway, where Gillingham and Chatham form a continuous settlement pattern as part of the consolidation of development around Rochester.

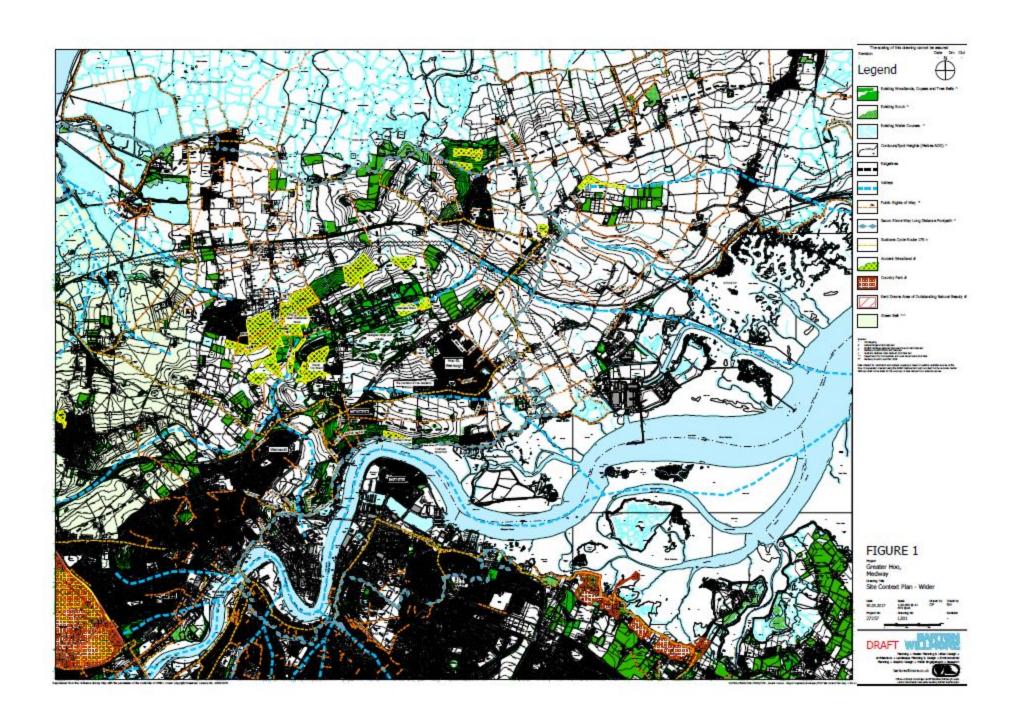
The settlement pattern has been shaped by historical land uses, focused upon industrial and military usages linked to the estuaries, including naval dockyards and their associated defences, both of which are still visible in the landscape. The industrial uses are most notable in the south-east part of the Peninsula with the large scale massing of Kingsnorth power station. These industrial buildings are highly visible, and along with the associated infrastructure of rail and overhead pylons form a notable detracting feature and contrast to the open character of the surrounding low lying marshes.

The land use has also been shaped by the geology and soils enabling large scale agricultural production and orchards, although the latter are in decline. The agricultural land use has shaped the vegetation patterns across the Peninsula, with large scale agricultural fields creating an open landscape character, similar to that across the marshes and low-lying flats. In contrast, the elevated ridge lines and hills are wooded, with ancient woodland to the north-west of Hoo St Werburgh between Great Chattenden Wood and Northwood Hill, as well as to the south at Cockham Wood.

The Peninsula is crossed by numerous Public Rights of Way (PRoW). The Saxon Shore Way, a long distance route, crosses Gillingham and Rochester and across the peninsula, forming part of the wider Green Infrastructure network. Other recreational areas include the Deangate Ridge golf course and country parks across Lower Rainham.

Due to the varied topography across the Peninsula and the sloping landform across Gillingham and Chatham, there are expansive and long ranging views between and across the peninsula. Additionally, there are also long distance views from the low-lying marshes as a result of their open character. Within these views, existing built

form, infrastructure and large scale industrial uses are visible, often contrasting with the surrounding agricultural landscape, often due to the harsh interface and lack of transition between built form and fields.



#### HOO ST. WERBURGH

The aerial photograph demonstrates that the Site consists predominantly of agricultural land comprising large scale fields that are generally open in character as a result of limited hedgerows or field boundaries. The main areas of vegetation are located at the edges of the Site, with the Deangate Ridge golf course and Cockham Wood. Part of Cockham Wood is ancient woodland.

There are also linear tree belts between Stoke Road and Angel Farm, to the east of Hoo St. Werburgh and to the north of Main Road Hoo, along an unnamed watercourse.

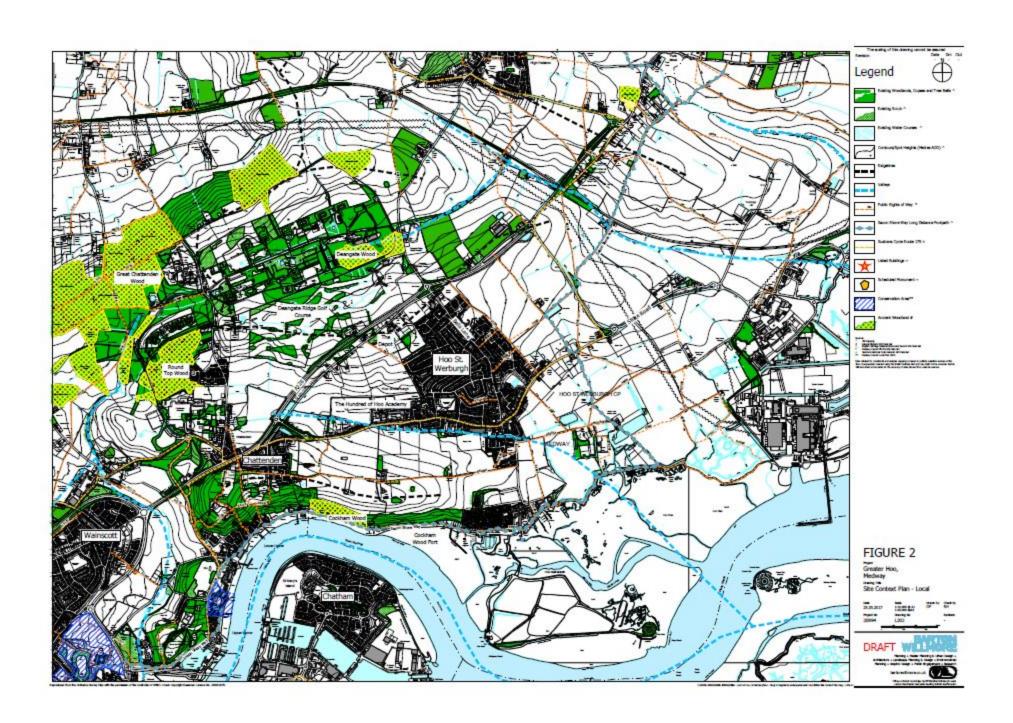
The Site is not covered by any national landscape designation. There are no Conservation Areas, Scheduled Ancient Monuments or Listed Buildings within the Site.

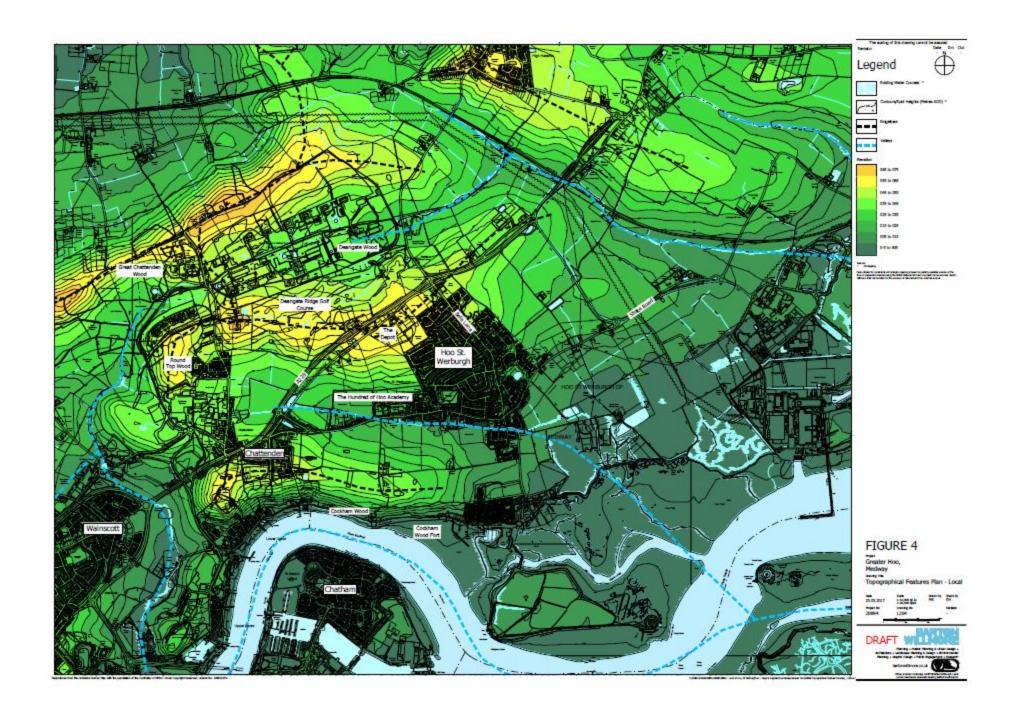
The Site is crossed by an extensive network of PRoW, with the Saxon Shore Way crossing the southern and eastern part of the Site, from which numerous other routes cross the marshes. National Cycle Route no.179 passes to the south of the Site along Main Road Hoo, between Chattenden and Hoo St. Werburgh and continues east through Hoo St. Werburgh before heading north to High Halstow.

Built development within Hoo St. Werburgh is primarily located between Main Road Hoo to the south and Bell's Lane to the north-east; with additional development extending to the south of Main Road Hoo, in the vicinity of St. Werburgh's Church. The settlement pattern also includes a ribbon pattern of residential properties extending along Main Road Hoo, to the west of The Hundred of Hoo Academy; and in sporadic clusters along Stoke Road to the east of Bells Lane.

The A228 and the Ratcliffe Highway extend northeast from Chattenden, cutting across the rising landform to the west of the Site before extending along the Deangate Ridge further to the northeast. To the south of Hoo St. Werburgh lies an area of industrial and maritime land use, in addition to trailer home development at Hoo Marina. Approximately 3.1km to the east of the Site is the

Kingsnorth Power Station, consisting of very large buildings, including a tall flue, which are highly visible and form dominant features within the surrounding landscape. To the north-east of the Site, there is a loose linear pattern of residential development at Sharnal Street and, in more nucleated pattern, at High Halstow, approximately 2.6km to the north of the Site.





#### Topography

Hoo Topography Plan demonstrates that in relation to the Site there is a complex landform of hills and valleys extending east and north-east, from elevated land to the west of Chattenden. This includes the Cockham Farm ridgeline at 45m AOD, the Deangate Ridge at 70m AOD and the Chattenden Ridge at 70m AOD. As a result, the western part of the Site is part of a valley system, enclosed by these ridgelines, with the valley floor consisting of an unnamed stream to the east of the A228 at 25m AOD. The combination of these elevated ridgelines and existing woodland visually screen the lower parts of the western part of the Site from the wider landscape, with only the more elevated parts of the Site, including the Deangate Ridge golf course being visible from the south of the River Medway.

In contrast, the eastern and south-east parts of the Site, are primarily flat or gently sloping landform falling from 40m AOD adjacent to the A228 to 15m AOD at Stoke Lane. From Stoke Road the landform falls to 5m AOD adjacent to the flats and marshes.

#### **Landscape Character**

Published Landscape Character Studies demonstrates that the Site has been covered by published studies at national, regional and borough level

At a national level, the Site is predominantly within national character area 113: North Kent Plain (NCA 113), characterised by arable fields, orchards and ancient woodland, as well as coastal towns and significant development around the Medway towns, which are noted for their "strong influence". NCA 113 is identified for significant opportunities for recreation and Green Infrastructure, specifically the provision of accessible natural green space in urban areas as a means for providing benefits to local communities, with opportunities focused upon increasing the area of broadleaved woodland and planning for the creation of significant new areas of green space and green corridors to provide a framework for new and existing development in urban areas and along major transport routes.

At a regional level the Site is predominantly within Hoo Peninsula Landscape Character Area (LCA), which is noted for its prominent hills and low lying alluvial marshes; decline in orchards and mixed farmland with shelterbelts; intensive, open farmed arable land; and intrusive influence of industrial development. The published guidance states that the landscape condition of the LCA is poor, due to these existing visual detractors and that there is very little of a coherent landscape pattern. Similarly, there is very little opportunity for ecological interest due to the scale of the arable field pattern. The stated landscape actions are based on a strategy of "restore and create" include creating new landscape elements around settlements and creating woodland links to develop wider networks within the existing hill top

At a borough level, the Medway Landscape Character Assessment (2011) has identified more detailed landscape character areas, with the Site covered by the following:

#### LCA 4 Hoo Flats

LCA 4 covers the south-east part of the Site, between Vicarage Lane and Kingsnorth Power Station. LCA 4 is characterised by low lying marshland, ditches and hedges. Due to the open character there are panoramic views of the estuary and detracting large scale industrial built form, as well as many PRoW across the area. The condition is stated as moderate as a result of the balance between these detracting elements and the ecological integrity of the area.

The stated landscape actions are based on "conserve and create", including for strengthening the biodiversity and landscape value of area through woodland blocks and more open habitat where this will favour certain bird species

#### LCA 11 Hoo Peninsula Farmland

The eastern part of the Site is covered by this character area, between the eastern edge of Hoo St. Werburgh, the A228 and Roper's Lane. The LCA is characterised as undulating predominantly arable farmland with large open fields and little sense of enclosure; and with extensive views from higher ground towards the estuaries. The character area is assessed as exhibiting a weak landscape structure, with a lack of distinctiveness and overall coherence and in poor condition.

The landscape actions are based on "restore and create", including for improving the image of the area with new planting along the road network and screening the settlement edges to achieve an improved relationship between development and countryside, as well as identifying strategic viewpoints and increasing biodiversity and recreation opportunities.

#### LCA 12 Lower Stoke Road

The south-east edge of the Site is covered by this character area between Abbots Court Lodge and Stoke Road. The LCA is characterised as a wedge of open undulating arable farmland that is medium scale; more diverse, varied and enclosed landscape, and is in moderate condition.

The stated landscape actions are based on "conserve and create", including for strengthening the biodiversity value of the area through new woodland blocks and hedgerows, and seeking to under-ground cabling of existing overhead lines

#### LCA 15 Deangate Ridge

This LCA covers the western part of the Site, with the land to the west of Hoo St. Werburgh and either side of the A228 as well as the Deangate Ridge golf course. The LCA is characterised by an elevated ridge of medium scale farmland with undulating arable fields. The A228 cuts through this area, which along with Hoo St. Werburgh and Chattenden is highly visible and noted as a detracting feature. The LCA is stated as being in moderate condition as a result of the balance between many visually detracting features and a variable pattern of elements.

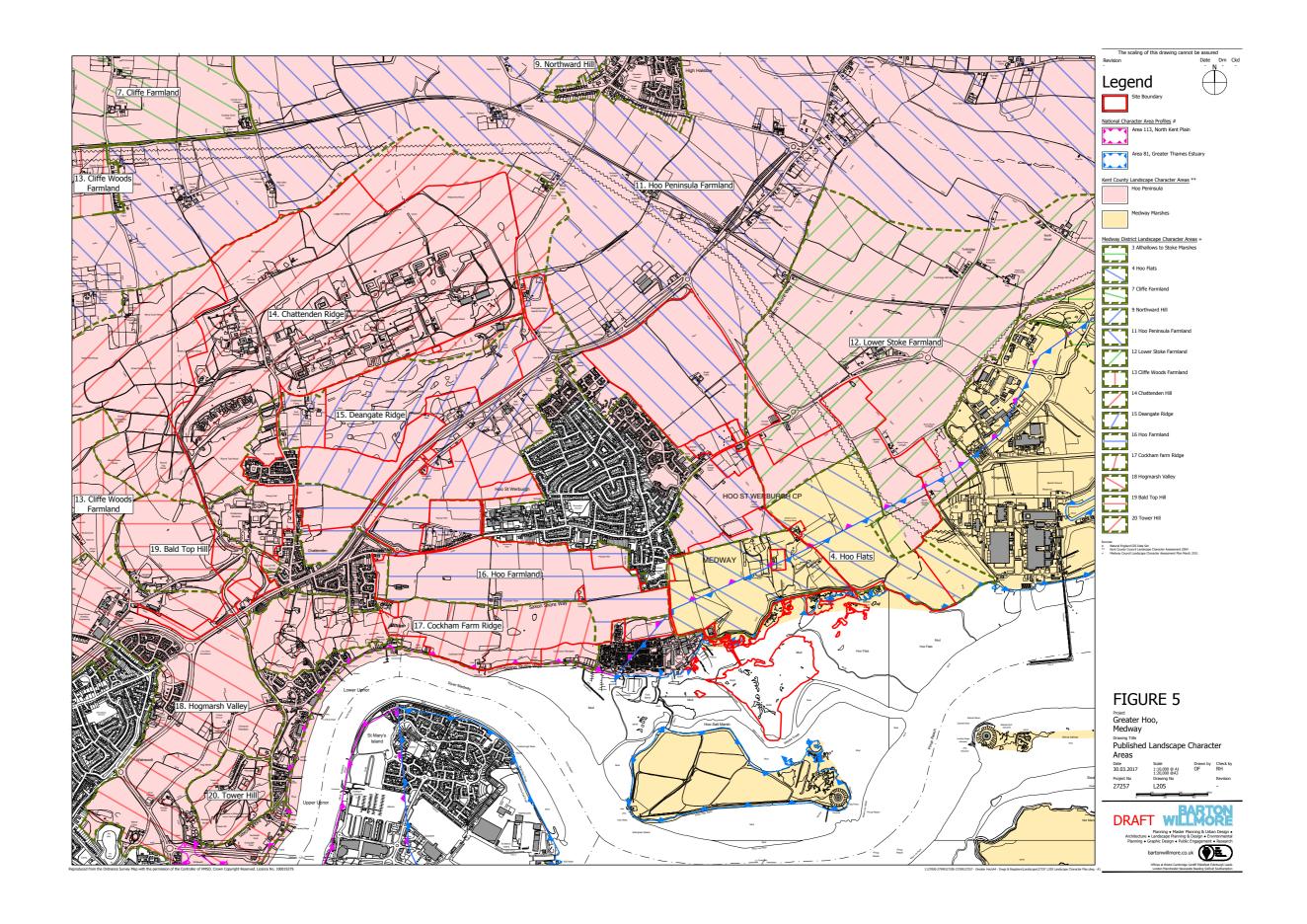
The stated landscape actions are based on "conserve and restore" including for screening land uses that harm local distinctiveness; strengthening the 'gateway' value of this open farmed ridge along A228 as key route into Medway and out to Hoo Peninsula and introducing new planting along A228 and improve maintenance of existing planting and introduce new off-road pedestrian and cycle links between Hoo, Lodge Hill and Chattenden as part of Green Infrastructure improvements.

#### LCA 16 Hoo Farmland

LCA 16 Hoo Farmland covers the central southern parts of the Site, extending from Hoo Marina and Vicarage Lane to the southern edge of Hoo St. Werburgh, the Hundred of Hoo Academy playing fields and the eastern edge of Chattenden. The LCA is characterised by large scale undulating arable fields and long views from elevated landform; although the landscape is noted as fragmented due to the prominence of infrastructure and as a result it is stated to be in poor condition.

The stated landscape actions are based on "restore and create" and include strengthening the biodiversity value of the landscape through

HOO ST WERBURGH — DEVELOPMENT FRAMEWORK DOCUMENT



woodland blocks; screening adverse view and introducing an improved "gateway" treatment to Hoo St. Werburgh.

#### LCA 17 Cockham Farm Ridge

The Cockham Farm Ridge covers the south-west part of the Site, extending North from the River Medway; it is noted as a distinctive and prominent wooded ridge, with undulating large, open arable farmland across gently sloping valley sides. It is noted that the Saxon Shore Way does not run along the ridge line but is instead situated beyond the ridge line on land to the north. The condition is stated as moderate, due to the variable pattern of elements, the interrupted visual unity and the variable cultural integrity.

The landscape actions are based on "conserve and restore", including for strengthening field boundary planting, particularly along Saxon Shore way; protecting and enhancing protected woodland areas and seeking opportunities to improve accessibility along shoreline as well as public realm improvement projects within all new development schemes

#### Green Cluster Studies Hoo Peninsula Technical Report (GCS) March 2008

The GCS characterises Hoo St. Werburgh as one of a number of settlements which are:

"...well dispersed along the ridge and often have relatively exposed sites...Despite their rural setting, these villages have a rather disjointed character and often seem oddly related to the surrounding countryside."

The key opportunities were noted as:

 Re-creating the 'wooded ridge' at the core of the peninsula to enhance biodiversity value, with extensive woodland planting and small areas of woodland having a strong visual impact in framing views and integrating development;

- Gateway Villages in particular opportunities to influence the design of future development on the fringes of villages, creating more distinctive gateway approaches, improving access to hinterland circular walks and integrating villages within their wider landscape setting;
- Distinctive local landscapes as many villages on the Hoo Peninsula have striking landscape settings and there may be opportunities for some large scale projects which aim to enhance landscape character, accessibility and interpretation; and
- A network of off-road cycleways- this is a large scale flat landscape, such that new cycleway links could be provided to link all the villages, with information and viewpoints along the way to transform perceptions of the Hoo Peninsula.

### APPENDIX 3 - TRANSPORT

### INTRODUCTION Purpose of Report

This report considers the high-level highways and transportation implications associated with a number of potential sites for residential led development in Hoo St Werburgh, Medway. It is hoped that the sites will be allocated as part of the emerging Medway Local Plan.

Collectively, the sites total circa 6,500 dwellings along with employment land (B1/B2/B8), potential secondary school, potential primary schools, retail and community use. These sites are in addition to the 5,000 dwellings plus other land uses proposed as part of the Lodge Hill development due to be heard at call-in inquiry in 2018.

#### Scope of Report

This report will first outline the existing situation in Hoo St Werburgh and the Medway Peninsula in terms of sustainable travel, specifically walking, cycling and public transport, and road infrastructure. It will then identify any shortfalls in terms of the existing provision and provide initial recommendations in terms of public transport services.

As the sites progress through the local plan, PRIME Transport Planning and the land owners and their agents will work with Medway Council (MC) to provide more details solutions where necessary.

# EXISTING HIGHWAY INFRASTRUCTURE & PUBLIC TRANSPORT PROVISION General

Hoo St Werburgh is located on the Hoo Peninsula, Medway. The area is a true peninsula with the towns of Wainscott, Strood, Rochester, Chatham and Gillingham to the south-west, the River Thames to the north, the River Medway to the south and the English Channel to the east.

#### Wider Highway Network

#### A228

The A228 is the primary strategic route through the peninsula. It is the primary distributor road connecting the settlements of Grain, Stoke (Upper, Middle and Lower), Allhallows, St Mary Hoo, High Halstow, Hoo St Werburgh and Chattenden to the A289 at the Four Elms roundabout at Wainscott.

The A228 is a two-lane dual all-purpose carriageway between Four Elms roundabout and Ropers Lane where it then becomes a single lane

non-dual carriageway. Residential frontage is limited with the A228 providing a road rather than street function. The majority of its junctions are large roundabouts.

#### 1289

The A289 functions as a semi ring road around Strood and Wainscott running from junction 1 of the M2 in the west to Gillingham though the Medway Tunnel. Like the A228, it is strategic in nature, with limited frontage and functions as a road rather than street. Its junctions to the east and south of Wainscott are large roundabouts, some with left lane separation, while the junctions to the west are grade separated. The A289 connects to the A228 south of Wainscott which connects to the A2 in Strood town centre.

#### Strategic Road Network

The nearest connections to the strategic road network (SRN) are junctions 1 and 2 of the M2 to the west of Strood. PRIME are aware that Highways England (HE) have some concerns with the operational capacity and safety of both junctions and junction 3 further south particularly given the level of growth forecast in Medway and Kent. Following a discussion with HE, the slip roads at junction 1 are understood to be sub-standard based on modern highway design standards.

HE is currently progressing the proposed Lower Thames Crossing (LTC) with the preferred route announced on 12th April 2017. This route, Option C, will connect the A2 from a new junction east of Gravesend to the M25 at a new junction between junctions 29 and 30 via a bored tunnel under the River Thames. A section of this route, known as the western southern link, will connect the A2 to the A226 south of Gravesend which can be reached via the A289.

#### Local Highway Network

There are two local distributor roads that connect Hoo St Werburgh to the A228, both of which form a junction in the village centre. Main Road runs to the west of Hoo while Bell's Lane runs to the north. The speed limit of both roads is 30mph in the vicinity of the settlement with traffic calming in the form of raised crossings and build-outs on Main Road and priority chicanes on Bell's Lane.

Both roads provide residential frontage as well as collecting traffic from minor residential roads and other accesses. The majority of junctions are

priority controlled with some mini-roundabouts also present.

Stoke Road runs north-east from the town centre to Stoke via Kingsnorth. The road is somewhat rural in nature but it does provide frontage access to properties and side roads in the vicinity of the village.

#### Walking

Within Hoo, streetlighting is present and footways are also provided though they are somewhat intermittent. There are sections north of the recent Bellway development on Bell's Lane where footway is not present on one side but it would appear that footway could be provided in the highway verge. Footways along Main Road are more contiguous although there are several sections where they narrow to less than the preferred minimum width of 2m, some of which are due to building constraints while others are caused by street furniture such as streetlighting, signage and guardrails. There may be scope to improve the width of some of these sections. Dropped kerbs and tactile paving are largely provided where they would typically be required, such as across junctions and on crossing desire lines.

Footway on Stoke Road is present on the southern side but is intermittent on the northern side.

In addition to the footways that run alongside the highway, there is a network of off-road footways. There are a number of off-road footways within the settlement that enhance connectivity between residential areas, notably a footpath that runs from Stoke Road to the A228 to the east of the existing residential areas which afford connection to it. Outside of the settlement there are extensive public rights of way that offer leisurely walking routes as well as convenient connections to neighbouring settlements including Chattenden. The Saxon Shore Way is a coastal walking route running south of Hoo St Werburgh connecting the village to Upnor and provides an alternative route to the A228. The majority of these are unsurfaced but could be upgraded as part of the development proposals, particularly those that run through the proposed allocations.

#### Cycling

Cycling facilities in terms of cycle lanes and other facilities in and around Hoo St Werburgh are fairly limited but the volume of traffic on the local roads is generally conducive to cycling. Main Road and a section of Stoke Road form part of National Cycle Route (NCR) 179 which is a circular route connecting Chattenden, Hoo St Werburgh, High Halstow, Cooling, Cliffe and Cliffe Woods to NCN 1, a long-distance route running between Dover and the Shetland Islands. NCN 179 is also known as the Heron Trail and runs largely on-road although there are traffic-free sections between Chattenden and NCN 1 and between Stoke Road and High Halstow.

2011 Census Method of Travel to Work (MTW) data has been interrogated to ascertain where the most popular workplace destinations accessible by cycling are as it is expected that cycling demand from the proposed dwellings are likely to be similar with the exception of the employment proposed as part of the allocations. Over 50% of the midlevel super output area (MSOA) cycling trips from the MSOA that includes Hoo St Werburgh have destinations on the Peninsula. Several of these destinations such as Chattenden and High Halstow can be reached via NCR 179, while other destinations can be reached using local roads but with the high speeds along the A228 not particularly conducive to cycling. Close to 40% of the local cycling trips have destinations in the Medway towns and workplaces to the south-west with half of these trips being to/from the MSOAs that contain Medway City Estate and Wainscott. These destinations are within nationally recognised acceptable cycling distances.

Figure A3.1 is an isochrone showing the areas accessible within 2km and 5km catchments. The figure shows that the whole of Hoo is within the 2km catchment while Chattenden, Kingsnorth, High Halstow, Lower Upnor and parts of Wainscott are within the 5km catchment. The towns just outside of the 5km catchment including Strood, Rochester and Chatham may be within a reasonable cycling distance for some future residents, particularly if future cycling routes are safe and convenient.

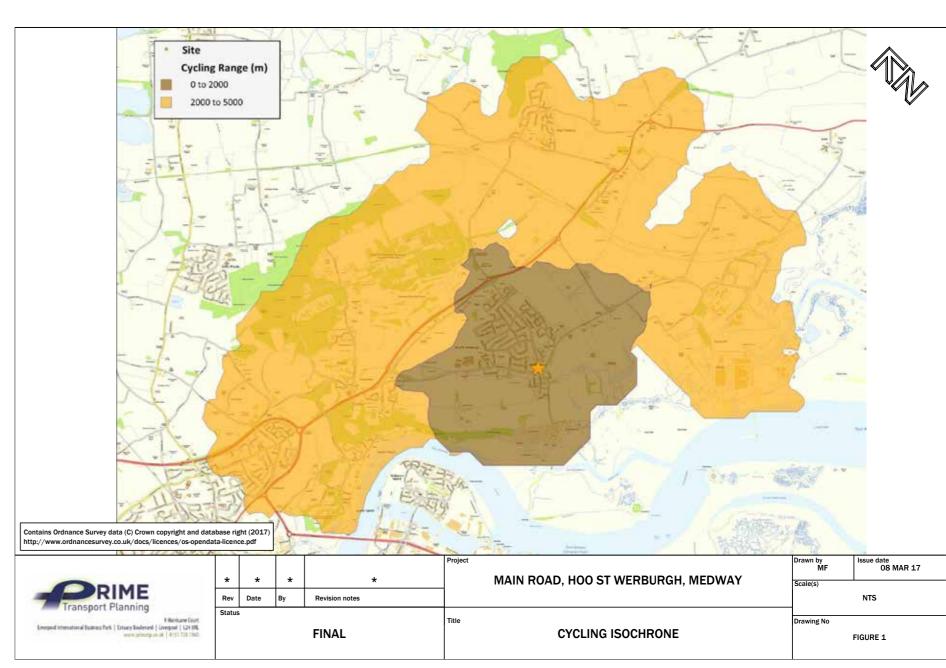


FIGURE A3.1: CYCLING ISOCHRONE

#### PUBLIC TRANSPORT Bus & Coach

A summary of the existing bus services in Hoo St Werburgh is provided in Table A3.1 with the corresponding routes shown in Figure A3.2.

The 191 operated by Arriva is the main service on the peninsula providing two to three services per hour between Gillingham and Grain on weekdays, two to three services per hour on Saturdays and one per hour on Sundays. The 191 service also provides connection to the University of Greenwich Medway Campus and Rochester and Strood train stations, the latter via a short circa 500m walk. The 761/762/765/766 coach services provide 7-8 services to/from central London during weekday commuter peaks. Dedicated school services also run during term time.

A bus catchment plan has been produced for direct services leaving Hoo between 7-9am on weekdays and is shown in Figure A3.3. This shows that High Halstow, Chattenden, Wainscott, Strood and Rochester train station are accessible within a 15-minute journey time, the centre of Rochester and Allhallows in a 15-30-minute journey time, Chatham, Stoke, Wouldham and Grain in a 30-45-minute journey time and St Mary's Island, parts of Gillingham, Eccles and Aylesford in a 45-60-minute journey time.

A coach catchment plan has also been produced for direct services leaving Hoo between 5-9am on weekdays and is shown in Figure A3.4. This shows that Bexley can be reached in a 40-60-minute journey time, Canary Wharf in a 60-80-minute journey time, City of London in an 80-100-minute journey time and Westminster and Victoria Station in a 100-120-minute journey time.

Whilst the current bus and coach service provision is appropriate for the peninsula, it is clear that services will need to be enhanced in order to encourage the use of this sustainable mode of travel.

The 2011 Census MTW data for the local MSOA has been examined which shows that close to

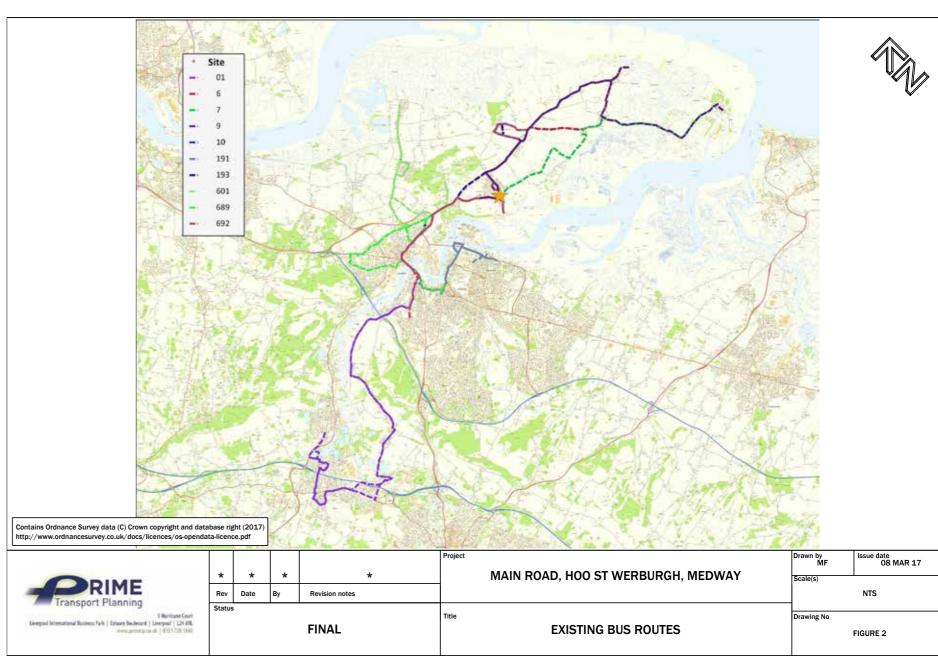


FIGURE A3.2: EXISTING BUS ROUTES

50% of bus trips are made to/from London with around 43% to/from Medway. It is likely that, with the exception of the new jobs that will be created as part of Local Plan employment allocations, the potential residential allocations will follow these patters, therefore bus and coach trips to/from these destinations will need to be enhanced.



BUS SERVICE	DOUTE	WEEKDAY PERIOD			WEEKEND	
BO2 SEKVICE	ROUTE	AM	INTER PEAK	PM	SAT	SUN
1- Farleigh Coaches (School)	Hoo-Rochester-Aylesford- Larkfield-Holmesdale Tech College		1/day		0	0
6/7/9/10 - Arriva (School)	Hundred of Hoo Academy- High Halstow-Allhallows- Grain	4 services	0	3 services	0	0
191/193/796- Arriva	Grain-Allhallows-Hoo- Rochester-Chatham- Gillingham	2/hr	3/hr	2-3/hr	2-3/hr	1/hr
601- Nu- Venture (School)	Cliffe-Lodge Hill-Hundred of Hoo Academy	1/day			0	0
689- Arriva (School)	Earl Estate-Hundred of Hoo Academy	1/day			0	0
692- Arriva (School)	Lower Stoke-Allhallows- Hoo-Rochester Grammar Schools	1/day			0	0
761/762/ 765/ 766 - Clarkes of London	Kingsnorth-Allhallows- Hoo-Strood-Snodland- London	7-8/day			0	0

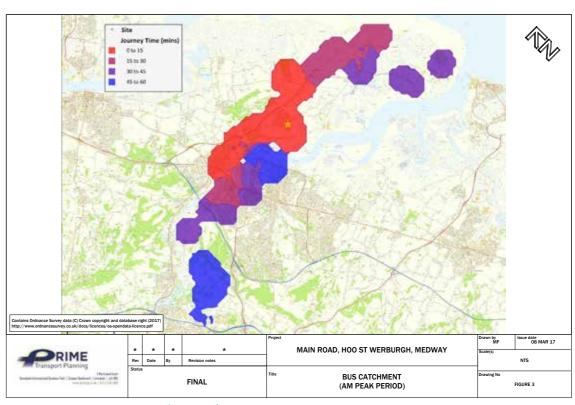


FIGURE A3.3: BUS CATCHMENT (AM PEAK)

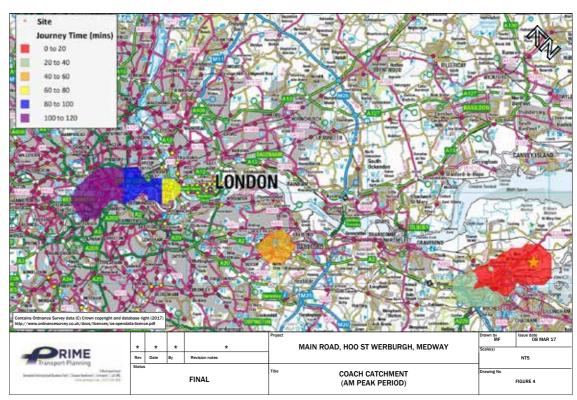


FIGURE A3.4: COACH CATCHMENT (AM PEAK)

#### Rail

Much like the neighbouring Kent area, Medway benefits from high quality and high speed rail services. Strood and Rochester stations are in close proximity to each other, around 4.5 miles south-west of Hoo St Werburgh. Both stations are operated by Southeastern and on the same line. They offer direct connections to London St Pancras International, Gillingham, Ramsgate and Faversham, while Strood also provide services to Tonbridge, Charing and Maidstone with Rochester providing services to London Victoria and Dover Priory.

Both Strood and Rochester stations can be reached in around 20-minutes by bicycle with the former having 48 secure cycle parking spaces and the latter 24. These stations are also accessible by car which can still be considered to be sustainable if as part of a longer journey, but particularly as a car share trip.

A rail catchment plan has been produced for direct services leaving Strood station between 7-9am on weekdays and is shown in Figure A3.5. This shows that Higham, Cuxton and Halling stations can be reached in a 0-15-minute journey time, Gillingham, Snodland, Maidstone, Gravesend and Ebbsfleet in a 15-30-minute journey time, Dartford, Woolwich, Stratford, Finsbury, St Pancras, Wateringbury (Kent), Sittingbourne and Faversham in a 30-45-minute journey time and Greenwich, Sidcup, Tonbridge, Whitstable and Swalecliffe in a 45-60-minute journey time.

While employment opportunities will be generated by potential Local Plan allocations as well as existing opportunities at Kingsnorth Business Park and the Medway towns, a fairly high element of employment demand will be to/from London. This is evident from examination of 2011 Census MTW data for the local MSOA which showed that over 85% of rail trips were to/from the capital. Strood and Rochester stations offer a journey time of roughly 30-45 minutes to London St Pancras with four services per hour from Strood and two per hour from Rochester. Shorter journey times, higher frequencies and lower fares will be available from

Gravesend and Ebbsfleet stations, however these are 9.5 and 13.5 miles from Hoo St Werburgh respectively, which when compared to the two local stations that are only 4.5 miles away, their appeal is likely to be more limited.

Clearly convenient, and preferably sustainable, connections to the local train stations will be essential to support the potential allocations.

### FORECAST DEMAND Existing Modal Split

When forecasting the likely travel demand associated with the potential allocations, it is important to consider the likely modal split across all likely modes of transportation for both residential trips and employment trips. 2011 Census MTW data has been interrogated for the local MSOA and the most common modes of transportation have been compared to the equivalent modes in the South East and England. The proportion of trips by each mode is shown in Figure A3.6.

The local MSOA which contains Hoo St Werburgh has a notably higher proportion of car/van use than both the region and the country. Car use accounts for almost 72% of the trips made locally by the modes listed which compares with 59% and 57% for the South East and England respectively indicating a high level of car dependence. Travel on foot and bicycle are notably lower than the region and country with working at/from home also being lower.

It will be important, in the interests of sustainable travel, for the potential allocations to ensure that transportation mode patterns are more in line with the region and country rather than the existing patterns. Careful land use planning and promotion of sustainable modes of transportation will be essential in order to achieve this. However, it should be remembered that the peninsula nature of the area and distance from potential workplaces may limit the effectiveness of walking and cycling for commuting trips. This places a greater importance on the need for high quality public transport links.

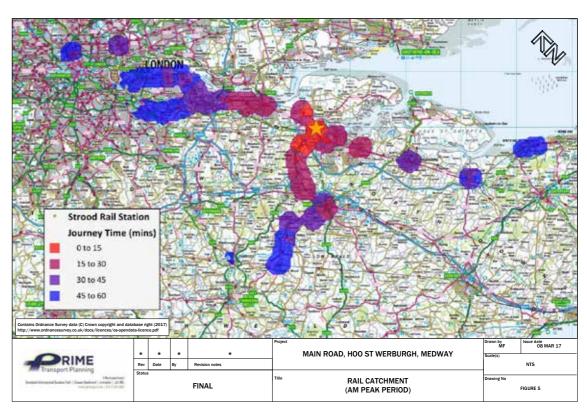


FIGURE A3.5: RAIL CATCHMENT (AM PEAK)

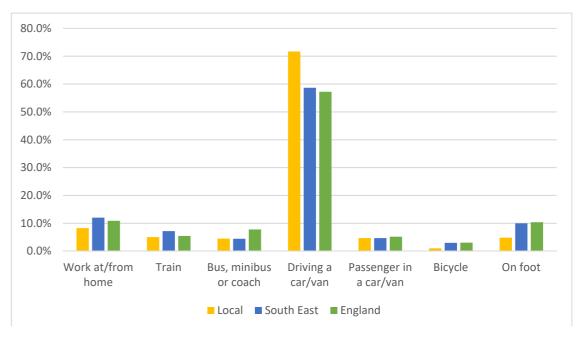


FIGURE A3.6: EXISTING MODAL SPLITS FOR LOCAL MSOA, SOUTH EAST AND ENGLAND

#### **Existing Trip Patterns**

Given the peninsula nature of the area, it is clear that the majority of new trips by car, public transport and bicycle with be to/from areas to the south-west of the peninsula and beyond. This is demonstrated by Table A3.2 below, which summarises the workplace trips by each mode recorded in the 2011 Census that will have an origin/destination outside of the peninsula.

TABLE A3.2:TRIPS EXTERNAL TO THE HOO PENINSULA

MODE	PERCENTAGE (%)			
Car	81.6%			
Bus	93.6%			
Train	100.0%			
Bicycle	47.5%			
All Modes	83.3%			

The figures above demonstrate that there is currently very little containment of trips on the peninsula which is indicative of the limited employment opportunities currently available locally.

The workplace destinations in the census data have been considered. Trips to/from the South East and London account for over 97% of all commuter trips to/from the local MSOA with 50% to/from Medway, 21% to the local authority districts of Dartford, Gravesham, Tonbridge and Malling and Maidstone while trips to/from London account for 19%.

The Department for Transport's (DfT) National Travel Survey reported that in 2015, the average length for commuting trips in England was 9.2 miles. Given that of the areas listed above, only Medway and some of the outlying areas of the local districts are within this distance, indicating that almost half of local residents commute to/ from workplace destinations a greater distance than the national average, with some of these, particularly London, being considerably further away.

Provision of new employment areas will help to contain some traffic to the Peninsula but it should be recognised that there will still be a considerable demand for long-distance commuter trips, with rail commonly recognised as being the most sustainable mode of transportation for such long-distance trips. Therefore, integration with and ease of access to existing and future rail services will be essential.

#### Vehicular Demand

It is understood that MC are developing a strategic traffic model of Medway to understand where improvement measures related to the emerging Local Plan allocations will be required. In the absence of this strategic modelling exercise it is difficult to accurately forecast the traffic implications of the expansion of Hoo St Werburgh. This notwithstanding, it is clear from the above analysis that public transport improvements will need to be central to any transport strategy.

Given the above, the Consortium would seek to work with MC, including in respect of the strategic traffic model exercise, to inform the development of a comprehensive transport and traffic strategy for the expansion of Hoo St Werburgh.

### PUBLIC TRANSPORT ENHANCEMENT Introduction

As stated previously, high quality public transport provision will be required to support the emerging Local Plan growth. National transport planning policy centres on the importance of sustainable transport. Whilst improvements to walking and cycling facilities will be important to the allocations, adequate public transport provision will be essential, particularly given the longer than average distance people on the peninsula travel to work

#### **Bus Provision**

In acknowledgement of the importance of the need for a public transport led strategy, PRIME met with representatives of Arriva, the main operator on the peninsula, on March 1st 2017, to inform them of the proposals and to gauge their initial view on supporting the level of development

proposed. A copy of the meeting minutes is provided in Figure A3.7

Arriva acknowledge their importance to the development proposals and are willing to work with the developers and MC to ensure that a suitable level of bus service provision is made available to not only address the potential level of demand, but to encourage further uptake of bus travel for existing residents.

Arriva understand the long-distance nature of commuting trips to/from the peninsula and respect the need for convenient interchange with National Rail services. They provide Fastrack services to Temple Hill, Dartford, Darent Valley Hospital, Bluewater, Greenhithe, Ingress Park, Swanscombe and Ebbsfleet International Station, accessible from Gravesend as part of a rapid transit system, but feel that such a system would be difficult to implement on the peninsula. Arriva also felt that more local services would be preferable for passengers and believe that Strood station would be the most suitable to connect to given the high-speed services to London St Pancras as well as frequent services to Maidstone and Tonbridge.

Arriva has expressed an early commitment to provide services every 10-minutes between Hoo St Werburgh and Strood station. This level of provision should not only be attractive to existing and future residents but would warrant bus priority measures along the A228 such as bus lanes and bus priority signals. This high frequency would also negate the need to have bus and rail timetables aligned.

In addition to new bus infrastructure, such as bus priority measures and bus stops, smart technology is playing an increasingly important role in bus journey satisfaction. Arriva already adopt technologies such as bus tracker mobile apps and customer wi-fi, both of which enhance the attractiveness of services for customers.

Arriva have also expressed a willingness to provide hopper/dial-a-ride type services and may be able to provide low emission mini or midi vehicles to operate on more localised routes.

#### Rail Provision

It is highly unlikely to be viable to provide new rail infrastructure along the peninsula making bus connectivity to the existing stations, with Strood being preferable, more viable. The proximity of Rochester station to the 191 route would also be a viable interchange point. In addition to bus connectivity, Strood and Rochester stations are within a reasonable cycling distance to Hoo St Werburgh and measures to encourage cycling, such as new cycleways and additional cycle storage facilities at the local train stations, can be considered.

## SUMMARY AND RECOMMENDATIONS Summary

This document has been prepared to provide initial advice on the highways and transport planning strategy required to facilitate the development of circa 6,500 dwellings and other land uses in Hoo St Werburgh.

The existing local and strategic highway network has been considered for both vehicular and non-motorised users as has public transport provision.

Existing travel patterns, particularly to work, have been identified using 2011 census data and compared with regional and national ones. The Hoo Peninsula clearly has unique travel characteristics that differ from the rest of the country and the region. These characteristics are primarily as a result of the peninsula nature of the local area and, while there is scope to encourage the use of more sustainable modes of travel through provision and encouragement and reduce the need to travel through careful land-use planning, there will always be a high demand to/from the other Medway towns and London.

#### Recommendations

At this stage, it is possible to identify some initial highways and transport planning requirement to facilitate the development. These are listed below in order of importance from most important, based on our opinion:

- 1. Work with Arriva to deliver 10-minute bus frequencies between Hoo St Werburgh and:
- Strood and Rochester train stations;
- Strood, Rochester, Chatham and Gillingham town centres; and
- the University of Greenwich Medway Campus.

- 2. Provide bus priority measures along A228 potentially in the form of bus lanes along links and bus gates at junctions;
- 3. Provide new bus routes stops internal to the development sites;
- 4. Work with Arriva to provide hopper/dial-a-ride services;
- 5. Provide cycle lanes and greenways where possible:
- 6. Provide cycle parking at key destinations within Hoo St Werburgh to supplement the provision of cycle lanes and greenways;
- 7. Potentially upgrade the Saxon Shore Way to provide a traffic free cycle route between Hoo St Werburgh and Upnor as an alternative route to the A228.
- 8. Provide additional secure cycle storage at Strood and Rochester train stations;
- 9. Incorporate traffic free walking and cycling routes internal to the development sites;
- 10. Provide new footways in existing highway verges that lack them in Hoo St Werburgh and declutter existing footways;

Integration with Lodge Hill and its transport strategy will need to be considered should the application be approved.



### Meeting with Arriva

Location: Lacon London 84 Theobalds Road, London

Date: Wednesday 1st March 2017

Time: 1:00pm

Attended by: Emma Taylor (ET) – Head of Commercial, Arriva (by phone)

Robert Patterson (RB) – Commercial Development Manager, Arriva David Schumacher (DS) – PRIME Transport Planning (PTP)

Apologies: N/A

Background:

DS set the scene

 PTP is representing a consortia of developers supporting a number of residential developments in Hoo St Werburgh (HSW)/Chattenden through the Local Plan process;

- The Draft Local Plan is out for consultation, the consultation period ending on the 6<sup>th</sup> March 2017 (post meeting note, this has been extended until 10<sup>th</sup> April 2017);
- The developers include Gladman Developments, Dean Lewis Estates, Taylor Wimpey and Church Commissioners for England;
- Church Commissioners for England;
   The total number of dwellings being sought by the above development consortia is circa 6,500;
- There will be a need to provide access to public transport services in the HSW area and it is generally recognised that the bus will play a major role in providing this service especially in the short to medium term; and
- Arriva is the major bus operator in the Medway area and as such PTP is looking for comments/feedback regarding the role that bus travel can play in providing sustainable connections from the HSW/Chattenden area to adjacent towns/places of employment etc.

#### Hoo St Werburgh Development

#### Strategic Bus Access

- With regard to the full development of the wider HSW area, RB envisaged that the 191 service could be used to access the development plots to the south of Peninsula Way;
- With the full development in place this could probably take the form of a 10 minute frequency service;
- This would be supplemented by a new service to serve the development plots to the north of Peninsula Way i.e. the Lodge Hill and Gladman Developments schemes at Chattenden;
- Again, given the quantum of development these areas could also be served by a 10 minute frequency service;
- The main focus of bus services would probably not change too much with locations such as Grain, Stoke and High Halstow being served to the east and Strood, Rochester, Chatham, Dockside Outlet and Gillingham being served to the west, this service also provides connections to a number of universities in the area;
- These locations would also facilitate access to rail services providing connections to destinations further afield, especially London;
- Due to the potential high frequency of these strategic bus services (10 minute frequency) the timetabling of these services would not necessarily have to tie in the timetabling of rail services at the various local stations;
- DS enquired about the Fastrack service Arriva run in Kent providing connections to Ebbsfleet International and whether a similar system would be appropriate in HSW; and
- RB stated that this scheme is a rapid transit system which Arriva operate with dedicated vehicles to run the service, RB thought it would be difficult to deliver such a system in the HSW area.

#### Barriers to Bus Movements in the Area

- RB pointed out that there are a number of capacity constraints on the local highway network which delay buses at the moment, namely Four Elms roundabout and Strood Bridge;
- RB is aware that there are proposals for the upgrade of the Four Elms roundabout as part of
  the growth initiatives in the area, however it is recognised that there is little that can be done in
  relation to Strood Bridge;
- RB pointed out that with the volume of buses to serve the proposed developments suggested
  in the Local Plan, it would help if some form of bus priority measures are provided on the section
  of Four Elms Hill between Four Elms roundabout and the roundabout junction of Peninsula
  Way/Main Road;
- DS suggested that such a measure may require the widening of Four Elms Hill to provide an
  additional lane for the bus priority measures as forecast volumes of traffic were set to rise as a
  result of the various development proposals in the area;
- DS also thought that one of the options was to signalise Four Elms roundabout;
- RB suggested that the inclusion of bus priority measures within the signals would be extremely beneficial:
- RB also suggested that real-time information at bus stops was useful, however Arriva are
  pursuing apps for smart phones as an alternative as this technology is seen to be the way
  forward in relation to providing passenger information; and
- RB suggested that the delivery of the Lower Thames Crossing would be a useful piece of infrastructure in the area and would ease some of the traffic problems local to HSB.

#### Access to Local Bus Services

- DS commented that whilst strategic access could be accommodated by bus services, could Arriva see a role for themselves in operating local services within the HSW area to compliment the more strategic services;
- ET suggested that Arriva would be interested in operating such a service, would need to take
  a look the routing and frequency of services, type of vehicle to be used (just invested in low
  emission minibuses to operate such a service elsewhere), fare structure i.e. free service, flat
  fee etc; and
- Would have envisaged that this type of local service may need S106 funding from developers
  to pump prime with the potential for Arriva taking over the service on a commercial basis at
  some point in the future.

#### Connections to Rail Stations

- ET/RB suggested that residents in the Medway area are likely to want access to destinations further afield, especially London for employment purposes;
- It was also generally recognised that the rail connections in the area would provide for quicker
  access to London and that Strood Station offered the better of the various options for accessing
  these services as Strood Station provides connections to both high speed services to St.
  Pancras and additional services to Maidstone and Tonbridge;
- This was also the nearest station to HSW;
- Whilst it is recognised that the bus stops are some 2 minutes' walk from the station, these bus stops are of good quality and the distance was not seen as a barrier to the use of Strood Station for accessing rail services:
- DS asked if direct access to Strood Station had been considered, RB stated that the road layout in the area was not conducive to buses exiting the station and that providing direct access to Strood Station was not commercially attractive;
- KB went on to comment that should the walk distance between the bus stops and Strood Station
  be seen as a barrier to its use, passengers could stay on the bus for another couple of minutes,
  alighting at Rochester Station instead where bus stops are provided directly outside of the
  station entrance.
- Rochester Station also provides services to London Victoria and Dover Priory;
- Rochester and Strood stations both accommodate 12 car trains;
- DS enquired about bus access to other stations in the area including Gravesend and Ebbsfleet International; and
- ET/RB both commented that both of these stations were too far and that the journey by bus in peak periods could take some considerable time given the congested nature of the routes to these stations from HSW. Ebbsfleet International also does not provide access to connections to Victoria:

#### The Use of Park & Ride

- DS enquired whether P&R would be beneficial from a bus operator's perspective; and
- RB commented that Chatham town centre is quite weak shopping wise so there is potentially a lack of demand and that HSW is probably in the wrong location to offer significant benefits from a P&R perspective.

#### Actions

• DS to keep Arriva informed as to how the potential wider development of HSW progresses.

## APPENDIX 4 - SEWERAGE STRATEGY AND ANALYSIS

## **UTILITY LAW SOLUTIONS**

Outline Foul Drainage Strategy and Analysis

Hoo St Werburgh Expansion

April 2017

#### Outline Foul Drainage Strategy and Analysis - Hoo St Werburgh Expansion

#### **Executive Summary**

Utility Law Solutions (ULS) specialises in the application of water and sewerage law in relation to the housebuilding industry and has been appointed to advise Dean Lewis Estates on foul drainage matters relevant to the expansion of Hoo St Werburgh into a sustainable rural town (the Greater Hoo Development).

The purpose of this report is to outline available options for sewerage and sewage disposal strategies for the proposed development of circa 6,500 dwellings which forms the Greater Hoo Development.

Although the detail of how the Greater Hoo Development will progress is still at an early stage, an understanding of the following has been obtained to provide a high level analysis of how the development as a whole can be drained:

- Details of the individual parcels of land that will form the Greater Hoo Development.
- Details of the general topography of the areas in and around the Greater Hoo Development.
- An understanding of the public sewerage and sewage treatment system which serves the existing settlement of Hoo St Werburgh and the surrounding area.
- Estimated timescales for the progression of the Greater Hoo Development and its inclusion in the emerging local plan.

ULS has been liaising with Southern Water to attempt to determine what steps it may take to ensure that its existing infrastructure will be able to accommodate the needs of this large development.

The emerging options for draining the development can be summarised as follows:

Option 1 – Direct connection of foul water flows from the Greater Hoo Development to the existing public sewerage network, with Southern Water undertaking outline design works to determine how capacity can be provided in the public sewerage system; or

Option 2 – The provision of an onsite sewage treatment facility which is suitable for adoption by Southern Water. The feasibility of this option will become clearer as discussions with Southern Water advance and a better understanding of the existing sewerage system is obtained.

Within Option 1 above, there are essentially two alternative strategies:

- 1. A holistic approach to draining the overall development with developers/owners of individual land parcels working together to devise a mutually beneficial drainage strategy. Such a strategy would seek to avoid as far as possible connection to existing small bore sewers which may require improvement works to accommodate significant additional foul water flows. An initial analysis of the land ownership and topography across the Greater Hoo Development indicates this to be a feasible option.
- 2. Seek to drain individual land parcels separately with connection to the existing public sewerage system local to each site. While this may be technically feasible, adopting this approach may significantly increase the cost of foul drainage for each development parcel due to the sewer upgrade works that Southern Water would seek to secure through the use of planning conditions. A fragmented approach to foul drainage for the Greater Hoo Development, may also impact the ability of Southern Water to provide targeted investment in its next spending period (2020 2025), for upgrading its major assets. This could impact upon the progress of Greater Hoo Development as a whole.

The provision of a new sewage treatment facility as outlined in Option 2 above could be considered if the costs or timing associated with Option 1 began to look unreasonable. Although Option 2 has the potential to give greater control, it is not without its own set of challenges, in particular obtaining a consent from the Environment Agency to discharge treated effluent to the River Medway

This report explores the existing sewerage and sewage treatment systems and the two foul drainage options in more detail below. The Southern Water discussions and new charging rules due in April 2018 are also examined.

#### A. Analysis of the Existing Public Sewerage and Sewage Treatment System

- A.1 The public sewerage network serving the existing settlement of Hoo St Werburgh is a typical village system with relatively small bore foul sewers. It is reasonable to assume that it does not have available capacity for individual new developments of many hundreds (or thousands) of properties and certainly cannot currently meet the needs of an additional 6,500 houses.
- A.2 All foul water flows from public sewers in and around Hoo St Werburgh currently discharge to a large sewage pumping station located to the south east of the existing settlement. The pumping station is located on the site of a former wastewater treatment works that was abandoned some years ago, with the pumping regime described below having been installed in its place.
- A.3 Foul sewage is pumped in a westerly direction via a 250mm rising main (a pipe under pressure) to a 300mm diameter public sewer in Four Elms Hill, Chattenden. This network ultimately outfalls into the Whitewall Creek Wastewater Treatment Works.
- A.4 Southern Water has indicated that it would consider including funds for public sewerage and sewage treatment improvement works in its future spending plans when clarity on the extent of new development on the Hoo peninsular is provided in the settled Local Plan. This would allow for the holistic upgrading of existing assets to be undertaken as required to accommodate foul water flows from the Greater Hoo Development and in all likelihood Lodge Hill (in total around 10,000 new dwellings plus ancillary uses) as construction progresses over a number of years.
- A.5 Whilst it would be practical for Southern Water to invest in improvements to its Hoo pumping station and at the Whitewall Creek Wastewater Treatment Works, clarity on the phasing and timing of individual developments would be required for it to consider what improvements may be necessary to the public sewerage network. For this reason, it may be beneficial to look at how each development parcel can be drained as part of a larger system, avoiding the existing Hoo St. Werburgh network.
- A.6 A further option that Southern Water may consider would be to convert the large pumping station south east of Hoo back to a sewage treatment works to accommodate both existing and proposed foul water flows and abandon the current pumping regime.

# B. Option 1 - Direct Connection of Foul Water Flows from the Greater Hoo Development to the Existing Public Sewerage Network

- B.1 Upgrading of existing public sewerage systems to accommodate new foul water flows is both expensive and time consuming, but where a single small to medium sized development is concerned, there is often no alternative but to make a connection to the nearest public sewer. In the case of the Greater Hoo Development however, it may be feasible to avoid connection of each landowner's development to existing small bore public sewers for some if not all of the individual sites. The capacity of the existing public sewerage system in Hoo St Werburgh is currently unknown but the addition of foul water flows from 6,500 new dwellings would undoubtedly require major and fragmented sewer improvement schemes giving rise to significant disruption within Hoo. Given that each development parcel will be of significant size, each isolated connection is likely to result in the need for separate public sewer improvement schemes should collaboration not take place.
- B.2 Given the extent and connectivity of land ownership and the prevailing topography it appears technically possible to bypass the majority of the existing public sewerage system in Hoo St Werburgh and discharge the foul water flows from the whole of the Greater Hoo Development (excluding Lodge Hill which would need to drain separately) directly to the existing Hoo St Werburgh pumping station described above. This has the advantage of avoiding the potential for expensive and fragmented local upgrading works to the existing public sewer network within Hoo St Werburgh.
- B.3 Preliminary discussions with Southern Water confirmed that in principle, keeping the foul drainage from the Greater Hoo Development contained within a new separate foul drainage system, would be desirable. The plan included at Appendix 1 demonstrates schematically how this might be achieved. The adoptable foul drainage networks from each land parcel could be constructed to allow foul water flows to pass from one development site to another with a final outfall direct to the Southern Water Pumping station noted on the plan. This strategy would require developers of individual parcels to work together in relation to the timing of development and sizing of new assets.
- B.4 In the event that the strategy set out in B.1 to B.3 above proved not to be workable, each development parcel would need to be drained separately into the existing public sewerage system local to each land parcel. Southern Water would attempt to use planning conditions for each separate development to ensure that any resultant public sewer improvement works would be funded by the associated developer. Adopting this approach to foul drainage has the potential to significantly increase the cost of foul drainage for each development parcel.

- B.5 Whilst a fragmented approach to foul drainage for the Greater Hoo Development, would not necessarily prevent Southern Water from investing in major assets, any uncertainty over timing and phasing could cause reluctance in providing investment in its next spending period (2020 2025). Any delay to the upgrading of the Hoo pumping station or Whitewall Creek Wastewater Treatment Works could cause significant delays to the progress of the Greater Hoo Development as a whole.
- B.6 The order and timing of the development of individual parcels of land may create difficulty in progressing an implementable holistic strategy for the Greater Hoo Development. Should this be the case, developers would need to work together and with Southern Water to explore potential interim measures. For example, temporary connections could be made to the local public sewerage network until the surrounding development progresses to a stage where the holistic strategy can be adopted.

#### C. Option 2 - The Provision of an Onsite Sewage Treatment Facility

- C.1 Clearly, each individual development parcel could not have its own dedicated sewage treatment works, it would be necessary to provide a single works for the entire Greater Hoo Development. Again, this would require collaboration between the developers of each site to ensure that an overall drainage network was constructed to outfall into the new sewage treatment works. This would require timing of each development and sizing of assets to be carefully planned. The cost of the new treatment works would also need to be split between the various developers.
- C.2 For a development of this size, a large bespoke sewage treatment works would need to be constructed but this cannot be provided at Day 1. As an interim measure, some form of temporary package treatment plant would be required that has a certain level of modularity, allowing capacity to increase incrementally as development progresses. When the foul water flows reach a certain volume and the final sewage treatment facility has been constructed, the temporary package treatment plant would be abandoned and the flows diverted into the new facility.
- C.3 The ultimate aim would be for the completed treatment works to be adopted by Southern Water. It should be noted that adoptable solutions are significantly more expensive than a commercial treatment plant. A conservative budgetary provision of £10 12m would need to be allocated. The management of the temporary works and the completed works until such time as adoption by Southern Water took place would also need to be considered.
- C.4 The new treatment facility could be sited on land owned by the consortium to the south east of Hoo St Werburgh, possibly in the vicinity of Southern Water's pumping station.
- C.5 The discharge of treated effluent from the new facility into the Medway would need to be consented by the Environment Agency. It is often the case where an existing sewerage network is present that the Environment Agency are reluctant to issue consent for a new treatment works.

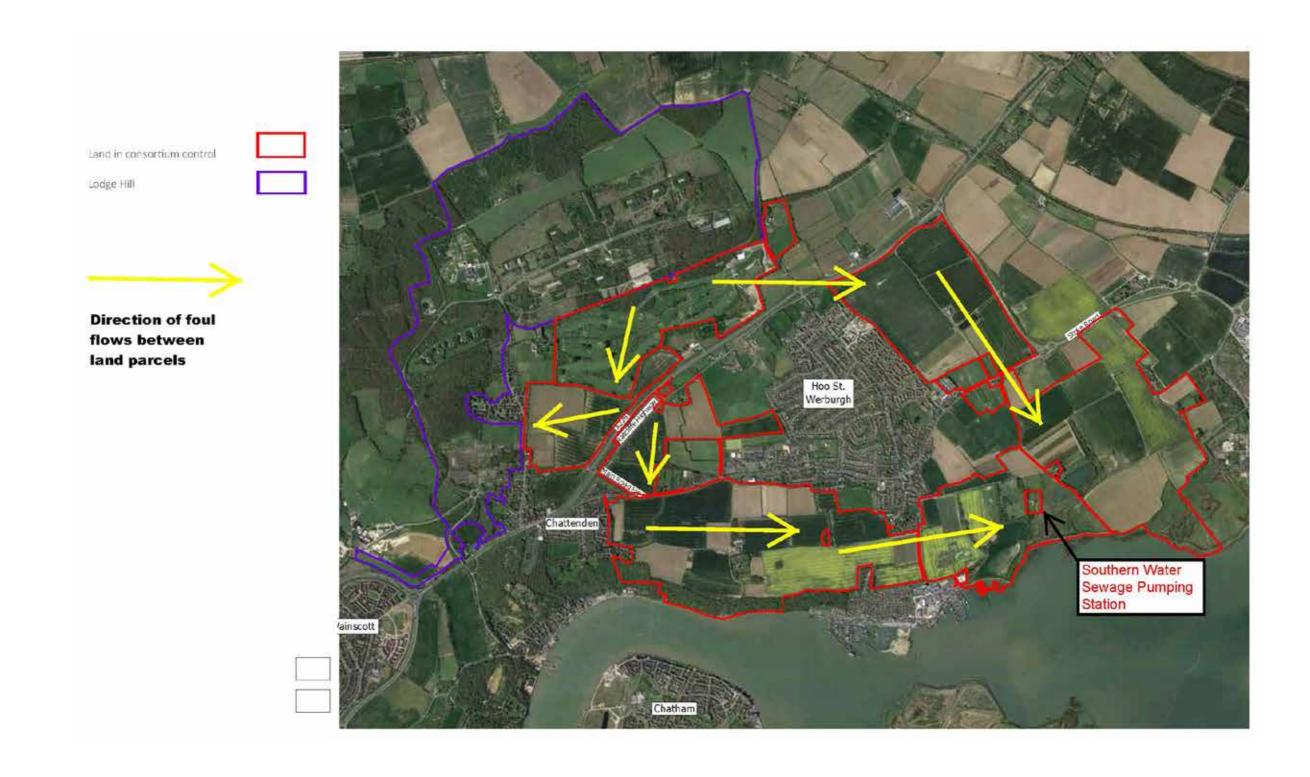
#### D. Discussions with Southern Water and New Water Industry Charging Rules.

- D.1 Preliminary discussions and a meeting have taken place between ULS and Southern Water to seek to confirm a high level foul drainage strategy and understand how the impact of the significant volume of new foul water flows from the Greater Hoo Development would be funded. The email exchanges to date with Southern Water are included at Appendix 2.
- D.2 Southern Water has indicated that it would consider including funds for public sewerage and sewage treatment improvement works in its future spending plans when clarity on the extent of new development on the Hoo peninsular is provided in the settled Local Plan. This would allow for the improvement of existing assets to be undertaken as required to accommodate foul water flows from the Greater Hoo Development as it progresses over a number of years. In all likelihood, this would be restricted to upgrading the capacities at the Hoo St Werburgh pumping station and the Whitewall Creek Wastewater Treatment Works
- D.3 From April 2018, Southern Water will introduce revised charging arrangements for new development. These arrangements will be based on the formal rules set out by Ofwat (the water industry regulator). At this stage, the nature of the new charging arrangements in Southern Water's area is unclear but the intention is that the existing charging methodology should be simplified and become more transparent. A copy of the Ofwat Charging Rules document published in December 2016 is included at Appendix 3.

#### E. Summary

- E.1 The Greater Hoo Development can be drained by discharging all foul water flows to the existing public sewerage network. A collaborative approach between the developers of individual land parcels may be beneficial to avoid the potentially expensive improvement works to the existing public sewer network within Hoo St Werburgh.
- E.2 Southern Water will need certainty of development and its likely timescales before committing to allocating spending for improving critical assets to which the Greater Hoo Development will discharge foul water flows. The developments inclusion in the Local Plan and how its progression fits with Southern Water's Asset Management Plan will be key to this.
- E.3 The construction of a sewage treatment facility to the south east of Hoo St Werburgh which would ultimately be adopted by Southern Water is an alternative drainage solution, but may be too problematic and costly.
- E.4 The new charging arrangements being introduced by Southern Water in April 2018 will need to be reviewed in terms of their impact on the foul drainage strategy for the Greater Hoo Development.
- E.5 The options laid out in this report should be reviewed and revised as the planning of the Greater Hoo Development progresses and further information becomes available.

# **Appendix 1**



# Appendix 2

From: Csatlos, George [mailto:George.Csatlos@southernwater.co.uk]

**Sent:** 29 March 2017 14:14

To: 'Philip Day' <philip.day@utilitylawsolutions.co.uk>

Cc: alex.day@utilitylawsolutions.co.uk Subject: RE: Growth - Hoo Peninsula

Hi Phil.

In terms of the solution required for the development at the moment it is speculative and too early to tell what Southern Water needs to build to accommodate the additional flows. If there is more certainly by this time next year the requirements will be scoped up by the design team to be included in the budget plan.

**Thanks** George

**George Csatlos Senior Project Manager** 



Southern Water, Southern House, Lewes Road, Falmer, Brighton BN1 9PY

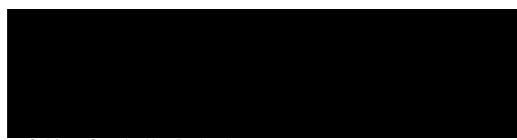
Subject: RE: Growth - Hoo Peninsula

Thanks George

Two follow questions arise from your email if I may and I hope you will have time for a quick response before you go on leave today.

- 1. Are you in effect ruling out the construction of a new sewage works at Hoo?
- 2. If the answer to 1. is yes, then clearly the existing terminal pumping station at Hoo would require significant upgrade works. If as you indicate below, if Southern Water had a clear indication that some 10,000 new homes at Hoo and Lodge Hill were to be included in the Local Plan by this time next year, in addition to improving sewage treatment capacity at Whitewall Creek, would upgrade works at the existing Hoo terminal pumping station also be considered for inclusion in the PR19 BP?

Kind regards, Phil



Subject: Growth - Hoo Peninsula

Phil,

Currently there are a number of treatment works on the Hoo Peninsula, however none have the capacity to serve the magnitude of the proposed development. The next nearest WTW is Whitewall Creek, which would probably need to double its size to accept the proposed development. There is probably sufficient land available at the site to provide the requisite treatment capacity.

In respect of the Local Plan, which is under review, the Lodge Hill development is recognised, the Hoo St Werburgh developments is recognised at 2000 houses only, not the 6,000 mentioned in your previous correspondence.

It is possible that perhaps the first year of development could be accommodated at Whitewall Creek but further optioneering would need to be carried out to understand exactly the location and scope of these works.

The Local Plan will not be adopted until 2019, which is a little late to give surety of development for inclusion of the capacity provision at Whitewall Creek in the PR19 BP. It is possible that we could take a modular approach and provide part capacity is we see any signs of surety. We would need to see these signs this time next year at the latest.

The Interim Sustainability Appraisal states the following for the areas of interest.

#### Lodge Hill

4.24 Lodge Hill has been considered as a potential location that could meet some of Medway's development needs over the plan period. The former military site at Lodge Hill, Chattenden, on the Hoo Peninsula was identified in the mid-1990s as a potential development site in regional planning guidance. Subsequent planning and regeneration policies and programmes have included reference to Lodge Hill in potentially contributing to the development needs of north Kent and Medway. The site was included as a component of Medway's development strategy in the draft Medway Core Strategy. In 2011, Land Securities, working on behalf of the Defence Infrastructure Organisation submitted an outline planning application for a major mixed use free standing settlement, including up to 5000 homes.

4.25 During the examination of the draft Medway Core Strategy in 2012, new information was presented on the ecology interest of the site, specifically

nightingales and grassland. This resulted in the site being designated as an extended Site of Special Scientific Interest (SSSI) in late 2013. The council then withdrew the draft Core Strategy from Examination.

4.26 In 2014, Medway Council's Planning Committee gave its support to the outline planning application. This was on the basis that an effective strategy could be secured and implemented to mitigate and compensate for the potential damage to wildlife features on the site. In considering the planning balance of the proposed development, the council recognised the significant contribution that could be made to the social and economic dimensions of sustainable development, and viewed that the environmental interests could be addressed through the mitigation and compensation strategy. The application was referred to the Secretary of State as a departure from the development plan, and he confirmed his decision to 'Call in' the application for determination through a Public Inquiry. The Public Inquiry has been arranged to start in March 2018.

4.27 In advance of the outcome of the Public Inquiry, the planning status of Lodge Hill is unclear. The council has included consideration of the site as a potential location in the four development scenarios to contribute to Medway's development needs over the plan period.

Further detail on St Werburgh/Lodge Hill in the Sustainability Appraisal states:

- •The potential expansion of Hoo St Werburgh into a small rural town, supporting a range of enhanced services, including secondary, primary and nursery schools and health care, jobs and parks. This small town could serve the wider peninsula. The scale of potential development, up to a maximum of 6500 homes would require significant investment in infrastructure and services to meet the needs of an increased population. However such a significant level of growth would also need investment in higher level services, retail and employment offers, to establish the effective function of a town. Specific provision would be made for countryside and open space resources within the context of a planned rural town. A rural town based around Hoo St Werburgh, could deliver:
- 6500 homes
- Investment in transport
- A new retail centre and employment land
- A secondary school , nursery school and 5 primary schools
- Community facilities, including a Healthy Living Centre, library and community centre
- Open space including play areas and local amenity greenspaces, and two country parks around the Saxon Shore Way and Deangate.

• Lodge Hill is recognised as a potential development location, subject to the outcome of the Public Inquiry scheduled for 2018. If the development of the site is supported by the Secretary of State, planning would be coordinated with the growth of Hoo St Werburgh to achieve complementary and sustainable growth. Lodge Hill is considered to have the potential to provide land for up to 3000 homes, with supporting infrastructure and services, including schools, health and community facilities, retail land and open spaces and country park, within the plan period.

In summary whilst the Sustainability Appraisal report specifies numbers of homes, the Options consultation document does not. The allocation of these sites in the Local Plan is at an early stage, and Southern Water would anticipate that the next version of the Plan submitted for consultation will refine these options and put forward more detailed site proposals, at which point we will comment on infrastructure capacity and request policy provision where necessary. If we had a clear indication that the two development sites were to be included in the Local Plan by this time next year, then Southern Water would consider including some of the required WTW improvements in the PR19 BP.

Kind Regards George

**George Csatlos** 

**Senior Project Manager** 



Southern Water, Southern House, Lewes Road, Falmer, Brighton BN1 9PY

From: Philip Day [mailto:philip.day@utilitylawsolutions.co.uk]

**Sent:** 06 March 2017 10:42

To: 'Csatlos, George' <George.Csatlos@southernwater.co.uk>; 'Davies, Nicholas'

<Nicholas.Davies@southernwater.co.uk>; 'Sharp, Simon'

<Simon.Sharp@southernwater.co.uk>
Cc: alex.day@utilitylawsolutions.co.uk

Subject: Development around Hoo St Werburgh - Hoo Spatial Options and Medway

Local Plan Review

Good Morning All

In preparation for our meeting tomorrow, please find attached a Draft Development Framework plan to give you a feel for the extent/location of the overall development.

In summary, ULS has been engaged to provide a Foul Drainage Strategy and Analysis in relation to a development of circa 6,500 dwellings around Hoo St Werburgh (the Hoo Development). This is part of the Hoo Spatial Options and Medway Local Plan Review. In addition, the Homes and Community Agency may bring forward circa 3000 dwellings at Lodge Hill during the same plan period as the Hoo development. It is possible that ULS may also be instructed to consider the foul drainage arrangements for an additional 3,000 units at Lodge Hill but it is unclear at this stage whether or not the foul drainage strategy for the Hoo Development can be aligned with the foul flows that would arise from Lodge Hill – something we would like to review albeit at very high level at this stage.

It appears that all the foul water flows from public sewers in and around Hoo St Werburgh currently discharge to a single large sewage pumping station. Foul sewage is then pumped in a westerly direction towards the Whitewall Creek Wastewater Treatment Works via a 250mm rising main which outfalls into a 300mm diameter public sewer in Four Elms Hill, Chattenden (see attached OS extract). The pumping station was previously a wastewater treatment works, but was abandoned some years ago and the pumping regime described above was installed in its place. This arrangement presents three distinct options to enable the foul water flows from the Hoo Development to discharge to the existing Southern Water public sewerage and sewage treatment system:-

- Increase the capacity (if necessary) of Southern Waters terminal sewage pumping station at Hoo to accommodate the foul water flows from the Hoo Development together with local public sewer improvements provided as required;
- Replace Southern Waters terminal sewage pumping station at Hoo with a new wastewater treatment works to accommodate both existing and proposed foul water flows and abandon the current pumping regime;
- 3. Collect the foul water flows from the Hoo Development at a new onsite sewage pumping station and convey them to a point of adequacy on the existing public sewerage system.

I would suggest that the aim of the session tomorrow is to:-

- 1. Confirm the accuracy of the general operation local sewerage system outline above:
- 2. examine the three strategic options outlined above and consider their viability at a high level; and
- consider any other alternatives.

Kind regards Phil From: Csatlos, George [mailto:George.Csatlos@southernwater.co.uk]

**Sent:** 21 February 2017 11:35

To: 'Philip Day' <philip.day@utilitylawsolutions.co.uk>

Cc: alex.day@utilitylawsolutions.co.uk

Subject: RE: Development around Hoo St Werburgh - Hoo Spatial Options and

Medway Local Plan Review

Good Morning Phil,

I have already had a conversation internally with regards to this site.

I will check availability and will be sending out a calendar invite for a meeting very soon.

I wonder what would suit you best in terms of location. I am happy to hold the meeting if Chatham if needed.

Regards George

#### **George Csatlos**

**Senior Project Manager** 



Southern Water, Southern House, Lewes Road, Falmer, Brighton BN1 9PY

Subject: RE: Development around Hoo St Werburgh - Hoo Spatial Options and Medway Local Plan Review

Good morning George

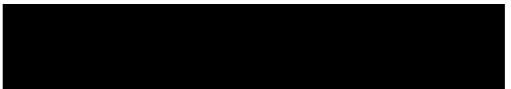
Further to my email below, I was just wondering if you have made any progress with your colleagues.

We have looked at the local sewerage system and it seems that the original sewage treatment works at Hoo was abandoned some years ago and all foul flows are now pumped west towards Whitewall Creek WWTW from a terminal sewage pumping

station via a 250 mm rising main which outfalls into a 300mm sewer in Four Elms Hill. Chattenden.

I look forward to hearing from you.

Kind regards Phil



Subject: Development around Hoo St Werburgh - Hoo Spatial Options and Medway Local Plan Review

Hi George

Further to our discussion in relation to the above, ULS has been engaged to provide a Foul Drainage Strategy and Analysis for the provision of foul sewerage and sewage disposal facilities to serve a development of circa 6,500 dwellings around Hoo St Werburgh (the Hoo Development). This is part of the Hoo Spatial Options and Medway Local Plan Review.

In addition, the Homes and Community Agency may bring forward circa 3000 dwellings at Lodge Hill (the Lodge Hill Development) during the same plan period as the Hoo development. It is possible that ULS may also be instructed to consider the foul drainage arrangements for an additional 3,000 units at Lodge Hill but it is unclear at this stage whether or not the foul drainage strategy for the Hoo Development can be aligned with the foul flows that would arise from Lodge Hill something we would like to review albeit at very high level at this stage.

We envisage that as Stage 1 of our analysis, an initial strategy will be provided which outlines the options that are available to provide sewerage and sewage disposal services to the Hoo Development. You indicated that you would be happy to pull together a meeting to discuss a potential strategy and in particular, it would be helpful at this stage to understand whether or not local capacity could be created or whether a more remote point of adequacy on the public sewerage system is required. As Stage 2 we would currently consider that commissioning S98/SR1 outline design works would be the next step.

We are currently obtaining detailed plans of the areas of land that are proposed to form part of the Hoo Development but in the meantime, attached is an extract from the Medway Local Plan Review which shows edged red the indicative areas which would form part of the Hoo Development together with the Lodge Hill Development.

I hope this is sufficient to get things moving at this stage – could you please circulate this email internally before setting up a meeting. If you could forward some suggested dates that would be most helpful – currently I am reasonably free next week, w/c 27/2 is out, w/c 6/3 I have some availability.

I look forward to hearing from you.

Kind regards Phil

Philip R. Day Director Utility Law Solutions Ltd



Utility Law Solutions Ltd Registered Office: 12 Payton Street, Stratford upon Avon, Warwickshire CV37 6UA Registered in England No. 6072562

# **Appendix 3**

December 2016

Trust in water

## **Charges Scheme Rules**

Issued under sections 143(6A) and 143B of the Water Industry Act 1991



#### WATER SERVICES REGULATION AUTHORITY

#### WATER INDUSTRY ACT 1991, SECTIONS 143(6A) and 143B

#### **Charges Scheme Rules**

#### Introduction

- 1. These rules are issued by the Water Services Regulation Authority under sections 143(6A) and 143B of the Water Industry Act 1991.
- 2. The rules come into effect on 15 December 2016, replacing the rules that came into effect on 17 November 2015.
- 3. The rules apply to water undertakers and sewerage undertakers when they are making a charges scheme.
- 4. The rules are supplementary to statutory provisions that apply to relevant undertakers under any enactment, or instrument made thereunder (including the conditions of their appointments), and in the event of any conflict between the rules and any statutory provision, the latter shall prevail.

#### Interpretation

- 5. Unless the context otherwise requires, in these rules:
  - "charges scheme" means a charges scheme under section 143 of the Water Industry Act 1991;
  - "Charging Year" means a calendar year running from 1 April in a given year to 31 March in the following year;
  - "domestic premises" means any premises used wholly or partly as a dwelling or intended for such use;
  - "Infrastructure Charges" means the charges described in section 146(2) of the Water Industry Act 1991.
  - "metered charge" means a charge for services that are based wholly or partly on measured quantities of volume;
  - "the Minister" means -
    - (a) in the case of an undertaker whose area is wholly or mainly in England, the Secretary of State, and
    - (b) in the case of an undertaker whose area is wholly or mainly in Wales, the Welsh Ministers;
  - "Mogden formula" means the following formula:

Charge per unit of effluent = R + [(V + Bv) or M] + B(Ot/Os) + S(St/Ss)7 where:

**R** = reception and conveyance charge [p/m<sup>3</sup>]

V = primary treatment (volumetric) charge [p/m<sup>3</sup>]

Bv = additional volume charge if there is biological treatment [p/m<sup>3</sup>]

M = treatment and disposal charge where effluent goes to sea outfall [p/m<sup>3</sup>]

**B** = biological oxidation of settled sewage charge [p/kg]

**Ot** = Chemical oxygen demand (COD) of effluent after one hour quiescent settlement at ph 7

**Os** = Chemical oxygen demand (COD) of crude sewage one hour quiescent settlement

**S** = treatment and disposal of primary sewage sludge charge [p/kg]

**St** = total suspended solids of effluent at ph 7 [mg/litre]

**Ss** = total suspended solids of crude sewage [mg/litre]

- "Network Reinforcement" has the same meaning as in the charging rules for new connection services issued by the Water Services Regulation Authority under sections 51CD, 105ZF and 144ZA of the Water Industry Act 1991;
- "new appointee" means a company holding an appointment as a relevant undertaker where the conditions of that appointment limit the charges that can be fixed under a charges scheme by reference to the charges fixed by one or more other relevant undertakers;
- "rateable value charge" means a charge fixed wholly or partly by reference to a
  rating valuation list or otherwise determined, whether directly or indirectly, by
  reference to any value or other amount specified at any time in such a list or
  which purports to be so fixed or determined;
- "rating valuation list" means a list which is or has at any time been maintained, for the purposes of rating, under section 41 of the Local Government Finance Act 1988, section 67 of the General Rate Act 1967 or any other enactment;
- "service" includes the supply of water; and
- "unmetered charge" means a charge for services that are not based on measured quantities of volume to any extent.
- 6. Unless the contrary intention appears, words and expressions used in these rules have the same meaning as in any provision of the Water Industry Act 1991.

#### **Consumer Council for Water**

7. Before making a charges scheme a relevant undertaker must consult the Consumer Council for Water about its proposed scheme in a timely and effective manner.

#### **Bill stability**

8. Undertakers should carry out a proportionate impact assessment whenever the nominal value of bills for a given customer type (assuming a constant level of consumption) is expected to increase by more than 5% from the previous year.

#### **Publication**

- Charges schemes must be published no later than the first working day of the February immediately preceding the Charging Year in relation to which they have effect.
- 10. Charges schemes must be published on a relevant undertaker's website and in such other manner as the undertaker considers appropriate for the purpose of bringing it to the attention of persons likely to be affected by it.
- 11. Where a relevant undertaker has published or fixed standard charges otherwise than under a charges scheme for any services provided by that undertaker, charges schemes must state how customers may obtain a copy of such charges and, if applicable, where on a relevant undertaker's website those charges may be found.

#### Principles for determining the amounts of charges

- 12. Consistent principles and approaches must be applied to the calculation of charges for different classes of customers.
- 13. Charging structures must reflect the long run costs associated with providing the relevant service.
- 14. Charges for services provided to domestic premises must be fixed so that the average difference between metered charges and unmetered charges only reflects any differences in the costs of, and the additional benefits of, the provision of one service relative to the other;
- 15. Differences between charges for services provided to larger users of water and charges for services provided to smaller users of water must only be based on cost differences associated with differential use of network assets, differential peaking characteristics, different service levels and/or different service measurement accuracy.
- 16. Where cost differences associated with differential peaking characteristics are used as a basis for differences between charges for services provided to larger users of water and charges for services provided to smaller users of water, the charges fixed on that basis must be structured on an appropriate peak demand basis.
- 17. Charges for sewerage services must take into account the different pollutant loads associated with household foul sewage, non-household foul sewage, trade effluent, surface water draining from premises and surface water draining from highways.

#### **Assessed charges**

18. Charges schemes must allow a customer to choose to pay an assessed charge determined in accordance with this rule in the specified circumstances:

- (a) The type and amount(s) of an assessed charge must be determined in accordance with the following principles:
  - (i) assessed charges should, as closely as practicable, reflect the metered charges that would apply in relation to the volume of water that is likely to be supplied; and
  - (ii) the amount of an assessed charge payable by an individual who is the sole occupier of domestic premises (a single occupier assessed charge) should reflect the volume of water that is likely to be supplied to domestic premises occupied by one individual in the relevant area.
- (b) The specified circumstances for the purposes of this rule are where a water undertaker has received a measured charges notice in accordance with section 144A of the Water Industry Act 1991 but was not obliged to give effect to it because:
  - (i) it is not reasonably practicable to fix charges in respect of the premises by reference to the volume of water supplied; or
  - (ii) to do so would involve the incurring by the undertaker of unreasonable expense.

#### **Unmetered charges**

- 19. Charges schemes that include any unmetered charges must clearly state the basis on which those charges are fixed or determined and, in the case of rateable value charges, state:
  - (a) which rating valuation list charges are fixed or determined by reference to; and
  - (b) if the undertaker uses a different value or other amount to that specified in such a list, the methodology or other basis on which that different value or other amount is calculated.

#### Wastewater charges

- 20. Sewerage undertakers' charges schemes must provide for a cost reflective reduction in the charges payable for the provision of sewerage services to any premises where the sewerage undertaker knows, or should reasonably have known, that surface water does not drain to a public sewer from those premises.
- 21. Sewerage undertakers must set out in their charges schemes how any reduction in the charges payable for the provision of sewerage services to any premises will be calculated if customers can demonstrate that they have significantly reduced the volume of surface water draining to a public sewer from their premises or explain why there is no such provision.

#### **Trade effluent**

22. Charges to be paid in connection with the carrying out of a sewerage undertaker's trade effluent functions must be based on the Mogden formula, a reasonable variant of the Mogden formula or on a demonstrably more cost-reflective basis.

#### Social tariffs / Concessionary drainage charges

- 23. Charges schemes must state:
  - (a) whether or not undertakers have decided to include in the charges scheme:
    - (i) provision designed to reduce charges to community groups in respect of surface water drainage from their property (having had regard to any guidance issued by the Minister under section 43 of the Flood and Water Management Act 2010);
    - (ii) provision designed to reduce charges for individuals who would have difficulty paying in full (having had regard to any guidance issued by the Minister under section 44 of the Flood and Water Management Act 2010);
  - (b) if any such provision is included, how eligible customers can apply for such reduced charges.

#### Times and methods of payment

24. Charges schemes must include provisions giving customers a reasonable choice as to the times and methods of payment of the charges fixed by the scheme.

#### **New appointees**

25. Rule 9 does not apply to new appointees. Instead new appointees must publish charges schemes no later than the 22 February immediately preceding the Charging Year in relation to which they have effect.

#### Infrastructure charges (English undertakers)

- 26. Each relevant undertaker whose area is wholly or mainly in England must fix Infrastructure Charges in a charges scheme.
- 27. Infrastructure Charges must be determined in accordance with the principle that the charges should reflect:
  - (a) fairness and affordability;
  - (b) environmental protection;
  - (c) stability and predictability; and
  - (d) transparency and customer-focused service.
- 28. Infrastructure Charges must be determined in accordance with the principle that the amount of such charges will over each period of five consecutive Charging Years ending on 31 March 2023 and, thereafter, on 31 March in each subsequent year

cover the costs of Network Reinforcement that the relevant undertaker reasonably incurs, less any other amounts that the relevant undertaker receives for Network Reinforcement.

- 29. Charges schemes must include a clear methodology explaining how Infrastructure Charges have been calculated.
- 30. For the avoidance of doubt, Infrastructure Charges must not relate to the costs of reinforcing, upgrading or otherwise modifying existing network infrastructure in order to address pre-existing deficiencies in capacity or in capability unrelated to a requisition under sections 41(1) or 98(1), to the adoption of infrastructure under a section 51A or 104 agreement or to connections described in section 146(2) of the Water Industry Act 1991.
- 31. Infrastructure Charges may be set as a fixed charge per connection or calculated in accordance with a formula. As long as the difference between amounts is cost-reflective, the amounts of Infrastructure Charges may vary to reflect different circumstances and, in particular, may be different for different geographical areas.
- 32. In making charges schemes, each relevant undertaker must ensure that:
  - a) Charges schemes clearly set out how Infrastructure Charges have been calculated;
  - b) The amount of Infrastructure Charges applied in respect of the modification or redevelopment of existing buildings or premises is determined in accordance with the principle that the amount must take due account of any previous usage in the 5 years before the modification or redevelopment began (including supplies of water that were not for domestic purposes and drainage that was not for domestic sewerage purposes) associated with the buildings and/or premises to which the charges are to be applied and be discounted accordingly; and
  - c) Charges schemes clearly explain the methodology to be applied for determining a discount to reflect previous usage.
- 33. Rules 26 to 32 above do not apply to:
  - a) new appointees; or
  - any charges scheme that has effect in relation to a period ending before 1 April 2018.

### **Annex: Information requirements**

- A1 Each undertaker should provide to the Water Services Regulation Authority an assurance statement from its Board of Directors and publish its statement no later than the time of publication of the charges schemes confirming that:
  - the company complies with its legal obligations relating to the charges set out in its charges schemes;
  - (b) the Board has assessed the effects of the new charges on customers' bills for a range of different customer types, and approves the impact assessments and handling strategies developed in instances where bill increases for particular customer types exceed 5%;
  - (c) the company has appropriate systems and processes in place to make sure that the information contained in the charges scheme, and the additional information covered by this annex is accurate; and
  - (d) the company has consulted the Consumer Council for Water (CCWater) in a timely and effective manner on its charges schemes.
- A2 With the exception of Cholderton and District Water and new appointees, each undertaker should provide to the Water Services Regulation Authority a statement setting out any significant changes anticipated by the undertaker, and publish the statement, at least three weeks before the publication of the charges schemes. The statement should include the following.
  - (a) Confirmation of whether the undertaker is expecting there to be any bill increases of more than 5% from the previous year (for a given customer type assuming a constant level of consumption) and, if such increases are expected:
    - what size increase is expected;
    - (ii) which customer types are likely to be affected; and
    - (iii) the handling strategies adopted by the company or why the company considered that no handling strategies are required.
  - (b) Details of any significant changes in charging policy by the company from the previous year.
- A3 In addition to the assurances set out in A1 above, new appointees' assurance statements must include assurance that their charges schemes offer:
  - levels of service at least comparable to the previous appointee's charges scheme;
  - (b) prices that do not exceed those in the previous appointee's charges scheme for similar services; and
  - (c) prices equivalent to those specified in the new appointee's application for each individual appointment or variation area.