

**Habitat Regulations
Screening Report**

**Land at North West
Sittingbourne
(MU 1)**

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LIABILITIES:

Whilst every effort has been made to guarantee the accuracy of this report, it should be noted that living creatures are capable of migration and whilst protected species may not have been located during the survey duration, their presence may be found on a site at a later date.

The views and opinions contained within this document are based on a reasonable timeframe between the completion of the survey and the commencement of any works. If there is any delay between the commencement of works that may conflict with timeframes laid out within this document, or have the potential to allow the ingress of protected species, a suitably qualified ecologist should be consulted.

It is the duty of care of the landowner/developer to act responsibly and comply with current environmental legislation if protected species are suspected or found prior to or during works.

1.0 Introduction

Background

- 1.1 The Ecology Partnership Ltd was commissioned by Persimmon Homes, Redrow and G H Dean and Co Ltd to undertake a Habitats Regulations Screening Assessment of the development proposed on land at north west Sittingbourne. Proposals are for a new residential development of a minimum of 1,500 units with associated parking and infrastructure, community facilities including primary and secondary schools and 22 ha of greenspace across three sites. The proposals are defined by Policy MU 1 under Bearing Fruits 2031: The Swale Borough Local Plan (2017).
- 1.2 An initial Preliminary Ecological Appraisal was undertaken by The Ecology Partnership in 2012. Since the initial survey was undertaken subsequent species specific surveys including eDNA surveys for great crested newts, bat surveys (remote sound recording and transect surveys), reptile surveys, breeding bird surveys and winter bird surveys across the site have been completed. The results of these have been discussed in separate reports and summarised in Environmental Statements accompanying the planning applications submitted for developments across the Allocation.
- 1.3 The Ecology Partnership have been instructed to review the proposed developments and illustrative masterplans with regards to the Habitat Regulations due to the Allocation being located approximately 850m south of the Swale SPA and Ramsar site and 1.9km of the Medway Estuary and Marshes SPA, Ramsar and SSSI. No additional internationally designated sites are present within 10km of the red line boundary of the site and therefore no further internationally designated sites have been included within this assessment.
- 1.4 Section 2 of this report sets the legislation by which the designated sites are protected and describes 'significance' and 'impacts' in relation to development and the designated sites. Section 3 reviews the Local Plan policies in terms of the Habitats Regulations. Section 4 looks at the site which is proposed for development. Section 5 addresses potential impacts,

with section 6 assessing mitigation methods. Finally, conclusions are provided in section 7.

Site Context and Status

- 1.5 The site is located to north west of Sittingbourne, bound by the A249 on the western boundary and residential development to the east and south. The Sittingbourne - Sheerness Railway forms the eastern boundary of the site. Figure 1 below shows the approximate red-line boundary of the site and its immediate surrounds.



Figure 1: Approximate red line boundary of the site which covers the whole MU1 area

- 1.6 The allocated site is subdivided into component parts as shown in figure 2 below, taken from the development framework.

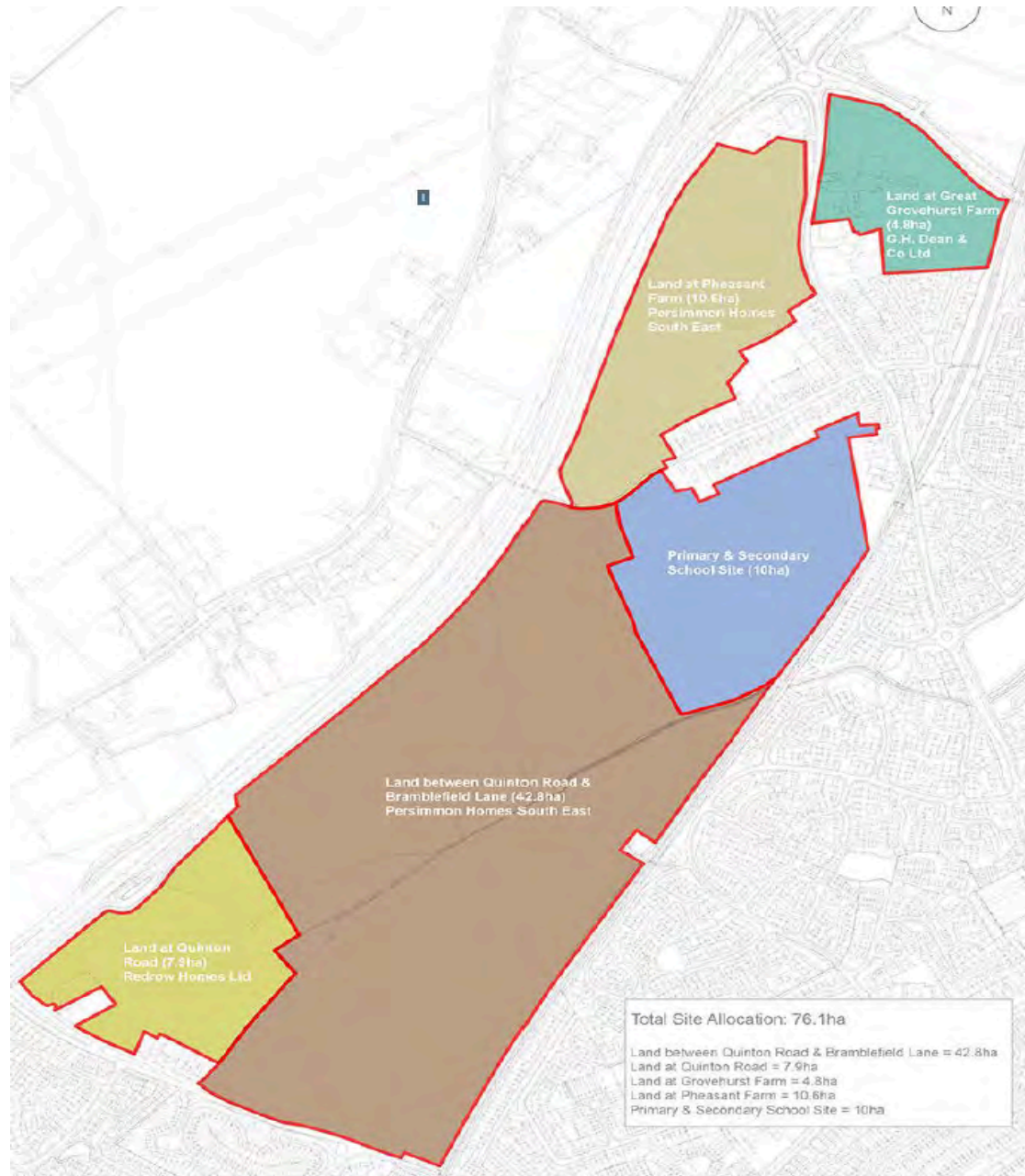


Figure 2: The allocation is divided into component parts; Land at Great Grovehurst Farm (GH Dean & co ltd), Land at Pheasant Farm (Persimmon Homes South East), land between Quinton Road and Bramblefield Lane (Persimmon Homes South East), the primary and secondary school site, and Land at Quinton Road (Redrow Homes ltd)

2.0 Legislation

- 2.1 To the north of the site lies the Swale SPA and Ramsar site. This lies approximately 850m north of the Great Grovehurst Farm section of the site and is separated from the site by the B2005 and a transport hub. Medway Estuary and Marshes SPA and Ramsar lie adjacent to the Swale, approximately 1.9km from the northern most aspect of the site, and form a continuous extensive habitat.
- 2.2 It is therefore considered that an assessment of the likely impacts of this development on these sites is undertaken. These areas are protected by the Habitats Directive (EC Directive 92/43/EEC on the Conservation of Natural and Semi-Natural Habitats and of Wild Fauna and Flora) and the Habitats Regulations (The Conservation (Natural Habitats &c.) Regulations 1994).
- 2.3 In Great Britain, the Habitats Regulations implement the requirements of the Habitats Directive. The Regulations aim to protect sites in the UK that have rare or important habitats and species in order to safeguard biodiversity. Under these Regulations, the LPA have a duty to assess whether there is a risk of any plan or proposal having a significant impact on the integrity of the SPA and Ramsar.
- 2.4 The need for Appropriate Assessment is set out within Article 6 of the EC Habitats Directive 1992, and interpreted into British law by the Conservation (Natural Habitats &c) Regulations 1994 (as amended in 2007). Under these Regulations, land use plans must be subject to Appropriate Assessment if they are likely to have a significant [adverse] effect on a Natura 2000 site Special Areas of Conservation, (SAC) and Special Protection Areas, (SPA).
- 2.5 The Habitats Directive applies a precautionary approach to protected areas and as such plans and projects can only be permitted once it is ascertained that there will be no adverse effect on the integrity of the site(s) in question. Projects may be granted permission if there are no alternatives to them and there are Imperative Reasons of Overriding Public Interest

(IROPI), such as large infrastructure development proposals etc. In such cases, compensation would be necessary to ensure the overall integrity of the site network.

2.6 In order to assess the likely significance of a site(s) and the site(s) integrity being affected an assessment under the Habitat Regulations is required. The first stage of the assessment is 'screening' the proposals.

2.7 The purpose of the Appropriate Assessment Screening is to analyse likely significant effects, as well as those effects, which were uncertain or not well understood and taken forward for assessment in accordance with the precautionary principle. The assessment should seek to establish whether or not the plans effects, either alone or in combination with other plans or projects, will lead to adverse effects on site integrity, in view of the sites conservation objectives. Site integrity can be described as follows (ODPM, 2005b):

"The integrity of a site is the coherence of its ecological structure and function, across its whole area, that enables it to sustain the habitat, complex of habitats and/or the levels of populations of the species for which it was classified."

2.8 Natural England (NE) guidance on determining likely significant effect states that;

'Likely significant effect is, in this context, any effect that may reasonably be predicted as a consequence of a plan or project that may affect the conservation objectives of the features for which the site was designated, but excluding de minimis or inconsequential effects'

And furthermore;

"The 'significance test' is a coarse filter intended to identify which proposed plans and projects require further assessment. It is the first stage of the process, and is distinct from the appropriate assessment of 'adverse effect on integrity'... Proposals having no, or de minimis, effects can be progressed without further consideration under the Habitats Regulations although reasons for reaching this decision must be justified and recorded" (English Nature, 1999).

- 2.9 This initial determination is intended to ensure that all relevant plans and projects likely to have a significant effect on European sites are subject to an appropriate assessment. The notion of what is significant needs to be interpreted objectively. The significance of effects should be determined in relation to the specific features and environmental conditions of the site concerned, taking particular account of the site's conservation objectives.
- 2.10 The following is a list of examples of types of effects that are likely to be significant and therefore need to be considered more fully. Effects must be considered for both on site effects as well as off site and indirect effects, as well as alone and in combination with other projects.
- Causing damage to the coherence of the site or to the Natura 2000 series (for example, presenting a barrier between isolated fragments, or reducing the ability of the site to act as a source of new colonisers);
 - Causing reduction in the area of habitat or of the site;
 - Causing direct or indirect change to the physical quality of the environment (including the hydrology) or habitat within the site;
 - Causing ongoing disturbance to species or habitats for which the site is notified;
 - Altering community structure (species composition);
 - Causing direct or indirect damage to the size, characteristics or reproductive ability of populations on the site;
 - Altering the vulnerability of populations/habitats to other impacts;
 - Causing a reduction in the resilience of the feature against external change (for example its ability to respond to extremes of environmental conditions);
 - Affecting restoration of a feature.
- 2.11 Where it was considered not possible to 'screen out' the developments, alone or in combination, it is necessary to progress to the later 'Appropriate Assessment' stage to explore the adverse effects and devise mitigation. This will include addressing the following issues:

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- Identify the effects of the proposal on the European site features and how those effects are likely to affect the site' conservation objectives.
 - Decide whether the plan or project, as proposed, would adversely affect the integrity of the site in the light of the conservation objectives.
 - Consider the manner in which the plan or project is proposed to be carried out, whether it could be modified, or whether conditions or restrictions could be imposed, so as to avoid adverse effects on the integrity of the site.
 - Conclude whether the plan or project, as modified by conditions or restrictions, would adversely affect the integrity of the site.
 - Where the plan or project is assessed as having an adverse effect on the integrity of the site alternative solutions should be considered and where appropriate a re-assessment undertaken.

2.12 Therefore, there are three stages that are considered:

- **Stage 1 – Likely Significant Effects:** identifying if the plan is likely to have a significant effect on a European Site either alone or in combination with other plans and projects
- **Stage 2 – Appropriate Assessment:** if significant effects are anticipated, identifying the implications of the plan on the integrity of the relevant European Sites in view of their conservation objectives. This stage is intrinsically linked to Stage 3 as the adoption of mitigation measures will influence the conclusions of the Appropriate Assessment.
- **Stage 3 – Mitigation Measures and Alternative Solutions:** identifying mitigation measures to avoid adverse effects or developing alternative solutions in cases where it is not possible to avoid these.

Scope and Objectives

2.13 The Ecology Partnership Ltd has been instructed to undertake an assessment for the proposed developments at North West Sittingbourne which forms land allocated in Bearing Fruits 2031, under Policy MU 1.

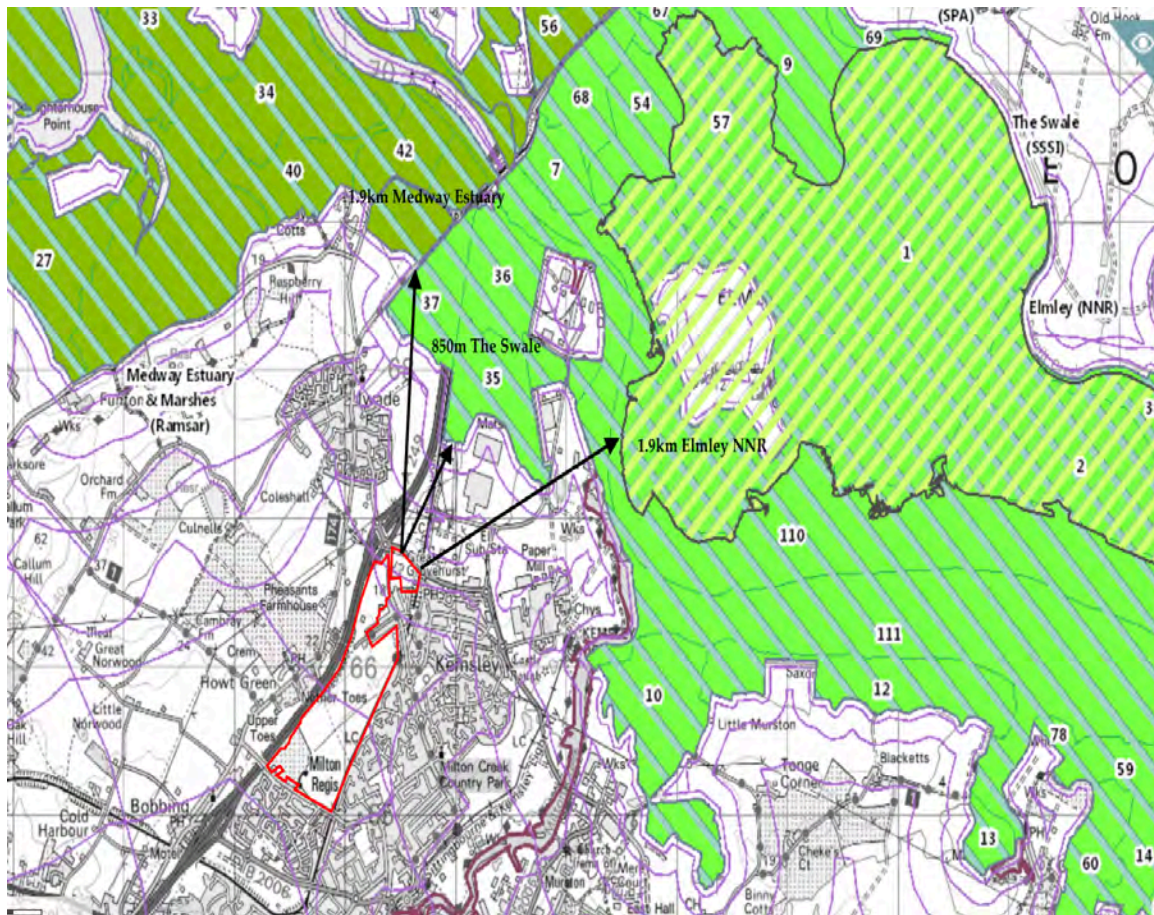
- 2.14 This report identifies the proposals for the Allocation and the significance of these proposals in terms of the protected sites. A description of the site and the development proposals are presented within this report.

3.0 Review of Policy and Legislation with regards to Protected Areas

- 3.1 A review of literature, including Local Plan policies and other Policies and Legislation, which should be considered as part of the assessment, is included within this section of the report.

Protected Areas

- 3.2 The Swale SPA and Ramsar: The Swale is an estuarine area that separates the Isle of Sheppey from the Kent mainland. This site qualifies under **Article 4.1** of the Directive (79/409/EEC) by supporting populations of European importance of the following species listed on Annex I of the Directive: Breeding season avocet (*Recurvirostra avosetta*), marsh harrier (*Circus aeruginosus*), Mediterranean gull (*Larus melanocephalus*), and over winter; avocet, bar tailed godwit (*Limosa lapponica*), golden plover (*Pluvialis apricaris*), hen harrier (*Circus cyaneus*), black tailed godwit, grey plover (*Pluvialis squatarola*), knot (*Calidris cantus*), pintail (*Anas acuta*), redshank (*Tringa tetanus*) and shoveler (*Anas clypeata*) and for migratory birds; ringed plover (*Charadrius hiaticula*).
- 3.3 The Medway Estuary and Marshes forms a single tidal system with the Swale and joins the Thames Estuary between the Isle of Grain and Sheerness. It has a complex arrangement of tidal channels, which drain around large islands of saltmarsh and peninsulas of grazing marsh. This site qualifies under **Article 4.1** of the Directive (79/409/EEC) by supporting populations of European importance of the following species listed on Annex I of the Directive: breeding season avocet and little tern (*Sterna albifrons*) and over winter the avocet, black tailed godwit, dark bellied brent goose (*Branta bernicla bernicla*), dunlin, grey plover, pintail, redshank, ringed plover and shelduck, on passage ringed plover. The site also qualifies under **Article 4.2** of the Directive (79/409/EEC) by regularly supporting at least 20,000 waterfowl.



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Figure 2: Location of the red-line boundary of the site in relation to the Swale and Medway Estuary and Elmley NNR.

National Planning Documentation

3.2 National policy guidance is provided by National Planning Policy Framework (NPPF), which sets out the Government's planning policies for England and how they should be applied. Section 11 of the document is entitled 'Conserving and Enhancing the Natural Environment'.

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- 3.3 In relation to development several sections are considered to be relevant and includes the following:

(110) 'In preparing plans to meet development needs, the aim should be to minimise pollution and other adverse effects on the local and natural environment. Plans should allocate land with the least environmental or amenity value, where consistent with other policies in this Framework.'

- 3.4 In terms of development, biodiversity must be considered and the creation of ecologically rich habitats and the protection of others must be considered as part of development. Indeed, this is stated further;

(114). 'Local planning authorities should: [1] set out a strategic approach in their Local Plans, planning positively for the creation, protection, enhancement and management of networks of biodiversity and green infrastructure...'

- 3.5 In relation to sites of ecological interest (SSSIs, SPAs, SACs and Ramsar sites) and including candidate areas of interest the following must also be considered;

(118). 'When determining planning applications, local planning authorities should aim to conserve and enhance biodiversity by applying the following principles: [1] if significant harm resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;.....[4] opportunities to incorporate biodiversity in and around developments should be encouraged....'

And;

(119). 'The presumption in favour of sustainable development (paragraph 14) does not apply where development requiring appropriate assessment under the Birds or Habitats Directives is being considered, planned or determined.'

Local Policy

- 3.6 Swale Borough have recently adopted their new local plan. Through the preparation and examination of the new local plan, policies contained within, including site allocations, transport, waste and water, have all been assessed in terms of potential impacts, or likely significant impacts, which may arise.
- 3.7 Policies have evolved over the Local Plan examination. This has led to several iterations of the Local Plan and wording and policies associated with allocated sites. A review of the evolving nature of the Local Plan has been made below. This concludes with the final adopted Plan and wording for the MU 1 allocation.

2013 – Consultation Draft Swale Borough Local Plan

- 3.8 In November 2013 URS undertook an HRA of the Swale Borough Local Plan, Part 1: Revised Consultation draft 2013. That HRA was circulated in November 2013 to Natural England, RSPB and Kent Wildlife Trust for comment. Natural England concurred with the conclusions of the HRA. Draft amendments included the removal and addition of new land allocations and re wording of some of the policies.
- 3.9 During the examination of the Swale Borough Local Plan Part 1: Bearing Fruits 2013 a review of The Habitats Regulations Assessment Mitigation measures (ST1, CP7, 7.7.43 – 7.7.81, Statement 9, DM28) proposed by the council confirmed the development of a Strategic Access and Management and Monitoring Strategy (SAMMS) was being implemented. This also confirmed that the council had been working with Natural England to ensure that the zoning (impact zones), including areas which need to be considered as ‘in combination’ were adequately addressed.
- 3.10 The Thames, Medway & Swale Estuaries SAMMS was being developed alongside the Local Plan by Swale Borough Council in consultation with Natural England, Swale Borough Council and other partners of the North Kent Environmental Planning Group

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- (NKEPG¹). The development of the strategy was based on the best available information including visitor surveys, bird counts, best practise and specialist advice. This in turn supported the new local plan policy DM28.
- 3.11 This policy was consulted upon and the Environment Agency, Kent County Council, the RSPB and the Kent Wildlife Trust were all actively involved in the development of the policy through the preparation of the Local Plan. During the 2013 draft Local Plan consultation support for this policy was received from Natural England, Protect Kent (CPRE) and the Faversham Society. The RSPB and KWT also welcomed the policy in 2013 and suggested amended wording to better reflect the Habitats Regulations 2010. This wording was fully incorporated into the submission version of the Local Plan. The Environment Agency and CPRE supported this policy as set out in the submission version of the Local Plan and considered the policy to be sound. There were no objections to Policy DM28 in the submission version of the plan.
- 3.12 The new local plan Policy CP7 sets out how likely recreational disturbance impacts on overwintering bird interest from new residential development identified in the Local Plan will be avoided on European sites through strategic mitigation. The Policy states its intention to support the implementation of the mitigation as a partnership between the North Kent local authorities. Policy DM28 provides the basis upon which to address the issue at the planning application level.

2014 – Publication Version Swale Borough Local Plan

¹ NKEPG consists of Swale, Canterbury, Medway, Gravesham, Dartford and Kent Councils, along with Natural England, the Environment Agency, Kent Wildlife Trust and the RSPB.

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- 3.13 In 2014 URS produced the Swale Borough Local Plan Part 1 Publication Version of the Habitats Regulations Assessment Screening draft. The scope of the HRA included the Swale SPA/ Ramsar, Medway Estuary and Marshes SPA / Ramsar, Queendown Warren SAC, Blean Complex SAC and the outer Thames Estuary SPA. The in combination scope of the HRA included the Swale Local Plan in combination with other plans, including water resource management plans, Medway LDF, Canterbury Draft Local Plan, transport plans and minerals and waste plans.
- 3.14 Queendown Warren and the Blean complex were scoped out of the HRA and it was considered that no likely significant effect of the Swale Local Plan will arise either alone or in combination with other projects and plans with regards to these habitats.
- 3.15 With regards to allocated sites within 100m of the Swale SPA / Ramsar, for these sites the risk was of disturbance of SPA birds at the most sensitive periods (generally October to February for wintering birds, although the most sensitive period for breeding marsh harrier is the spring), or direct incidental damage to the site or effects on drainage and water quality into the SPA/Ramsar site, if construction work takes place without adequate controls (such as minimising winter construction activity and where it cannot be minimised using close-board fencing, damped piling and other measures set out in British Standards guidance to reduce noise to non-disturbing levels). It was recommended that the policies for these sites include specific reference to the proximity of the European designated SPA/Ramsar site and stipulate the need for planning applications to include protocols for avoiding disturbance and other adverse effects on the integrity of the European designated SPA/Ramsar site during the construction process. North west Sittingbourne allocation was not identified as having potential direct impacts such as those discussed above.
- 3.16 The review of the local plan identified policies which had the potential to increase recreational pressure on both The Swale and Medway Estuary and Marshes SPA/Ramsar. As such recommendations to mitigate these included; creation of greater distances between development and the SPA /Ramsar sites, secure bird roosts sites, provided

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- additional green infrastructure, raising awareness, enhanced wardening presence, improved signage and modifications to existing car parking areas. As a result of this, alongside bird disturbance surveys (see below), the SAMMS strategy was developed.
- 3.17 The detailed Strategic Access Management and Monitoring Strategy (SAMMS) for the Thames, Medway and Swale Estuaries was developed to resolve disturbance issues from increased recreational activity to wintering birds. The strategy has been designed to address disturbance impacts and provides a strategic, cross boundary solution to issues relating to disturbance, there are two aims.
- *To support sustainable growth whilst protecting the integrity of European wildlife sites from impacts relating to recreational disturbance*
 - *To reduce the existing recorded recreation impact on birds on the European wildlife sites in order to meet duties relating to the maintenance and restoration of European sites, as required by Article 4(4) of the Birds Directive.'*
- 3.18 The development of policy CP7 and DM28 reflect the development of the SAMMS strategy. Allocated sites (such as north east Sittingbourne, north west Sittingbourne and Kemsley Mill) support policy specific requirements for the facilitation and development of open space and recreational aspects to mitigate the impacts of the SPA/ Ramsar sites.
- 3.19 Consequently, it was considered that there would be no likely significant effects in terms of recreation, as a result of the Swale Borough Local Plan due to the policy protection measures in place and the specific commitments made within the Local Plan to deliver the SAMMS.
- 3.20 Within the early draft of the Local Plan (2013) Policy MU 1, Land at north west Sittingbourne, indicated that planning permission would be granted for mixed uses on land at North West Sittingbourne, as shown on the Proposals Map and shall comprise 'B' class employment uses on the Great Grovehurst Farm (north) site, a minimum of 1,390 dwellings and structural landscaping and open space adjacent the A249 would require the

provision of a HRA are appropriate mitigation. Here 22ha of open space and the incorporation of green links and corridors would assist in the mitigation of likely significant impacts on the designated sites. Point 2 of the policy within the early draft stated;

Achieve an integrated landscape strategy provide a minimum of 21 ha natural and semi-natural greenspace and other open space as a continuous buffer along the A249, forming part of the important local countryside gap between Sittingbourne and Bobbing/Iwade in accordance with Policy DM25. This zone will link to a network of green spaces and corridors throughout the allocation to provide a minimum open space provision of 22 ha, plus green corridors. This open space shall also be designed so as to offer mitigation of potential adverse impacts on European wildlife habitats as determined by a Habitats Regulations Assessment;

- 3.21 The draft Publication Swale Local Plan was further subjected to HRA screening for likely significant effects on protected habitats. The purpose of this exercise was to determine whether any allocated sites or policies could result in a likely significant effect on any internationally important wildlife sites in view of those sites conservation objectives.
- 3.22 For allocations or policies where potential exists, a series of recommendations were then made for policy amendments or other requirements within the draft Local Plan in October 2014. These amendments were intended to ensure that the Local Plan had an adequate policy framework in place to enable the delivery of measures to protect the European sites in the borough, either by requiring specific protection measures to be taken by allocated sites or by facilitating delivery of strategic initiatives on behalf of the Council. These amendments were made to the Swale Local Plan by the Council and have been included in the December 2014 version of the Swale Borough Local Plan, Part 1.

2015 – Bearing Fruits 2031

- 3.23 In April 2015, AECOM (formerly URS) undertook HRA for the Bearing Fruits 2031: Swale Borough Local Plan - publication version which was submitted for examination. The 2015

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- HRA for the Local Plan identified that there would be no likely significant effects upon internationally designated sites (principally the North Kent Marshes Internationally Designated Sites) as a result of increases in recreational pressure, provided that residential development within 6km of the internationally designated sites (and particularly large developments beyond 6km) pay appropriate financial contributions towards delivery of the Strategic Access Management and Monitoring Strategy (SAMMS) for the Swale SPA and Ramsar site, and Medway Estuary and Marshes SPA and Ramsar site. This was provided for 10,800 net new dwellings and job target of 7,053.
- 3.24 An HRA of the submitted Local Plan was undertaken in 2015 and since the original HRA was conducted no significant additional plans and projects had emerged that would lead to new potential pathways for an in combination effect.
- 3.25 As previously explored, the main potential for an in combination effect on the designated sites, is that of cumulative recreational pressure due to the in combination impacts with the Local Plans or Core Strategies of other local authorities planning development within 6km of the Thames Estuary & Marshes SPA/Ramsar site, Medway Estuary & Marshes SPA/Ramsar site and Swale SPA/Ramsar site. This issue has been thoroughly explored in earlier HRAs for the Swale Local Plan and independently as part of the strategic access management and monitoring strategy. As such, no new in combination effect arose from these Proposed Main Modifications.
- 3.26 As a result of the HRA the recommendations for the alteration of relevant policies to embed mitigation have now been incorporated into each of the reviewed relevant policies. As such it is considered that the Proposed Main Modifications plan can be screened out (i.e. that they will not result in a likely significant effect either alone or in combination), since policies now provide a sufficient mechanism to require and facilitate the delivery of measures and safeguards to protect the European sites.
- 3.27 Subsequently, AECOM (September 2015) published; 'Supplement to Bearing Fruits 2031 Swale Borough Local Plan Part 1: Submission Version Habitat Regulations Assessment

Screening Analysis of the Implications of the Swale Housing Scenarios on the North Kent Marshes Internationally Designated Sites'. Within this document, the potential impacts of three levels of housing provision within the Borough, were reviewed. This report concluded that even under those scenarios providing for the largest increase in population, the impact would probably not increase visitor pressure on the SPA to such an extent that it could not be addressed by the additional SAMMS contributions that would be made by those dwellings. The number of dwellings were increased from 10,800 to 13,192 within this main modifications.

2016 – Bearing Fruits 2031 Proposed Main Modifications

- 3.28 Finally, AECOM was then appointed to undertake HRA of Bearing Fruits 2031: The Swale Borough Local Plan: Proposed Main Modifications June 2016 (known as 'the Plan').
- 3.29 Policy MU 1, Land at North West Sittingbourne, was reviewed. Here the modifications were minor text changes that did not have HRA implications. The number of dwellings at NW Sittingbourne ((comprising land north of Quinton Road, land at Pheasant Farm, Bramblefield Lane and land at Great Grovehurst Farm) has been extended from 1,390 to 1,500 dwellings. However, the increase in the quantum of the housing provided within Swale was previously assessed in the HRA of housing scenarios (September 2015). No further HRA implications resulting from the policy wording change.
- 3.30 However, three new allocations were considered to have potential impacts and as such the draft policies were reviewed to enable the modifications to be screened out. This included policy AX5 Iwade Expansion, which is made up of three separate parcels. These are to provide a minimum of 572 home and concerns of recreational pressure, distance from construction and operational activities, loss of supporting habitats (functionally linked habitats) impact pathways relating to surface runoff and dust deposition were all considered to have potential impacts on the integrity of the designated sites. As such the policy wording included the requirement of SANGS (in line with CP7 and DM28) the requirement of a wintering bird survey and the requirements for an HRA to address

issues resulting from noise, lighting and visual intrusion were included in the Plan. The Plan also indicated that mitigation must be provided as necessary to address these issues.

- 3.31 Policy New Regen X1 : The Port of Sheerness Regeneration area also requires a project specific HRA to ensure the integrity of the outer Thames Estuary SPA is retained; and Policy DM17 Open Space, sports and recreation provision seeks to ensure that the location of new facilities does not result in increased levels of recreational pressure on internationally designated sites.

2017 – Bearing Fruits 2031 The Swale Borough Local Plan

- 3.32 Finally Bearing Fruits 2031: The Swale Borough Local Plan, Full Council Item, 26th July 2017 identifies policy MU 1, land at north west Sittingbourne, with the site including 1,500 dwellings (across three sites) and at least 22ha of open space. This 22ha is required to offset potential impacts on European wildlife habitats and to aid in settlement separation.

In 6.6.5 of this document, it states;

‘development proposals will need to reduce recreational disturbance on the SPA, by ensuring the provision of appropriate recreational and accessible natural greenspace opportunities on site for use by residents and visitors. Such proposals will be subject to an HRA and where demonstrated as necessary to void likely significant effects on the SPA, a financial contribution towards wider management of recreational pressures on the North Kent Marshes will be sought in accordance with Policies CP7 and DM28’

Furthermore, within the Policy MU 1 itself, section 3 of the policy states;

‘Ensure that through both on and off site measures, any significant adverse impacts on European sites through recreational pressure will be mitigated in accordance with Policies CP 7 and DM28, including a financial contributions towards the SAMMS.’

- 3.33 Policy MU 1, which is shown below in full, has therefore been developed to enshrine integrated mitigation measures to off set any potential impacts on the nearby SPA and Ramsar sites. The requirement of 22ha of open space provision, linked with other habitat enhancement opportunities, play areas and linked cycle path and footpaths, are a requirement of the master plan.

Policy MU 1 - Land at north-west Sittingbourne

Planning permission will be granted for mixed uses on land at North West Sittingbourne, as shown on the Proposals Map and will comprise a minimum of 1,500 dwellings, community facilities and structural landscaping and open space adjacent the A249. Development proposals will:

- 1. Be in accordance with a Masterplan/Development brief prepared by the landowners/developers involved in the delivery of the allocation, in consultation with the Borough Council and which reflects the requirements of this policy;*
- 2. Be in accordance with Policy CP4 and in particular, achieve an integrated landscape strategy to provide a minimum of 22 ha natural and semi-natural greenspace and other open space as a continuous buffer along the A249 that will form part of the important local countryside gap between Sittingbourne and Bobbing/Iwade in accordance with Policy DM25 and Policy New A17 for Iwade, as well as contributing toward an appropriate link between the two via Bramblefield Lane/old Sheppey Way. This area will link to a network of green spaces and corridors throughout the allocation to achieve open space provision;*
- 3. Ensure that, through both on and off site measures, any significant adverse impacts on European sites through recreational pressure will be mitigated in accordance with Policies CP7 and DM28, including a financial contribution towards the Strategic Access Management and Monitoring Strategy;*
- 4. Provide on-site flood mitigation measures;*
- 5. Integrate heritage assets, having regard to their setting;*
- 6. Be accompanied by a Health Impact Assessment in accordance with Policy CP5;*
- 7. Be supported by a transport assessment and access strategy in the Masterplan /development brief to determine the need and timing for improvements to the transport network and phasing of development and address the following:*

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- a. *The scale, nature and timing of interim improvements at Grovehurst Road/A249 junction and if necessary at the Bobbing/A249 junction;*
 - b. *Identification of vehicular access points from Quinton Road and Grovehurst Road and mitigation of traffic impacts on the local road network and existing neighbourhoods by defining an appropriate quantum of development relative to these access points;*
 - c. *The timing of any necessary off site highway improvements relative to the phasing of development;*
 - d. *Identification of improvements to the public transport network between the site and Sittingbourne;*
 - e. *Encouragement of increased rail use from Kemsley Halt through enhancement of the facilities there and public pedestrian and cycle links;*
 - f. *Secure safe and attractive pedestrian and cycle links within the development and to the adjacent network including links to Iwade over the A249;*
 - g. *Have regard to the availability of land to the north of Swale Way already safeguarded for the remodelling of the A249/Grovehurst Road junction and should the mitigation design require it, within any other relevant allocation.*

8. *Achieve a mix of housing in accordance with Policy CP3, including provision for affordable housing in accordance with Policy DM8;*

9. *Achieve suitable means of sustainable energy production and carbon reduction measures compliant with Policy DM20;*

10. *Secure new primary and secondary schools on site, with dual public/school use facilities (including a land reservation for its provision), to include land for artificial playing pitches; and*

11. *Provide appropriate community facilities and other infrastructure within the site to meet the needs of future residents, including those within the Local Plan Implementation and Delivery Schedule, in particular those arising from primary health care, libraries and community, learning and skills services.*

3.34 The final wording for the local plan policy CP 7; Conserving and enhancing the natural environment - providing for green infrastructure is:

The Council will work with partners and developers to ensure the protection, enhancement and

delivery, as appropriate, of the Swale natural assets and green infrastructure network and its associated strategy. Development proposals will, as appropriate:

- 1. Recognise and value ecosystems for the wider services they provide, such as for food, water, flood mitigation, disease control, recreation, health and well-being;*
- 2. Protect the integrity of the existing green infrastructure network as illustrated by the Natural Assets and Green Infrastructure Strategy Map, having regard to the status of those designated for their importance as set out by Policy DM25 and Policy DM29;*
- 3. Where assessment indicates that it is necessary to enhance and extend the network (including when management, mitigation and/or compensatory actions are required to address adverse harm), be guided by the Green Infrastructure Network and Strategy Map, prioritising actions toward identified Biodiversity Opportunity Areas;*
- 4. Ensure that there is no adverse effect on the integrity of a SAC, SPA or Ramsar site, alone or in combination with other plan and projects, as it would not be in accordance with the aims and objectives of this Local Plan;*
- 5. Require the completion of project specific Habitats Regulations Assessment, in accordance with Policy DM28, to ensure there are no likely significant effects upon any European designated site. For residential sites within 6km of an access point to any of the North Kent Marshes, development must contribute to its Strategic Access Management and Monitoring Strategy;*
- 6. Contribute to the objectives of the Nature Partnerships and Nature Improvement Areas in Kent;*
- 7. Make the enhancement of biodiversity and landscape as their primary purpose;*
- 8. Promote the expansion of Swale's natural assets and green infrastructure, including within new and existing developments, by:*
 - a. delivering a high standard of design quality to maximise the social, economic, health and environmental benefits of green infrastructure;*
 - b. providing a focus for social inclusion, community development and lifelong learning;*
 - c. taking into account the guidelines and recommendations of relevant management plans and guidance, Biodiversity Action Plans and Supplementary Planning Documents;*
 - d. contributing to the protection, conservation and management of historic landscapes, archaeological and built heritage assets;*
 - e. achieving, where possible, a net gain of biodiversity;*

f. providing new recreational facilities in accordance with Policy DM17, exploiting opportunities

to link urban and countryside areas and to create new footpath and cycle links;

g. taking account of and integrating with natural processes, such as flood risk and utilising sustainable urban drainage; and

h. including proposals to 'green' existing and proposed developed areas by increasing opportunities for nature in domestic gardens, streets and buildings, including street trees and in and around formal open spaces and sports provision.

3.35 The final policy wording for Policy DM 28 Biodiversity and geological conservation

Development proposals will conserve, enhance and extend biodiversity, provide for net gains in biodiversity where possible, minimise any adverse impacts and compensate where impacts cannot be mitigated.

Part A. For designated sites

Development proposals will give weight to the protection of the following designated sites for biodiversity, as shown on the Proposals Map, which will be equal to the significance of their biodiversity/geological status, their contribution to wider ecological networks and the protection/recovery of priority species as follows:

1. Within internationally designated sites (including candidate sites), the highest level of protection will apply. The Council will ensure that plans and projects proceed only when in accordance with relevant Directives, Conventions and Regulations. When the proposed development will have an adverse effect on the integrity of a European site, planning permission will only be granted in exceptional circumstances, where there are no less ecologically damaging alternatives, there are imperative reasons of overriding public interest and damage can be fully compensated.

2. Within nationally designated sites (including candidate sites), development will only be permitted where it is not likely to have an adverse effect on the designated site or its interests (either individually or in combination with other developments) unless the benefits of the development at this site clearly outweigh both the impacts that it is likely to have on the features of the designated site that make it of national importance and any broader impacts on the national network of Sites of

Special Scientific Interest. Where damage to a nationally designated site cannot be avoided or mitigated, compensatory measures will be sought. Development will also accord with and support the conservation objectives of any biodiversity site management plans;

3. Within locally designated sites (including draft published sites), development likely to have an adverse effect will be permitted only where the damage can be avoided or adequately mitigated or when its need outweighs the biodiversity interest of the site. Compensation will be sought for loss or damage to locally designated sites.

Part B: All Sites

Development proposals will:

- 1. Apply national planning policy in respect of the preservation, restoration and re-creation of:
 - a. the habitats, species and targets in UK and local Biodiversity Action Plans and Biodiversity Strategies;*
 - b. linear and continuous landscape features or those acting as stepping-stones for biodiversity;*
 - c. aged or veteran trees and irreplaceable habitat, including ancient woodland and traditional orchards;**
- 2. Be informed by and further the guidelines and biodiversity network potential of the Council's Landscape Character and Biodiversity Assessment SPD;*
- 3. Support, where appropriate, the vision and objectives of relevant environmental and biodiversity management and action plans;*
- 4. Be accompanied by appropriate surveys undertaken to clarify constraints or requirements that may apply to development, especially where it is known or likely that development sites are used by species, and/or contain habitats, that are subject to UK or European law;*
- 5. When significant harm cannot be avoided through consideration of alternative sites or adequate mitigation provided on-site or within the immediate locality, compensatory measures will be achieved within the relevant Biodiversity Opportunity Area, or other location as agreed by the Local Planning Authority;*
- 6. Provide, where possible, a net gain of biodiversity overall; and*
- 7. Actively promote the expansion of biodiversity within the design of new development and with reference to the wider natural assets and green infrastructure strategy in Policy CP7.*

- 3.36 The local plan has now been adopted and the policies have been appropriately worded to reflect the input of many stakeholders over the consultation period. It is considered that the policy wording of MU1 and the requirement of CP7 and DM28 will ensure that there are no likely significant impacts, alone or in combination with other proposals as a result of the borough local plan.

Supporting Documentation

Natural England Guidelines – Access to Natural Greenspace Standard (ANGSt)

- 3.37 ANGSt has been developed by NE to improve access to green space, improve the naturalness of green space and improve connectivity of green spaces. These principles can be used for protection and enhancement of current green spaces, planning new spaces and protecting vulnerable spaces. In the case of developing ANGSt space in relation to the proposed development site, all the principles and ANGSt requirements will be reviewed.
- 3.38 The supply and provision of greenspace/ANGSt associated with growth points and urban extensions can be seen as providing benefits to local communities. This is especially true when green space development in line with new housing increase has been included within the master planning process and provides a development brief which supports green infrastructure and open space at the core of a schemes design.
- 3.39 ANGSt recommends that everyone, wherever they live, should have an accessible natural greenspace:
- Of at least 2 hectares in size, no more than 300 metres (5 minutes' walk) from home;
 - At least one accessible 20 hectare site within two kilometres of home;
 - One accessible 100 hectare site within five kilometres of home; and
 - One accessible 500 hectare site within ten kilometres of home; plus
 - A minimum of one hectare of statutory Local Nature Reserves per thousand population.

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- 3.40 ANGSt should be accessible. As such the use of the following is recommended in ANGSt provision; information boards, information posts, path routes, directions, interpretation boards, as well as some paths and routes being of a more permanent surface. Community engagement with opportunities for volunteering and working on the land is also encouraged.
- 3.41 ANGSt should aim to support areas of naturalness. For example, opening culverts, naturalizing streams, wild flower planting, meadows, different mowing regimes. The definition of natural space within ANGSt is *“places where human control and activities are not intensive so that a feeling of naturalness is allowed to predominate”*.
- 3.42 Reviewing open space provision and ANGSt principles, the masterplans supporting the applications propose 15.675 ha of open space in the area of land north of Quinton Road/South of Bramblefield Lane and a further 7.02 ha of opens space in the Pheasant Farm Land area, totally 22ha. The landscape strategy includes orchard habitats, allotments, footpaths connecting the site to the wider landscape. The linear park features forms the most significant landscape feature. This will support a range of habitats for wildlife and include trim trails and links to SUDs features and LEAPs. This feature supports ANGSt design principles, including the creation of natural areas, natural features, as well as more permanent features and pathways.
- 3.43 Mitigation developed by Natural England for the Thames Basin Heaths Planning Zone, SANGS, or Suitable Accessible Natural Green Space, has been considered effective in delivering development whilst not compromising the integrity of the Thames Basin Heaths which are SPAs. SANGS are intended to provide mitigation for the potential impact of residential development on the SPA by preventing an increase in visitor pressure on the SPA. SANGS is not a requirement for sites in the Swale, where largely the landscape and conditions differ. As such SANGS development is not proposed, albeit some of the principles of SANGS have been addressed within the allocation.

North Kent Visitor Survey Results September 2011 (Footprint Ecology)

3.44 Footprint Ecology undertook a visitor survey along the North Kent shoreline in order to provide a baseline assessment of potential impacts from recreational use of the SPAs and Ramsar sites. These surveys formed the basis of the mitigation measures which have subsequently been incorporated into the local plan policy.

3.45 The visitor surveys were conducted in February and March 2011 to assess the level and type of visitor use at selected locations across the shoreline. The following key results have been highlighted from the report:

- In total 21 access locations were surveyed with 1398 visitors recorded entering and leaving the survey locations and 542 visitor groups were interviewed.
- A very high proportion of visitors were undertaking dog walking (62%) as their main activity and a further 23% were walking which account for 85% of the main activity responses.
- Across all locations visits were typically short with 57% of visits lasting less than an hour Just under a third (30%) of interviewed groups advised they spent between 1 and 2 hours in the area
- Two main modes of transport were used to access visit location with 63% of visitors arriving by car and 34% by foot.
- The majority of interviewed visitors (26%) made a visit to the survey location daily and 18% visited most days
- The majority of interviewed visitor groups (96% / 521) were local residents and had travelled to the site from their home.
- Motivations for site visits was most influenced by distance to location (and stated by 28% of visitors. The second most given reason for choice of visit location was that it was good for the dog or that the dog enjoyed it, and this response was cited by 26% of visitors
- Visitors would be attracted to another site if it was closer to home (than the location at which they were interviewed) had a good path network or better path surfacing and was more dog friendly than the survey location
- The median route lengths of walkers and dogs walkers within North Kent are very similar to those found in comparative visitor survey work. The range of median

route distances for dog walkers in recent work range from 1.6km at the Exe to 3.2km at the Brecks and here we observed a value of 2.6km. For walkers the values ranged from 2.1km (at the Exe) to 3.9km (at Suffolk) here the median route distance was 3.0km.

- 3.46 The above highlights that meaningful and robust opportunities for developing alternative recreational areas, associated with housing developments, is possible. Dog walking is significant in terms of lifestyle choices, however, having options for dog walking close to home would be considered significant to people interviewed. These results have been considered in terms of the application site and the development of the initial master plan.

Bird Disturbance Study North Kent 2010/2011 (Footprint Ecology)

- 3.47 Footprint Ecology undertook a research project looking at the causes of bird disturbances. The work relates to the coast between Gravesend and Whitstable, an area internationally important for wintering waterfowl. Twenty two locations were surveyed and each was visited repeatedly between December 2010 – February 2011. The survey work comprised of bird counts and counts of people with a record of the recreational activity they undertook. This was undertaken to inform decision makers on the issues associated with SPA and recreational pressure and the major causes for concern are outlined below.

- The most significant groups involved using the site included dog walkers (47%) and walkers without dogs (24%).
- Cyclist and jogger were also considered to be in quite high numbers.
- Around one quarter (26%) of species-specific observations resulted in birds being 'disturbed' – i.e. becoming alert, walking/swimming away, undertaking a short flight (<50m) or a major flight (>50m). Major flight occurred in 14% of the species specific observations.
- Around one fifth (18%) of disturbance events caused a major flight.
- Dog walking with dogs off leads was the activity responsible for the majority of observed species-specific major flight events. A total of 189 major flight observations were attributed to this activity – this is nearly half (46%) of all the major flight events.

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- The following factors were significant in predicting whether major flight would take place or not: distance (the shorter the distance, the more likely major flight); species; flock size (larger flocks less likely to take flight); number of dogs off leads (more dogs and major flight more likely); dog present or not (major flight more likely if dogs present); 'zone' in which activity occurred (major flight more likely with activities on the intertidal or on the water) and state of tide (major flight more likely at high tide).
 - The results here can be used to start to consider how disturbance may be affecting the birds. There was little evidence to suggest that the distribution of birds was related to levels of access, at least at the surveyed sites. There was no significant correlation with bird numbers (or densities) and the mean level at sites of access or the actual count of people made during a count. However, there were no visits where high numbers of people were counted and high numbers of birds also occurred. This would suggest that birds are perhaps avoiding the busiest sites, but at the other sites other factors may be influencing distribution. Bird distributions are therefore such that people and birds overlap, and birds are being flushed.
 - Given that disturbance has been clearly shown to have an adverse impacts on species of wintering waterfowl at other sites (dit Durell *et al.* 2005; Goss-Custard *et al.* 2006), it is necessary to be cautious in the case of the North Kent marshes. There is evidence that some of the bird species have shown marked declines (Liley *et al.* 2011). Mitigation and avoidance measures are therefore necessary to ensure any potential future impacts are avoided.

3.48 The results highlight the activities responsible for disturbance and the kind of distances at which disturbance events occur. Dog walking stands out as a particular activity of concern.

3.49 Such research has been used to identify opportunities for mitigation measures. For example, the provision of space for dog walkers at accessible, and walkable locations, would be significant in terms of local lifestyle and effects on the SPA. It is considered that providing alternative options for dog walking close to home would be considered significant in terms of mitigation. This is considered within the master plan of the proposed

development site.

4.0 Site Description and Proposals

The Site

- 4.1 A phase 1 habitat survey was conducted by The Ecology Partnership initially in July 2012 across the Persimmon and Redrow development parcels (including the schools site) (see figure 2). These parcels comprise predominantly arable fields, species-poor hedgerows, tall ruderal vegetation, semi-improved grassland, scrub, scattered deciduous and coniferous trees, a water-filled drainage ditch and pond.
- 4.2 These parcels were dominated by arable field supporting corn, wheat and barley. The semi improved field margins and tall ruderal vegetation predominantly supporting cocks form Yorkshire fog, common nettle with mugwort, thistles, dock and umbellifers was present throughout the site. These parcels also support species poor hedgerows dominated by blackthorn. New tree planting was present along the A249, and on site including poplars and crack willow. A ditch runs across the Persimmon development parcel, which support limited species diversity and in many places was choked with leaf litter. A pond was also found to be present within the northern part of the Persimmon parcel (i.e. Pheasant Farm).
- 4.3 The Redrow and Persimmon development parcels are summarised thus; *'The extended Phase 1 survey identified a mosaic of different habitats present within the site including; arable fields; semi-improved grassland; species-poor hedgerows; deciduous and coniferous standard trees; tall ruderal vegetation; scrub a water-filled drainage ditch and pond. These habitat types are common and widespread throughout the UK and are considered to be of value at site level only.'*
- 4.4 The Great Grovehurst Farm development parcel was surveyed by Ecosulis and Lloyd Bore. A total of 22% of the land at Great Grovehurst Farm constitutes previously developed land. At the end of 2017 all buildings located at Great Grovehurst Farm were demolished. The remaining habitats present in this area of the allocation identified that the site supported

largely arable habitat with fringing grassland, scattered scrub, hard standing and buildings. A wooded embankment was present along the edge of the railway line. The habitats were considered to be largely common and widespread.

4.5 Protected species surveys have been undertaken across the Allocation. These have been summarised below:

- Badgers: no definitive evidence of badgers was found in the wider allocated site. Mammal push throughs were noted along the scrub edges. No latrines, hairs or other evidence of badgers found. Considered likely badgers are using the site for foraging and commuting. An historic badger sett is known to be present in the Great Grovehurst Farm site. No confirmation of its current levels of activity.
- Bats: no trees on site were considered to have high potential for bats, several low potential trees identified. No confirmed bat roosts on site. Maned transects and anabat surveys identified low level use of the site by bats, dominated by species common and widespread. The most activity was associated with back garden habitats in the area of Bramblefield and the central ditch line / tree line within the centre of the site. A day roost for brown long eared bats was identified in one building at Great Grovehurst Farm. This was subject to demolition under a Natural England low impact licence.
- Great crested newts (GCNs): one defunct pond was identified to the rear of properties in Bramblefield, with a further two ponds associated with highway land. Ponds adjacent to the A249 did not support any GCN DNA and were not considered suitable for GCNs. The defunct pond was largely dry and could not support a breeding population of GCNs. The pooled areas of the ditch were also tested and came back as negative for eDNA. GCNs not considered to be on the water bodies on site or immediately adjacent to the site. During the walkover (October 2017) a new pond, located in the garden of a property in Bramblefield was recorded. This was considered to have fish and not suitable for GCNs. Surveys undertaken on (P1) Pond 1, located in the curtilage of Great Grovehurst Farm (adjacent to the Great Grovehurst Farm site) identified a peak count of 6 males and 6 female GCNs in bottle traps with a peak count of 9 females and 7

males using torching surveys. Pond 1 was considered to have a small population present, this population was a breeding population. A second pond, (P2) located just north of the B2005 was also surveyed. Surveys of pond 2 peak resulted in a peak count using bottle trapping was 4 females and 13 males, with torching yielding 9 females and 8 males. Pond 2 supported a medium population and was identified as being a breeding population.

- Reptiles: Slow worms and common lizards were located around the edges of the site. These were restricted to arable field margins and scrub areas. Large numbers, an 'exceptional' population of slow worms were identified within the Redrow and Persimmon development parcels. A single grass snake was identified to be present on the Great Grovehurst Farm site.
- Breeding birds: The bird survey identified only a single pair of skylarks using the site on one occasion during the 2015 surveys in the largest field of the site. The number of birds breeding on site was considered to be limited and largely restricted to the hedgerows and dense scrub areas.
- Wintering birds: Wintering bird surveys have not identified (October and November 2017) species using the site which are associate with the SPA and Ramsar sites. However, skylarks were recorded using the wider site for foraging.
- Other species: The site did not support evidence of water voles. Rabbit holes /warrens were identified within the boundaries of the site.

Site Proposals

- 4.9 The proposals for the site allocation include the development of housing, schools and community infrastructure. The land north of Quinton Road/south of Bramblefield Lane is proposed to support primary and secondary schools, a local centre and housing. Open space is proposed which forms over 15 ha, including areas for allotments, play areas, circular walkways and parkland. The Pheasant Farm land is proposed to support housing and a further 7ha of open space. The Great Grovehurst Farm land is proposed to support housing with some areas of open space provision to support an ecological mitigation strategy for GCNs.

4.10 The master plans prepared to support the application proposals show the pedestrian and cycle routes, a structural landscaping scheme, including a buffer along the A249 and the provision of the open space. The open space provision of at least 22ha is considered to be significant in terms of a robust mitigation plan for the development in relation to potential impacts on the Swale SPA.

5.0 Discussion of Potential Impacts

5.1 Impacts can be divided in to direct and indirect impacts. Direct impacts are usually associated with development adjacent to or on land that has been designated. Indirect effects, which may not result in the loss or fragmentation of habitats, are also significant in terms of protected habitats integrity. Indirect impacts are associated with the increase in population levels as a result of development.

Direct Impacts

5.2 Examples of direct impacts which are considered significant include:

- Causing damage to the coherence of the site or to the Natura 2000 series (for example, presenting a barrier between isolated fragments, or reducing the ability of the site to act as a source of new colonisers);
- Causing reduction in the area of habitat or of the site;
- Causing direct change to the physical quality of the environment (including the hydrology).

5.3 No significant direct impacts on the Swale or Medway Estuary and Marshes sites are anticipated as a result of the proposed scheme. The development at north west Sittingbourne will not result in the loss of habitat, loss of coherence or result in the isolation or fragmentation of protected habitats.

5.4 The allocation is located sufficient distance from the designated sites as to ensure that there will be no land loss, no land squeeze, no land isolation or fragmentation or habitats which are similar in terms of species diversity to that of SPA and Ramsar sites. Furthermore, the allocation is separated from the SPA and Ramsar site by a road, the Swale Way, and the

large scale development located to the north of this road, which includes the Nicholls Group transport hub.

Indirect Impacts

Waste Water & Hydrology

- 5.5 Increased development causes two main indirect impacts when considering hydrological issues. The first is increased surfaces run off from an increase in areas of hardstanding and infrastructure that create impermeable surfaces. The second is an increase in waste water.
- 5.6 The main Sewage Treatment Works that serve Swale District discharge treated effluent into tributaries of The Swale SPA/Ramsar. According to Swale Borough Council's Topic Paper 10 (2009) relating to Water the Environment Agency has identified areas of concern where the receiving waters are almost at their capacity to receive effluent discharges. Consents in these areas have been set accordingly. An increase in nutrient loading can increase the growth of micro algae mats, which can smother areas of habitat and reduce the growth of benthic communities impacting upon the invertebrates and as such the integrity of the SPA and Ramsar sites themselves.
- 5.7 While the grazing marsh components of the SPA and Ramsar sites are sensitive to deteriorations in water quality, the grazing marsh and its ditches are not subject to the presence of treated sewage effluent which due to the point of discharge flows through the creek channels into the marine/estuarine portions of the SPA.
- 5.8 In estuaries like The Swale and Medway where the sediment loading is higher (reducing light penetration and restricting rates of algal growth), temperatures being cooler and wave action stronger (leading to winter break up of mats and considerable annual variation in algal cover) the sediments are able to remain well oxidised despite high nutrient loadings and the benthic invertebrate community is unaffected by macroalgal mats. If the benthic invertebrate community is unaffected then the site would continue to maintain its prey productivity for birds.

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- 5.9 Special Protection Areas and Ramsar sites around the greater Thames Estuary have been confirmed to have high nutrient levels, however, this does not result in the smothering macro-algal growth. The prevailing expert opinion is that the dominant control on phytoplankton growth in these estuaries is not nutrient availability but light availability which is controlled by the high loading of suspended sediment.
- 5.10 There will therefore be no Likely Significant Effect on the features of the SPA due to increased wastewater disposal as a result of the development of new homes and new commercial floorspace as set out in the Swale Local Plan.
- 5.11 Any increase in surface water run-off due to development or redevelopment involving large impermeable surfaces, could also lead to flooding downstream in areas some distance from the development. Whilst the main risk to The Swale SPA/Ramsar would be via localised pollution, events further upstream in the catchment could potentially contribute to reduction in water quality at the SPA/Ramsar. However, this would be addressed by the provisions of Policy DM21 (Water, Flooding and Drainage). The site has been designed in line with above policies with a SuDs strategy. The SuDs strategy and traditional pollution control measures will be used to ensure the quality of the water.
- 5.12 It is considered that sufficient mitigation is in place with the creation of SuDS ponds within the allocation. The surface water discharge from the proposed will be restricted to the existing greenfield runoff rates. This will be achieved by using a series of SuDS measures such as permeable paving with sub-base storage, wet/dry detention basins, and swales for highways drainage. Drainage from such basins into drainage ditches present within the wider allocation and the stream located in Nicholls Transport hub will receive water at current discharge conditions. It is therefore considered that the proposed development will not have a negative impact on the Swale and Medway Estuary and Marshes SPA and Ramsar sites in terms of surface water run off.

Air Quality

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- 5.13 A development of approximately 1,500 dwellings will lead to an increase of vehicle movements. Increase vehicle movement can create a negative effect on air quality in the local area and the designated sites there in.
- 5.14 The Swale SPA and Ramsar site lies within 200m of the A249 as it approaches and crosses onto the Isle of Sheppey. Development of an additional 13,192 dwellings in Swale will result in an increase in traffic flows over the Swale Crossing. There will also be an increase in traffic flows due to development in surrounding local authorities over the same time period and (to a lesser extent) due to proposals for new minerals and waste facilities being developed for the Kent Minerals and Waste Plan.
- 5.15 The Critical Load for grazing marsh and littoral sediment (the load above which adverse botanical effects may occur) is 20kg N/ha/yr. The UK Air Pollution Information System (www.apis.ac.uk) indicates that the modeled nitrogen deposition rate at representative points (TQ908689 and TQ922703 for the Swale Crossing and TQ920651 for the Sittingbourne Northern Relief Road) is 14.42 – 15.12kg N/ha.yr (i.e. 25% below the critical load)²⁰. An increase of 5kgN/ha/yr would therefore be required in order for the Critical Load to be exceeded. This would be a very large additional nitrogen input, far beyond that attributable to traffic; the entirety of UK road traffic is responsible for 10% of nitrogen deposited at this location (1.7kgN/ha/yr) according to the Source Attribution data available at the UK Air Pollution Information System and this comes not purely from local traffic but also ‘imported emissions’ from across the UK.
- 5.16 The local plan would not result in such a large increase in traffic flows. even when traffic generated through The Swale Local Plan is considered in combination with that arising from other Local Plans in Kent or proposed future minerals or waste traffic associated with the Kent Minerals and Waste Plan.
- 5.17 The Local Plan contains a number of measures to reduce reliance on the private car and therefore improve air quality. Policies include CP 2 (Promoting sustainable transport), which involves promoting sustainable transportation, improving public transport and

access to modes of transport other than by car and ensuring development is well-located in relation to these alternative forms of transport and DM 6 (Managing Transport Demand and Impact) which provides further guidance as to the detailed design of developments to ensure walkable neighbourhoods and integrated access to public transport, as well as requiring larger developments to undertake transport assessments and prepare travel plans.

- 5.18 On balance, it is therefore considered that there would be no likely significant effect associated with air quality from the Local Plan with respect to the Swale SPA/Ramsar either alone or in combination with other projects and plans.

Increased Visitor Pressure

- 5.19 The increase in local population can also cause a rise in the recreational pressure that a designated site comes under. Pressures from dog walking and recreational use can cause path widening and disturbance of the species the site was designated for.
- 5.20 The SPA and Ramsar site gained its designation for important assemblage of bird species. An increase in dog walking could cause a disturbance to such species. To mitigate against this, the provision of green space within the development area can encourage local residents to use the development site for recreation rather than the designated site.
- 5.21 A large area of the allocation has been designed to support open space. The total area of open space is 22 ha and includes, in addition to this SuDS ponds with wetland areas managed for their wildlife and amenity value, play areas, a community orchard, allotments and footpaths through and around the site:
- 5.22 This provides green space opportunities for local residents and includes opportunities for circular walk ways, areas for which dogs can be let off a lead, the provision of semi-natural spaces providing focal points, open water and a variety of features of interest.
- 5.23 The nature of the designated sites is also not conducive for over use. The majority of the grazing marsh associated with the SPA and Ramsar is privately owned farmland and is only accessible by a limited number of public rights of way. Many of the fields within the

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- designated sites support livestock for much of the year and it is usually expected that dogs be kept on leads in such circumstances. However, it is acknowledged this is difficult to enforce.
- 5.24 It is considered that through the provision of 22ha of open space on site, the public rights of way links that lead to the east and west, away from the designated site and the limited accessibility to the privately own designated site itself, the impact of a rise in population would be negligible.
- 5.25 It is considered that the areas of open space provided meet the criteria for ANGSt requirements.

In Combination Effects

- 5.26 Other local developments must be considered alongside the north west Sittingbourne development proposal to ensure there are no in combination effects.
- 5.27 Swale Borough Council has however, undertaken a separately prepared assessments under the Habitats Regulations in relation to the likely significant effects of the local plan on the SPA and Ramsar site, where allocation of housing and commercial floor space, transport and mineral plans etc, was considered in combination with the local plans and core strategies of surrounding districts.
- 5.28 Assuming that the nearby developments have mitigation in place to negate any potential negative effects such as increased surface water run off or increased visitor pressure, and as such be in line with policy CP 7 and DM 28, a cumulative impact from the developments would be insignificant and it is therefore considered that as a standalone development with mitigation in place, the study development will not have a significant negative impact on the designate site.
- 5.29 The adopted local plan has through the adoption process, designed and developed polices with stakeholder groups, to ensure that the in combination issues associated with the SPA, SAC and Ramsar sites within Swale would be resolved and mitigated. These include, but

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- are not limited to the policies CP 7 and DM 28 as well as site specific policies which review the allocated land within the borough.
- 5.30 Furthermore, policies such as sustainable development over arching policy and the green infrastructure policies aim to direct development within Swale. Additional policies reflecting the coast, landscape features and nature resources, also provide a firm basis for the protection of the SPAs and Ramsar sites which dominate the Kent coastline. Policies with respect to water, air quality and pollution have also been developed to reduce water waste, to reduce air pollution and to reduce pollution events. Therefore it can be assumed that there will be no in combination effects on the internationally designated sites.

6.0 Mitigation Methods

- 6.1 The allocation has, at its core, the provision of green and accessible space. This is clearly shown across the masterplans supporting the planning applications for development across the site. The development proposals would provide mitigation for an increase in population pressure and requirement for recreational space through the provision of ANGSt on site, within the red line allocation boundary.
- 6.2 It is considered that this provision of several areas of open space, including 15 ha in the land to the north of Quinton Road/south of Bramblefield Lane and a further 7 ha on the Pheasant Land site is significant in terms of provisions of green space. A total of 22ha of open space provision is provided.
- 6.3 The proposals include the provision of features which are important for accessibility. The enhancement and creation of a network of footpath and cycle routes and the creation of play areas for local children is also considered as part of the scheme. The linear park provision provides areas for recreation, with areas of naturalness, such as wildflower areas, thickets, tree planting, as well as new habitats, such as allotments and orchards.

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- 6.4 In terms of mitigation measures for dog walking, a major potential impact on the integrity of the adjacent SPA and Ramsar site, the site is large enough to allow for dogs to run freely within the linear park. Areas of ponds, ditches and swales can also provide an interesting feature for local residents. Linkages with off site habitats to the east and west of the development, also provide for further recreational options. Access to the Iwade Country Park, the Milton Creek Country Park and The Meads Community Woodland are all accessible from the allocated site providing alternative recreational areas.
- 6.5 The MU1 policy lays out the requirements of open space provision. However, the MU 1 policy also requires consideration of policy CP7 and DM28. CP7 requires the contribution of funds from any development within 6km of the SPA and Ramsar site to support SAMMS. Furthermore policy DM28 requires consideration of biodiversity, linear features, provision of ecological corridors and stepping stones supported by sufficient surveying effort. It is considered that the development proposals have had sufficient survey effort to inform the design and to promote ecological opportunities within the allocation. As such it is considered that the development is in line with policies CP7 and DM28.
- 6.6 Give the use of the financial contributions to the SAMMS and the imbedded design of the open space provision of the site, it is considered that the development proposals, support sufficient space for on site mitigation and any other impacts from local population will be managed through SAMMS. As such it is considered that the development proposals would not result in any likely significant impacts.
- 6.7 Mitigation for the increased surface water run off that is caused by development will be implemented in the form a detailed drainage scheme involving SuDS. This is considered to be sufficient mitigation so that the designated site is not negatively affected. No impacts from air quality or sewage and waste water are predicted.
- 6.8 It is considered that the allocated land of NW Sittingbourne is able to provide robust mitigation for recreational pressure issues associated with SPAs and no further impacts are considered further as part of the development.

7.0 Conclusions

- 7.1 The red line boundary consists of a variety of habitats, including arable land, ruderal grassland, scrub, tree lines and ditches. The arable land and species poor grassland and ruderal habitats is not considered to be significant in terms of nature conservation.
- 7.2 The allocation proposes approximately 1,500 units and the creation of 22 hectare of space, proposed for community use and for recreational and wildlife use. Furthermore, the allocation includes the provision of a new primary and secondary school and associated sports / play facilities.
- 7.3 The allocation lies within 1km of the Swale SPA and 2km from the Medway Marshes SPA. Due to the location of the allocation it was considered that an appropriate assessment screening was undertaken to identify potential issues associated with such development.
- 7.4 The assessment reviewed current literature from both the local plan policies, the habitat regulations assessments of local plans and emerging policies, research on the SPA and Ramsar site with respect to disturbance, and Natural England guidance for creating areas of open space to remove recreational pressure on Natura 2000 sites.
- 7.5 It is considered that without mitigation this allocation would provide a local increase in the population and this could put an increased strain on the local SPA and Ramsar sites. An increase in the local population could lead to increase use of the local SPAs. Research suggests that currently the SPA is used for recreation, most notably for dog walking. Disturbance to the birds of the SPA was noted. An increase of this pressure may have an effect on the ability of the birds to breed, feed and use the natural landscape, therefore constituting a significant effect on the SPA. Therefore the development of the allocation would not be able to proceed unless a mitigation strategy was developed.
- 7.6 This development would provide its own mitigation strategy, with open green spaces designed in as part of the master plans compliant with the local plan policy MU1 and

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- SAMMS. Thus the development proposals provide sufficient space for recreation, for everyday use, such as dog walking and cycling.
- 7.7 It is considered that without mitigation, increase surface water run off could have a negative impact on water quality within the designated site. The development proposals for the site include appropriate mitigation in the form of SuDS ponds, permeable paving and swales and therefore no significant negative impacts will be caused.
- 7.8 It is considered that single site development and cumulative development will not have a negative impact on the designated site in terms of air quality or increase waste water. No mitigation is required.
- 7.9 Due to the nature of the development including the substantial areas of green space provided, it is considered that the increase in population will be adequately mitigated for and there should be no impact on the integrity of the Natura 2000 sites within the local area.
- 7.10 Therefore, it can be concluded that the development, including the provisions of the open green space, would not need an Appropriate Assessment as there would be no significant impact, i.e. a *de minimis* effect.

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