

OTTERPOOL PARK

Environmental Statement Appendix 7.19 Habitats
Regulations Assessment – Stage 1 and Stage 2 (for
Stodmarsh SPA, SAC and Ramsar Site)

**Version 2.1 – Updated in response to Recreation, Air Quality and Nutrient Neutrality
Comments**

NOVEMBER 2022



CONTENTS

EXECUTIVE SUMMARY	1
1 INTRODUCTION	1
1.1 Overview	1
1.2 Site Location and Setting.....	1
1.3 Proposed Development.....	2
1.4 Aims of the Assessment	2
2 BACKGROUND TO HABITATS REGULATIONS ASSESSMENT	3
2.2 Natura 2000 Site Creation	3
2.3 National Site Network Site Protection	3
3 HABITATS REGULATIONS ASSESSMENT METHOD	5
3.1 Overview	5
3.2 Stage 1: Screening.....	5
3.3 Stage 2: Appropriate Assessment	5
3.4 Stage 3: Assessment of Alternative Solutions.....	5
3.5 Stage 4: Assessment Where No Alternative Solutions Exist and Where Adverse Effects Remain	5
3.6 Relevant Legislation and Guidance.....	8
3.7 HRA Consultation – (Stage 1 of the HRA Process).....	8
3.8 HRA Consultation on Nutrient Neutrality In Relation To Stodmarsh SPA, SAC and Ramsar Site (HRA Stage 2).....	9
4 COMMENTS ON THE PREVIOUS SUBMISSIONS	12
5 SCOPE OF HRA	19
5.1 Overview	19
5.2 Approach to Assessment	19
5.3 Potential Vulnerabilities	20
5.4 Impacts Scoped Out	21
5.5 Impacts Scoped In	22
5.6 Summary of Sites Scoped In	24
6 ASSESSMENT OF LIKELY SIGNIFICANT EFFECTS – (STAGE 1)	1
6.1 Functionally Linked Land	1

6.2	Air Pollution Assessment (Screening - Stage 1).....	5
6.3	Public Access/Recreational Disturbance.....	2
6.4	Water Pollution.....	11
7	IN-COMBINATION EFFECTS	13
8	APPROPRIATE ASSESSMENT (STODMARSH SAC, SPA AND RAMSAR).....	14
8.1	Water Pollution / Nutrient Neutrality	14
9	CONCLUSIONS	19
10	REFERENCES	21

FIGURES

Figure 1: Proposed Project Design Showing Accessible Green Infrastructure Provision

Figure 2: Sites in the National Sites Network within 30km

TABLES

Table 1: NE HRA consultation	8
Table 2: Consultation in relation to nutrient neutrality on the Otterpool site	10
Table 3: Key comments and responses in relation to the 2019 HRA submission.....	13
Table 4: Comments from AECOM Addressed in this updated HRA document and the associated Nutrient Neutrality Budget (Appendix L).....	14
Table 5: Project Response to Natural England Comments received October 2022	16
Table 6 Sites in the National Sites Network scoping table.....	25
Table 7 - Bird species listed as a qualifying feature of the Sites in the National Sites Network recorded on site	3
Table 8: HRA screening matrix.....	27

APPENDICES

APPENDIX A : SCREENING MATRICES

APPENDIX B : NATURAL ENGLAND DAS LETTER (REF DAS/11529/202390)

APPENDIX C : ARCADIS SCOPING LETTER (MAY 2018)

**APPENDIX D : EMAIL CONVERSATION WITH NATURAL ENGLAND TO AGREE
SURVEYS FOR RECREATIONAL PRESSURE**

APPENDIX E : NATURAL ENGLAND FEEDBACK ON THE 2019 SUBMISSION

**APPENDIX F : ARCADIS MEMO ON APPROACH TO NUTRIENT NEUTRALITY (JAN
2021)**

**APPENDIX G : CORRESPONDENCE WITH NATURAL ENGLAND REGARDING
NUTRIENT NEUTRALITY**

**APPENDIX H : CORRESPONDENCE WITH NATURAL ENGLAND REGARDING THE
AIR QUALITY ASSESSMENT (EMAILS)**

**APPENDIX I : NATURAL ENGLAND COMMENTS ON THE ARCADIS APPROACH TO
STODMARSH SAC SPA AND RAMSAR SITE - NEUTRALITY PROPOSALS
FOR OTTERPOOL**

**APPENDIX J : STATEMENT OF COMMON GROUND – FOLKESTONE AND HYTHE
DISTRICT COUNCIL AND NATURAL ENGLAND**

**APPENDIX K : LOCAL PLAN HRA 2019 ADDENDUM (DEFERRED TO IN RELATION
TO AIR QUALITY)**

APPENDIX L : NUTRIENT BUDGET ANALYSIS UPDATE

**APPENDIX M : NATURAL ENGLAND COMMENTS ON THE APPLICATION RECEIVED
05 AUGUST 2022**

APPENDIX N : FURTHER ADVICE FROM NATURAL ENGLAND

**APPENDIX O : PREVIOUS REPOSSES TO NATURAL ENGLAND COMMENTS DATED
05/08/2022**

**APPENDIX P : NATURAL ENGLAND COMMENTS ON THE NUTRIENT NEUTRALITY
UPDATE DATED JULY 2022**

**APPENDIX Q : JUSTIFICATION FOR THE RATIONALE THAT N DEPOSITION
REDUCES IN ALL FUTURE SCENARIOS**

Executive Summary

Arcadis Consulting (UK) Limited has been commissioned on behalf of Otterpool Park LLP to undertake a Habitats Regulations Assessment in relation to 'Otterpool Park', a proposed garden settlement located within Folkestone, Kent hereafter, referred to as "the site".

To support the proposed Development, an Environmental Impact Assessment (EIA) was undertaken and the findings presented in the Otterpool Park Environmental Statement (ES) to which this updated Appendix relates. The EIA has been undertaken to ensure the likely significant effects of the proposed Development are properly understood by the decision maker. In tandem with the production of an EIA, an HRA is required in accordance with the Habitats Regulations. The HRA assesses whether the proposed Development is likely to have a significant effect on any National Site Network (and Ramsar) Sites or on any of their qualifying features, either directly or indirectly, alone or in combination with other plans/projects. This document provides information to support an HRA that would be completed by the competent authority i.e. the local planning authority.

This report supports an amended outline planning application for the Otterpool Park development. Information to support an HRA was previously provided to support the original application for outline planning permission made in February 2019, and comments were received in relation to that document from stakeholders. These comments have been addressed within this amended assessment. The following are the key differences between the initial and amended application:

- In the initial HRA, some sites within 30km were not screened as no potential impact pathways were identified. Within this amended submission, all sites within 30km (18 sites) are screened to make the rationale of this HRA clearer.
- Within the initial HRA, water nutrient impacts were not a vulnerability identified. Subsequently, impacts to the Stodmarsh Special Area of Conservation (SAC), Special Protection Area (SPA) and Ramsar site from increases in water nutrients have been identified as a potential impact pathway by Natural England. As such, this has been addressed within this HRA.
- The Institute of Air Quality Management's (IAQM) designated sites guidance (2020) identifies that for impacts on sites that are within the National Site Network, the assessor should first consider whether the air quality issues have been considered in the Local Plan HRA. Additionally, it identifies that if this has been done then it is appropriate and in line with government guidance to defer to that over-arching Local Plan assessment. Deferring 'upwards' to the Local Plan also addresses the undesirable situation of having multiple traffic and air quality models for a single local authority area and the potential for the modelling inconsistencies that would follow. As such within this HRA, assessments of Air Quality impacts are deferred to the Local Plan HRA (LUC 2018 and 2019). This approach was consulted upon with Natural England, full details are presented in Chapter 6 Air Quality, Section 6.2 under the sub heading *Deferring to the Local Plan HRA for ecological sites with a European designation*, with the relevant consultation with Natural England Presented in ES Appendix 7.2.
- Within the initial HRA, all impacts were screened out at Stage 1. Within this document, impacts resulting from the nutrient neutrality have potential to impact the Stodmarsh SAC, SPA and Ramsar site unless on-site mitigation is implemented. As such, in line with the case law set out by CJEU C-323/17 People Over Wind and Peter Sweetman vs Coillte Teoranta, impacts to this site are assessed through appropriate assessment.

Subsequent to the March 2022 issue of the HRA, comments from stakeholders including Natural England and the Local Planning Authority have been received. In response to these comments, the following amendments have been made to this document:

- Additional information on the approach to air quality (namely assessing nitrogen deposition resulting from ammonia) has been added to justify the assessment approach and outline the regimen that the competent authority could secure to provide practical and legal surety.
- An updated assessment and approach to addressing nutrient neutrality in line with comments and a modified methodology is provided;
- Additional information on the assessment of the potential impact from recreational pressure.

Within this document, a list of sites within the National Site Network with the potential to be impacted by the proposed Development was drawn up and included 18 sites up to 30km from the proposed Development.

The potential impacts of the proposed Development were largely determined by three key factors:

- whether there were any sites or qualifying features that could be directly affected by the proposed Development;
- whether there are any sufficiently mobile qualifying features of the sites that while distant from the scheme may rely on functional habitat that would be affected by the proposed Development (largely birds and bats – see section 6 on functional habitat); and
- whether any of the potential effects of the proposed Development have the potential to indirectly affect receptors some distance from the scheme due to the zone of influence (for example through effects on water regime or increased traffic flow).

Professional judgement has been used in this assessment, taking into account the conservation objectives for sites within the National Site Network, to determine whether or not significant effects are likely to result from the proposals.

Only those potential effects with relevance to the proposed Development and the qualifying features of the sites within the National Site Network have been scoped in for further consideration.

The following potential effects were considered:

- Functionally linked land: changes in favourable condition of faunal species populations as a result of habitat loss/degradation/disturbance of functionally linked land.
- Air pollution: impact of atmospheric nitrogen deposition – as a result of the increase in dust and vehicular emissions during construction/operation.
- Public access/disturbance – as a result of the increase in recreational pressure in the operational phase.
- Water pollution – changes in water quality, specifically increased nutrient inputs (nitrogen and phosphorous) through wastewater, via water treatment works, and drainage to watercourses or ditches within the Stour catchment.

Birds were the only sufficiently mobile receptor to have the potential to use habitat functionally linked to the proposed Development site; these were screened out as no qualifying bird features were being supported or maintained by the site from the bird survey results, nor does the proposed Development support habitat that would be likely to support the qualifying features in any significant numbers.

Only one site was within the threshold for air quality assessment, that being the Folkestone to Etchinghill Escarpment SAC. In line with the Institute of Air Quality Management's designated sites guidance (2020), this HRA defers to the Local Plan HRA (Folkestone and Hythe District Council (F&HDC) Core Strategy Review (LUC, 2018) and the F&HDC Places and Policies Local Plan (PPLP) (LUC, 2018) and Core Strategy Review HRA Addendum (LUC 2019)), concluding no significant

effects predicted for the proposed Development. These documents underpin the 2020 People and Places Local Plan Review.

Subsequent consultation with Natural England raised queries in relation to ammonia deposition from road contributions. Considering that the projected ammonia deposition is lower than the current baseline in future scenarios, the site is currently in favourable conservation status and that there is an acceptance of the large uncertainty of projecting air quality trends over long periods of time, it is considered that air quality impacts upon this site will not have a significant impact upon the designated site (utilising the information within the Local Plan HRA and the air quality modelling compiled for the ES). However, in order to provide further certainty, it is recommended that the potential impact from nitrogen deposition is screened at a subsequent stage of the tiered planning process, and that updated air quality assessments are conducted utilising the emerging ammonia modelling tools and updated DEFRA toolkits as they are issued. In the unlikely event that these studies should identify nitrogen exceedances, a suite of mitigation and management options are available.

A number of the sites were of particular stakeholder concern due to a potential increase in recreational pressure; primary and secondary data was analysed for these sites. These sites were Folkestone to Etchinghill Escarpment SAC, the Wye and Crundale Downs SAC, the Dover to Kingsdown Cliffs SAC and the Dungeness complex (SPA, SAC and Ramsar). While small numbers of additional visitors may be expected, visitor behaviour predicted that the proposed Development's residents were unlikely to travel to these sites in any significant numbers and the primary recreational use was dog walking. Given the large amount of accessible greenspace integral to the design (over 50% of the site), it is anticipated that a significant proportion of residents would utilise this space for dog walking and visits to the designated sites would be in small numbers for recreational purposes associated with the appreciation of the designated features.

With regard to the Dungeness complex (SPA, SAC and Ramsar) (nearest points, coastal 8.7km south, and marine 2.9km south), the Dungeness Complex Sustainable Access and Recreation Management Strategy (SARMS) and supporting documents (The Places Team, 2017) was reviewed and it was concluded that no significant effect resulting from the development is foreseen. This is supported by Natural England's responses to the previous Otterpool Park HRA submission.

Of the remaining sites under consideration, Parkgate Down SAC is not publicly accessible. The remaining sites are over 15km away, with seven of them being over 20km away. Residents of the proposed Development are unlikely to use these sites in any significant numbers.

In summary, proposals are not likely to have a significant effect on the Folkestone to Etchinghill Escarpment SAC and Wye and Crundale Downs SAC through recreational pressure. The conclusions have been informed both by baseline evidence, notably visitor surveys undertaken at these sites, together with changing behaviours in relation to open space and the needs of the population. For example, the HRA describes the changing ways in which people interact with the outdoors since the Covid-19 pandemic, in addition to the different needs that people have – whether this be for dog walking, exercising, or being 'in nature'. People experience outdoor spaces for a variety of purposes, future residents of the proposed Development are likely to visit different types of spaces to fulfil different needs, quality greenspaces in proximity to their homes are likely to be preferentially used. Therefore, areas such as the Folkestone to Etchinghill Escarpment SAC and Wye and Crundale Downs SAC form just one type of space amongst many.

Other factors that have informed the conclusions include the distance of the sites from the proposed Development. The conclusions that no likely significant effects are anticipated is founded on these factors, together with the multiplicity of alternative outdoor spaces that are provided either as part of the proposed Development or in its vicinity. The requirement for the preparation of an access strategy serves as a further measure by which these areas can be monitored and protected. Further engagement with Natural England about the content of the access strategy would be welcomed at a later stage in the design, for example when further detail is available at Tier 2. ; i.e. in line with Natural

England's recommendation "*that the Otterpool Park application revisits the potential for recreational impacts at the detailed design stage*".

A review of the Local Plan HRAs, namely the F&HDC Core Strategy Review (LUC, 2018) and the F&HDC Places and Policies Local Plan (PPLP) (LUC, 2018) and Core Strategy Review HRA Addendum (LUC 2019), was carried out to assess other plans and projects which could lead to likely significant effects on sites within the National Site Network when considered in combination with the proposed Development. It concluded that there were no likely significant effects, there are no additional developments of note since this assessment that in combination with the proposed Development would change this assessment in regard to functionally linked habitat, air pollution and recreation.

The proposed Development was found to have the potential to lead to likely significant effects (alone and in combination) upon the habitats and qualifying features of the Stodmarsh SAC, SPA and Ramsar sites with regard to water pollution. This is with specific reference to increased nutrient inputs, primarily associated with future wastewater treatment requirements and discharges from wastewater treatment works into the East Stour River, which in turn connects with the designated sites. Natural England have advised that all new development within the Stour catchment that has the potential to result in increased nutrient budgets requires mitigation in order to achieve nutrient neutrality. This requirement has also been confirmed by project-specific nutrient budget calculations undertaken as part of this assessment. Therefore, with regard to water quality impacts associated with the proposed Development and Stodmarsh SAC, SPA and Ramsar sites, Stage 2 Appropriate Assessment is required.

The Appropriate Assessment of potential impacts upon Stodmarsh SPA, SAC and Ramsar Site, was informed by the Water Cycle Study (WCS) (available within the Otterpool Park Environmental Statement, Appendix 15.2). Extensive consultation was undertaken with stakeholders including Natural England. The approach to water management on site will ensure that the development is nutrient neutral.

Since the previous HRA submission (March 2022), changes in methodology and consultee comments have resulted in the need for modifications to the approach to achieving nutrient neutrality (outlined in the WCS). The updated approach, outlined in a Nutrient Budget provided as a component of this assessment, demonstrates that nutrient neutrality can be achieved on the site. As such, no impact upon Stodmarsh is foreseen and therefore there is no need to proceed beyond Stage 2 of the HRA. As the site will be nutrient neutral (compared to the baseline), there is no potential for in-combination effects, therefore no assessment in relation to other proposals and water quality is required.

With regard to all other potential impacts and designated sites, the HRA is complete at Stage 1, and no further input in this respect in relation to the proposed Development is required.

1 Introduction

1.1 Overview

- 1.1.1 Arcadis Consulting (UK) Limited was commissioned by Otterpool Park LLP ('the applicant') to provide information in support of a Habitats Regulations Assessment (HRA) for a proposed new development. The proposed Development is 'Otterpool Park', a garden settlement located within Kent.
- 1.1.2 To support this proposed Development, an Environmental Impact Assessment (EIA), presented in an Environmental Statement (ES) has been undertaken to ensure the likely significant effects of the proposed Development are properly understood by the decision maker. In tandem with the production of an EIA, an HRA is required in accordance with the Habitats Regulations. The HRA assesses whether the proposed Development is likely to have a significant effect on any National Site Network (and Ramsar) sites hereafter referred to as "the sites" or on any of their qualifying features, either directly or indirectly, alone or in combination with other plans/projects. This document provides information to support the HRA, the final HRA will be undertaken by the local planning authority as the competent authority, for ease this report is referred to as 'the HRA' throughout.

1.2 Site Location and Setting

- 1.2.1 The site is located within Folkestone, Kent within the administrative boundary of Folkestone and Hythe District Council (F&HDC) and spans a large area located immediately south of Junction 11 of the M20. The site is largely agricultural in nature with the majority of the site comprising arable and pasture fields, a disused horseracing course with an artificial lake ('Folkestone Racecourse Lake'), areas modified from historical use (airfields), existing historic settlements and relatively new industrial areas.
- 1.2.2 The M20 motorway, Channel Tunnel Rail Link and Westenhanger Station are located to the north of the site, beyond which lie the villages of Stanford and Postling within a largely rural setting including the Kent Downs Area of Outstanding Natural Beauty (AONB). This AONB extends to the east, beyond which lies the town of Hythe, and to the south where it includes Lympne village. The site also includes the settlements of Barrowhill, Sellindge, Westenhanger and Newingreen. Lympne Industrial Park and some areas of woodland are located immediately south of the site. In addition, East Stour River flows through the site in

a north-east to west direction. The site is centred on Ordnance Survey National Grid Reference TR 111 363.

1.2.3 An aerial image illustrating the Outline Planning Application (OPA) is presented in Image 1.



Image 1: Outline Planning Application boundary (red line)

1.3 Proposed Development

1.3.1 The proposed Development is located on approximately 589 ha of land. The planning application seeks permission for a new garden settlement accommodating up to 8,500 homes (Use Classes C2 and C3) and Use Class E, F, B2, C1, Sui Generis development, including use of retained buildings as identified, with related infrastructure, highway works, green and blue infrastructure, with access, appearance, landscaping, layout and scale matters to be reserved.

1.4 Aims of the Assessment

1.4.1 This document aims to:

- outline the legal requirements and guidance for undertaking an HRA, including the potential option stages;
- describe the baseline features of the sites in the National Sites Network and assess how the proposed Development site may be used by their qualifying features;
- describe the Development proposals;
- assess the likelihood of the significant effects of the proposed Development on Sites in the National Sites Network as identified in consultation with Natural England (NE);
- review relevant literature for the Special Protection Area (SPA) bird species to assess the likelihood (or otherwise) of significant effects from the proposed Development; and
- confirm the result of the HRA in accordance with NE's advice.

2 Background to Habitats Regulations Assessment

2.1.1 This section describes the background behind National Site Network designations and the legislation surrounding its protection and therefore the rationale for this assessment. This also includes references to guidance followed.

2.2 Natura 2000 Site Creation

2.2.1 In May 1992, Member States belonging to the European Union (EU) adopted legislation designed to protect the most seriously threatened habitats and species across Europe. This legislation is referred to as the Habitats Directive and complements the Birds Directive (adopted in 1979). At the heart of both these Directives was the creation of a network of sites called Natura 2000. Natura 2000 comprised a network of areas designated to conserve natural habitats and species that are rare, endangered, vulnerable or endemic within the EU.

2.2.2 The Birds Directive requires the establishment of SPAs for birds classified under Directive 2009/147/EC on the Conservation of Wild Birds (the codified version of Directive 79/409/EEC as amended¹) for rare, vulnerable and regularly-occurring migratory bird species and internationally important wetlands.

2.2.3 The Habitats Directive (Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora)², similarly requires Special Areas of Conservation (SACs) to be designated for other species, and for habitats.

2.2.4 Together, SPAs and SACs made up the Natura 2000 series. All EU Member States contributed to the network of sites in a Europe-wide partnership.

2.2.5 SPAs are classified under the Birds Directive to help protect and manage areas which are important for rare and vulnerable birds because they use them for breeding, feeding, wintering or migration.

2.2.6 The Directive was enacted in UK legislation by the Conservation of Habitats and Species Regulations, more commonly referred to as the Habitats Regulations. The 2017 Habitats Regulations were amended by the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019. The amendments have resulted in the UK designated sites that were part of the European Natura 2000 site network now being termed as National Site Network sites.

2.2.7 The Conservation of Habitats and Species Regulations 2017 (Amendment) (EU Exit) Regulations 2019 retain in place the prescriptions of the 2017 Regulations with only relatively minor changes. The HRA regime set out in the Conservation of Habitats and Species Regulations 2017 (as amended) therefore continue to apply.

2.3 National Site Network Site Protection

¹ Conservation of Wild Birds (the codified version of Directive 79/409/EEC as amended)

² Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora

- 2.3.1 Although implemented in England through The Conservation of Habitats and Species Regulations 2017 (Amendment) (EU Exit) Regulations 2019, the source directive that led to the creation of this legislation is the European Community (EC) Habitats Directive.
- 2.3.2 Under Article 6 of the European Community (EC) Habitats Directive an assessment is required where a plan or project may give rise to significant effects upon a National Site Network site or sites (also known as 'Sites in the National Sites Network').
- 2.3.3 In addition, it is a matter of law that candidate SACs (cSACs) and Sites of Community Importance (SCI) are considered in this process; furthermore, it is Government policy that sites designated under the 1971 Ramsar Convention for their internationally important wetlands (Ramsar sites) and potential SPAs (pSPAs) are also considered. These are all hereafter referred to as Sites in the National Sites Network.
- 2.3.4 Paragraph 3, Article 6 of the Habitats Directive states that:
- 2.3.5 *'Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to paragraph 4 (see below), the competent national authority shall agree to the plan or project only having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public.'*
- 2.3.6 Paragraph 4, Article 6 of the Habitats Directive states that:
- 'If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of social or economic nature, the Member State shall take all compensatory measures to ensure that the overall coherence of the national site network is protected. It shall inform the Commission of the compensatory measures adopted.'*
- 2.3.7 As explained above, the requirements of the Habitats Directive are transposed into UK law by means of the Conservation of Habitats and Species Regulations 2017 (as amended), hereafter referred to as the Habitats Regulations. The process of assessing the implications of development on Sites in the National Sites Network (which include Ramsar sites) is therefore known as HRA. The 2017 Regulations have been amended by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019. The effect of the amendments largely relates to wording, requirements and processes remain the same as protection levels remain unchanged. Existing EU guidance and case law from the European Court of Justice remains a valid source of direction and interpretation of the requirements of the legislation, although it should be noted that much case law has now been incorporated into guidance and/or best practice.

3 Habitats Regulations Assessment Method

3.1 Overview

- 3.1.1 The requirements of the HRA comprise four distinct stages and according to prescribed guidance and methods. A flow chart deriving from the European Commission guidance (2001) is presented in Image 2. This report comprises the Stage 1: Screening and Stage 2: Appropriate Assessment (in relation to the Stodmarsh SPA SAC and Ramsar Site only).

3.2 Stage 1: Screening

- 3.2.1 This is the process which initially identifies the likely impacts upon a National Sites Network Site (formerly European Site) of the project or plan, either alone or in combination with other projects or plans and considers whether these impacts may be significant. If the effect may be significant, or is not known, that may trigger the need for an Appropriate Assessment (Stage 2).

3.3 Stage 2: Appropriate Assessment

- 3.3.1 This is the detailed consideration of the impact on the integrity of the National Sites Network Site (formerly European Site) of the proposed Development, either alone or in combination with other projects or plans, with respect to the site's conservation objectives and its structure and function. This is to determine whether or not there will be adverse effects on the integrity of the site. This stage also includes the development of any additional mitigation measures to avoid or reduce any possible significant adverse effects. Where there are adverse effects, an assessment of mitigation options is carried out to determine adverse effects on the integrity of the site. If these mitigation options cannot avoid adverse effects, then development consent can only be given if Stages 3 and 4 are followed.

3.4 Stage 3: Assessment of Alternative Solutions

- 3.4.1 This is the process which examines alternative ways of achieving the objectives of the proposed Development that would avoid adverse effects on the integrity of the National Sites Network Site (formerly European Site), should avoidance or mitigation measures associated with the proposed Development be unable to cancel out adverse effects.

3.5 Stage 4: Assessment Where No Alternative Solutions Exist and Where Adverse Effects Remain

- 3.5.1 Should no alternative solutions be available, at Stage 4 an assessment is made with regard to whether or not the development is necessary for imperative reasons of overriding public

interest (IROPI) and, if so, of the compensatory measures needed to maintain the overall coherence of the national site network.

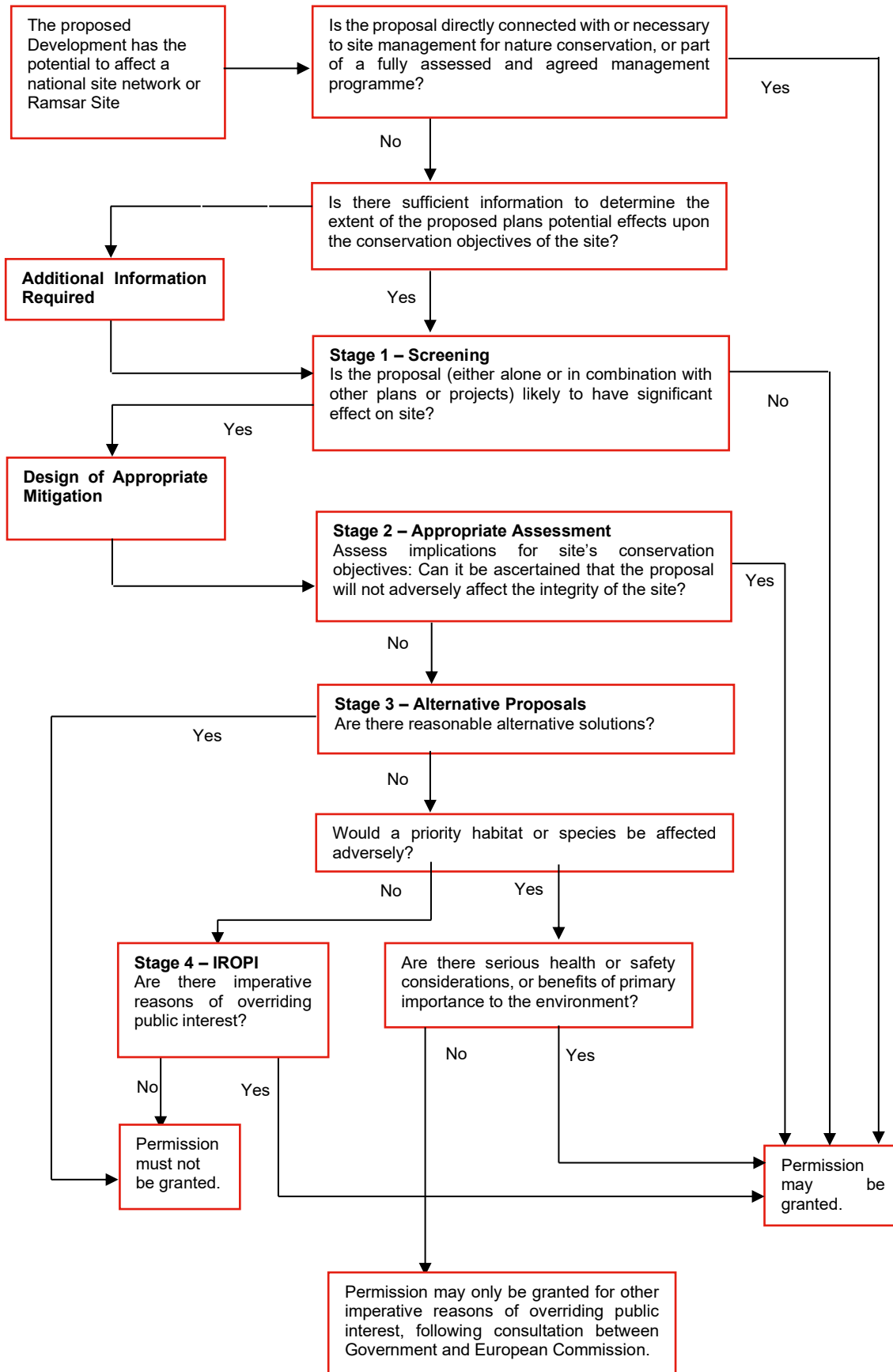


Image 2: HRA Flow diagram

3.6 Relevant Legislation and Guidance

3.6.1 The following legislation and guidance documents will be consulted in the preparation of the HRA:

- The Conservation of Habitats and Species Regulations 2017 (as amended);
- European Commission (2000), Managing Natura 2000 sites: The provisions of Article 6 of the Habitats Directive 92/43/EEC;
- European Commission (2007), Guidance document on Article 6(4) of the Habitats Directive 92/43/EEC;
- European Commission (2001), Assessment of plans and projects significantly affecting Natura 2000 sites;
- The Planning Inspectorate Habitat Regulations Assessment Advice Note Ten: Habitat Regulations Assessment relevant to nationally significant infrastructure projects, Version 5, August 2013;
- The Highway Agency (HA) Interim Advice Note 141/11: Assessment of Implications (of Highways and/or Roads Projects) on Sites in the National Sites Network (Including Appropriate Assessment) and the Planning Act 2008;
- The Design Manual for Roads and Bridges (DMRB) Volume 11 Environmental Assessment, Section 4 Other Assessment Techniques, Part 1, HD44/09, Assessment of Implications (of Highways and/or Roads Projects) on Sites in the National Sites Network (Including Appropriate Assessment), Section 4 Assessment Methods (adopted in February 2009);
- Natural England (2020) Advice on Nutrient Neutrality for New Development in the Stour Catchment in Relation to Stodmarsh Designated Sites - For Local Planning Authorities;
- High Court judgment of Wyatt, R. (On the Application of) v Fareham Borough Council (2021) EWHC 1434 (Admin) (28 May 2021); Court of Justice of the European Union (April 2018); Case C-323/17 People Over Wind & Peter Sweetman v Coillte Teoranta ('People over Wind').

3.7 HRA Consultation – (Stage 1 of the HRA Process)

3.7.1 The aim of this consultation with NE was to seek agreement of the scope of the overall HRA Stage 1 Assessment. The table below (Table 1) presents the consultation with Natural England in relation to this HRA.

Table 1: NE HRA consultation

Consultee	Date / Attendees	Summary of Issues Raised/Agreed
Natural England (NE)	<p>7 December 2016</p> <p>meeting, attendees included:</p> <p>Landscape and Visual Lead (Arcadis)</p> <p>Natural England (NE) representative</p> <p>Ecology Lead (Arcadis)</p>	<p>An initial meeting was undertaken between Arcadis Landscape and Biodiversity team members. During this meeting key issues were discussed, including potential impacts to Natura 2000 and Ramsar sites henceforth referred to as Sites in the National Sites Network.</p> <p>This consultation was formalised by NE in a letter dated 15/12/2016 Reference DAS/11529/202390 (Appendix B).</p>

Consultee	Date / Attendees	Summary of Issues Raised/Agreed
NE	<p>31 July 2017</p> <p>Via email:</p> <ul style="list-style-type: none"> NE representative <p>Arcadis</p>	<p>This email conversation was to agree the scope of the surveys required for the recreational surveys. This included six sites of particular stakeholder concern. This is presented in Appendix D.</p>
NE	<p>25 May 2018</p> <p>via telephone</p> <p>Attendees:</p> <ul style="list-style-type: none"> NE representative Ecology Lead (Arcadis) 	<p>The conversation was to discuss the scoping letter (May 2018) Arcadis had produced to formally scope the content of the HRA with NE (Appendix C).</p> <ul style="list-style-type: none"> Approach and initial thoughts outlined in the HRA scoping letter by Arcadis confirmed. Also recommended using the information from the HRA undertaken for the Shepway Core Strategy and the Shepway Places and Policies Plan to be used within our assessment and the need for assessment of in combination effects. NE requested that the consultation between Arcadis and herself regarding the recreational pressure surveys be reported within the HRA. Suggested that air quality monitoring of the Folkestone to Etchinghill Escarpment SAC may be required after the project.
NE (Lead Advisor, Sussex & Kent)	<p>March 2021</p>	<p>NE were contacted regarding the approach to assessment of air quality impacts on Sites in the National Sites Network (Folkestone to Etchinghill SAC) with regards to deferring to the findings of the Local Plan HRA.</p> <p>NE acknowledged receipt of the initial query. No response has been received at the time of writing, therefore it has been assumed that the proposed approach is agreed.</p>
NE	<p>June 2021, follow up email July 2021</p>	<p>NE were contacted by email in order to confirm the approach to comments received relating to the assessment of recreational disturbance in the HRA. The email contained a summary of the proposed approach. No response has been received at the time of writing and it has therefore been assumed that the proposed approach is agreed.</p>
NE	<p>August 2022</p>	<p>Comments on the application including the HRA were received These comments are presented as Appendix M.</p>
NE via the Local Planning Authority	<p>09 September 2022</p>	<p>Further clarification from Natural England on the approach to Ammonia deposition (presented as Appendix N).</p>
FHDC (as LPA)	<p>11 November 2022</p>	<p>Feedback was received from FHDC outlining that it was not necessary to screen out the impacts from ammonia related deposition at Tier 1 HRA.</p> <p>Requests were also made to include further rationale for the selection of tools utilised to inform the nitrogen deposition assessment.</p>

3.8 HRA Consultation on Nutrient Neutrality In Relation To Stodmarsh SPA, SAC and Ramsar Site (HRA Stage 2)

3.8.1 The potential for nutrient loads within the East Stour River catchment to adversely impact upon the Stodmarsh SAC, SPA and Ramsar site was not raised by stakeholders in relation to the 2019 HRA submission. Subsequently, Natural England identified this potential impact, and raised this with Folkestone and Hythe District Council (F&HDC). As a response, it was identified that Otterpool Park would require measures in place to achieve nutrient neutrality in relation to the East Stour River catchment.

This section outlines the consultation conducted in relation to the potential water pollution from nutrient loading at the Stodmarsh SAC, SPA and Ramsar Site. The following stakeholder liaison was undertaken in relation to this issue, as presented in Table 2.

Table 2: Consultation in relation to nutrient neutrality on the Otterpool site

Date	Description	Details
29/06/2020	Nutrient Neutrality Roundtable meeting	Roundtable meeting with NE (Natural England) and F&HDC – Folkestone and Hythe District Council (including their HRA consultants) to discuss Nutrient Neutrality assessment needs to overcome NE’s Stodmarsh Lake concerns
14/10/2020	Flood Risk and Water Management Workshop – Technical Workshop 2	Workshop with F&HDC (Folkestone and Hythe District Council), EA (Environment Agency), NE (Natural England) and KCC (Kent County council, the Lead Local Flood Authority LLFA) to discuss baseline hydraulic modelling, nutrient neutrality mitigation strategy, East Stour River bridge crossings design approach and integrated water management.
31/03/2021	Cross-boundary nutrient neutrality mitigation opportunity discussion	Meeting with Ashford Borough Council to discuss if Otterpool Park can help offering nutrient neutrality mitigation credits to deliver development sites in Ashford.
16/03/2022	Advice for Water Quality and Nutrient Neutrality issued to F&HDC. This new methodology incorporates the updated information as detailed below as well as a catchment specific (Stodmarsh) nutrient budget calculator	This update required a new calculation of the nutrient budget.
July 2022	Updated nutrient budget provided to Local Planning Authority (LPA) and NE for their initial feedback and consultation.	<p>This document contained the following modifications:</p> <ul style="list-style-type: none"> • The Generic Methodology includes the latest version of Farmscoper (version 5) which includes more up to date values for the various variables. The updated approach also uses the actual outputs rather than averaged values from Farmscoper for detailed farm types broken down by rainfall, soil drainage type and Nitrate Vulnerable Zones (NVZ). The benefit of taking the detailed farm types approach is that it offers a more specific budget calculation for the actual nutrient losses from the development or mitigation land to be taken into account. • The Generic Methodology covers all potential different situations on water usage

Date	Description	Details
		<p>that might occur across the full range of catchments.</p> <ul style="list-style-type: none"> • It provides a more consistent approach for dealing with onsite wastewater treatment systems. • Pet waste is not considered in the greenspace export coefficient as this type of waste is taken into account in the urban surface water run off element of the calculator. • The new methodology uses a different approach for calculating the urban export coefficient so that it is applicable across the country. The values take into account the type of urban land and development site specific rainfall. This results in export values that will be specific to the rainfall at the location within the catchment.
15/09/2022	<p>LPA comments prepared by AECOM on behalf of Folkestone and Hythe District council are received.</p> <p>N.B. At the time of reporting no comments from Natural England have been received on the updated submission.</p>	<p>Comments are presented with the project response in the table below (Table 4).</p>
14/10/2022	<p>Natural England Comments on the updated July 2022 Nutrient Neutrality calculations.</p>	<p>Comments are outlined with the project response in the table below (Table 3).</p>

3.8.2 In line with the Statement of Common Ground, the Appropriate Assessment within this report as supported by the Water Cycle Analysis (ES Appendix 15.2), Nutrient Budget Analysis (Appendix L) and statement of common ground (Appendix J) addresses the requirement for the following information:

- The information, values and assumptions made in the nutrient calculations;
- Information and evidence to support the assumptions used, especially where these deviate from Natural England’s methodological advice (e.g. the Councils evidence on occupancy rates and their long term stability).
- Evidence to support any mitigation planned, including source evidence or link if a website or copies of documents that are not readily or freely available;
- Evidence of types of mitigation (wetlands proposals) including proposed locations to ensure the areas of mitigation are draining relevant areas of mitigation land/WwTW so will function effectively.
- Any additional hydraulic loading or nutrient loading calculations undertaken for wetlands or bespoke mitigation.
- Clarification of how long term management of any mitigation land in particular wetland and other types of SuDS will be secured.

- Maps, locations or identification of how any mitigation that is not within the developer's ownership will be secured. In particular, information on mitigation proposals for the allocations other than Otterpool.
 - Any information on winter maintenance programmes or other information material to water quality assessment that may impact the efficacy of proposed nutrient removal systems.
- 3.8.3 A draft approach to achieving nutrient neutrality was submitted to Natural England on 22/04/2021. Subsequently, comments were received from Natural England in a letter dated 01/06/2021 on the approach to nutrient neutrality. Further information was required on the following aspects:
- Bespoke calculations to show the removal values of the wetlands can be achieved on site.
 - Further clarification on the nutrient neutrality calculations, in order to clearly demonstrate how nutrient neutrality will be achieved at Otterpool.
 - More detail on the design of the wetlands.
- 3.8.4 NE letter also clarified that the use of the median removal values for wetlands was acceptable at the current outline stage, but at the detailed stage it must be demonstrated that these values will be achievable on site. Therefore, bespoke wetland specific calculations using estimations of hydraulic and nutrient loading are required, which demonstrate that the efficacy proposed can be achieved at Otterpool Park
- 3.8.5 All of the above information is presented in the Water Cycle Study (including further recommendations for the detailed design stage).
- 3.8.6 Alongside the consultation outlined above, a 'Statement of Common Ground' was agreed between Natural England and F&HDC in relation to the nutrient neutrality issues. This is presented as Appendix J.
- 3.8.7 The updated Water Cycle Study and HRA document which contained an assessment of this was provided as a component of the submitted ES in March 2022 in support of the Application. Subsequent to the preparation of these documents, an updated methodology for assessing Nutrient Neutrality was provided by Natural England. The approach to achieving Nutrient Neutrality was incorporated and a further iteration of the approach to nutrient neutrality was prepared. This was provided to Natural England and the Local Planning Authority. Comments from AECOM on behalf of the Local Planning Authority (presented in full in Appendix L) were received in September 2022.
- 3.8.8 This document provides an approach to delivering Nutrient Neutrality which takes into account all previous iteration, consultee comments and evolving methodologies.

4 Comments on the Previous Submissions

- 4.1.1 This HRA has been provided to support an amended planning submission for the Otterpool Park development. As outlined above, an initial submission was made in 2019, accompanied by an HRA, which was subsequently resubmitted in March 2022. This section outlines the comments on the 2019 and March 2022 submission and subsequent draft documents (including the evolving Nutrient Neutrality calculations) and how these have been addressed in this submission, as presented in Table 3.
- 4.1.2 As presented in Appendix E, in 2019 Natural England agreed with the conclusions in the HRA, with the exception of assessments made in relation to air quality and Folkestone to Etchingill Escarpment SAC.

Table 3: Key comments and responses in relation to the 2019 HRA submission

Consultee/Contact	Summary of Comments	Arcadis Response and Reply	Location of Correspondence
NE	Clarification in relation to screening of air quality impacts, with further detailed assessment as necessary, for Folkestone to Etchinghill Escarpment SAC.	Approach in this amended HRA is in line with the Institute of Air Quality Management's (IAQM) designated sites guidance (2020) addresses this issue	Appendix E
NE	Response to consultation on outline application for residential use development. Agreement with the conclusions of the HRA with regard to recreational disturbance, in that the scheme is not considered to have an adverse effect on the integrity of assessed sites, either alone or in combination with other plans and projects. Attention is drawn to visitor and site management measures being drawn up by F&HDC and Rother District Council in relation to the Dungeness complex.	F&HDC and Rother District Council measures in relation to the Dungeness complex added to the HRA.	Appendix E
Scoping Opinion F&HDC (Report compiled by Temple as LPA advisor) Dated 29/07/2021	With reference to cumulative assessment in the ES: The 'HRA' short list would provide a longer list to assess the cumulative effects on internationally designated sites (such as from recreational pressure). This assessment should be presented within the cumulative assessment in the ES.	The HRA has been modified to account for this comment. This will be carried over to the EIA section (in relation to cumulative effects). Within the HRA, all 'long-list' sites are screened in the HRA for the amended submission (in relation not in-combination effects).	ES Appendix 7.2
Scoping Opinion F&HDC (Report compiled by Temple as LPA advisor) Dated 29/07/2021	Dover County Council Planning Policy and Projects Manager notes that the Thanet Coast and Sandwich Bay Ramsar site and SPA, and the Sandwich Bay SAC fall partly within 30km of the site and partly outside. It is considered that the impact upon the entirety of those designated sites should be scoped into the ES, and not just those parts which fall within 30km of the development site.	The amended HRA has been modified to account for this comment. The assessment includes the Thanet Coast and Sandwich Bay Ramsar site and SPA, and the Sandwich Bay SAC and assesses all vulnerabilities of the site and potential impacts from the development. As such, the entire designated areas are assessed.	ES Appendix 7.2
NE	In relation to the March 2022 submission, Natural England made comments in relation to Air Quality, Nutrient Neutrality and Recreational Impacts	The comments relating to Air Quality and Nutrient Neutrality are addressed in this report. The comments in relation to Recreational pressures are	Comments are presented in Appendix M, further information in


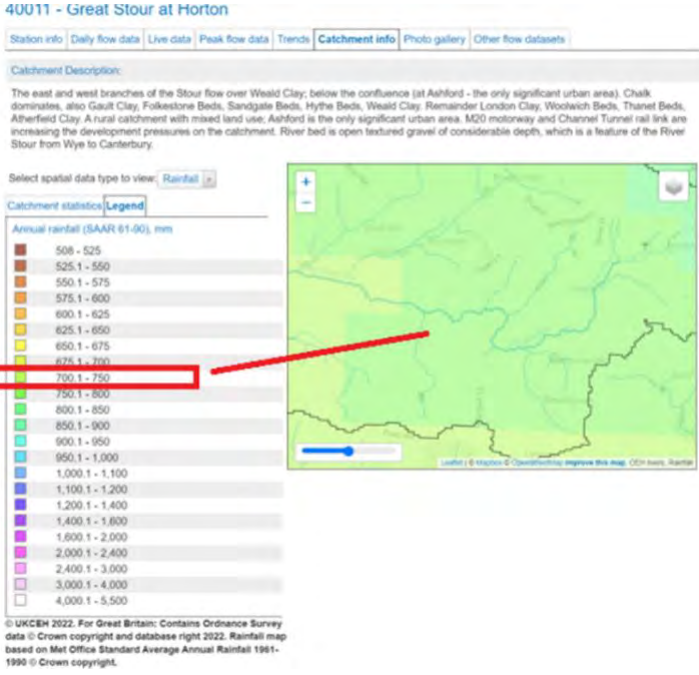
Consultee/Contact	Summary of Comments	Arcadis Response and Reply	Location of Correspondence
		addressed in this report but also in the response provided as Appendix O.	Appendix N, Appendix O
LPA (Prepared by AECOM on behalf of the LPA)	Technical comments on the amended nutrient neutrality approach dated July 2022.	<i>Technical comments and responses provided in</i> Table 4 above.	AECOM comments included in Appendix L
NE comments on the July 2022 Nutrient Neutrality calculations	Technical comments on rainfall and load removal of proposed wetlands.	Comments addressed in the submission provided in Appendix P. A summary response is provided below with a full response in Table 5. With regards to the query relating to the rainfall figures utilised, the Arcadis figures were checked and were found to be correct. For surety a sensitivity test was conducted and if the NE figures were utilised, the amount of wetland required would reduce, therefore this aspect of the calculations is considered robust. With regards to the comments relating to the detailed design of the water features, it was confirmed by the competent authority that this related to detailed design at subsequent tiers of the application, and that no further detailed design was required at Tier 1.	Appendix P

Table 4: Comments from AECOM Addressed in this updated HRA document and the associated Nutrient Neutrality Budget (Appendix L)

AECOM Comment	Arcadis Response
The wrong units such that kg TP/yr is used for nitrogen (rather than phosphorus) and kg TN/yr is used for phosphorus (rather than nitrogen). This is only a typographical matter but should be addressed.	The correct units have been updated throughout the report and appendix documents.
For the Option of being served by Sellindge WwTW (Option 2) they have used different permit concentrations than are given in the Stodmarsh calculator. This WwTW has a permit of 1 mg TP/l and 27 mg TN/l according to the Stodmarsh Calculator, although the post 2025 permit will be tightened to 0.5 mg TP/l. However, the Applicant has used values of 0.3 mg TP/l and 25 mg TN/l in their calculations. The reason why these alternative permit values have been used needs to be clarified. If the permit	Sections 4, 5, 6 and 7 have been updated to reflect the current permit concentrations, as shown in the latest Stodmarsh Nutrient Neutrality Calculator. It was assumed that under this Sellindge WwTW option, the first occupancy will also be post 2025 in line with the tightened P permit of 0.5 mg TP/l. Appendix C provides the supporting calculations. The previous calculations have used a permit of 0.3 mg TP/l and 25 mg TN/l based on the previous consultations undertaken with Southern Water, the Environment Agency

AECOM Comment	Arcadis Response
<p>values in the Stodmarsh calculator are used the amount of mitigation required for Option 2 increases considerably.</p>	<p>(EA) and NE for upgrading Sellindge WwTW to accommodate the Proposed Development as evidenced in Appendix D, along with the relevant July 2022 nutrient budget calculations. It is envisaged that this information still can provide useful information in the event of TP value is further tightened post 2025 - for example, as part of a potential mitigation option in line with the ongoing Water Industry National Environment Programme (WINEP) study for Stodmarsh.</p>
<p>The biggest issue, which the applicant acknowledges, is that whether Option 1 or Option 2 is chosen they don't (using the new calculator tool) currently have anything like enough mitigation identified at this time to demonstrate nutrient neutrality. The proposed wetland area in the previous Water Cycle Study (WCS) (March 2022) was 28.77 ha which means that for Option 1 there is currently a shortfall of approximately 6.88 ha for PCC Scenario 1 and 5.93 ha for PCC Scenario 2. For Option 2, this increases to 30.97 ha for Scenario 1 and 28.13 ha for Scenario 2; the shortfall for Option 2 is even larger if the actual permit values in the calculator tool for Sellindge WwTW are used. We recognise Option 1 is the preferred option but that still has a shortfall of c. 20-25%.</p>	<p>Section 6 addresses the revised mitigation proposals to address the identified shortfall in wetland area for Option 1 (Onsite WwTW) under both PCC scenarios. This involves extending some of the previous wetlands as well as reconfiguring suitable SuDS areas (with surplus storage capacity and footprint area) into stormwater wetlands/bio-retention areas to maximise their nutrient removal ability and wider benefits. Therefore, a total of 35.68 ha of wetland is now available as part of the revised mitigation strategy to meet the 35.65 ha required under the worst-case PCC Scenario 1 (or 34.70 ha under alternative PCC Scenario 2). However, the Proposed Development within the current OPA will only require a total wetland area of 30.64 ha. Further wetland areas within the wider FMP can also be provided, if necessary, when the development plans are more advanced outside the current OPA.</p> <p>We recognise that there is still a significant shortfall in wetland area (approximately 48ha) to address the nutrient loads from Option 2 (Sellindge). Therefore, this is not our preferred approach to the OPA as explained in Section 6.1.2.</p>
<p>To address (3), the Applicant proposes that the current SuDS area within the OPA boundary should be designed as wetlands or bio-retention features to remove surplus P load. They note there is the potential for 8.97 ha of additional stormwater wetlands within the Otterpool Park OPA and FMP. If this is the case, it would be sufficient to address the shortfall for Option 1, the preferred approach. However, this would require further investigation and if that potential has been identified at this point, we would need to understand whether further work was to be undertaken prior to application submission to confirm that potential. Overall, if a resolution to grant outline planning permission is made it is recommended that it is subject to a planning condition that the Applicant identifies and details the additional required for wetland mitigation prior to the next planning stage.</p>	<p>Additional assessment work was undertaken as part of this update to address this issue, as explained in Section 6.2 and our response to the Point 3 above. The updated assessment should now give a sufficient level of extra confidence to the LPA and NE to decide that the proposed mitigations are robust and can achieve nutrient neutrality without causing adverse effects on the integrity of the Stodmarsh designated sites either alone or in combination with other plans or projects. The assessments undertaken to date are precautionary and meet the level of detail expected for an OPA of a strategic site of this nature. Further detail on the mitigation proposals will be submitted as part of the planning conditions for each key development phase or multiple development phases.</p>

Table 5: Project Response to Natural England Comments received October 2022

Natural England Comment from Appendix P																																																									
<p>Natural England has reviewed the latest nutrient budget calculations and we advise that we consider it has one error within the calculations. From reviewing the average annual rainfall at the site using the National River Flow Archive (Catchment Info for 40011 - Great Stour at Horton (ceh.ac.uk)), we advise that the annual average rainfall (mm) used in Stage 2 of the calculations should be set as 750.1 – 800, not 700.1 – 750.</p>	<p>The average annual rainfall is 748mm for the most recent available record period (1961-1990) according to the National River Flow Archive at the NE's specified location (40011 - Great Stour at Horton). Also, the applicable rainfall colour band for Otterpool Park indicates as 700.1-750 mm (see images below).</p>  <p>40011 - Great Stour at Horton</p> <p>Catchment Description: The east and west branches of the Stour flow over Weald Clay; below the confluence (at Ashford - the only significant urban area). Chalk dominates, also Gault Clay, Folkestone Beds, Sandgate Beds, Hythe Beds, Weald Clay, Remainder London Clay, Woolwich Beds, Thanet Beds, Atherfield Clay. A rural catchment with mixed land use. Ashford is the only significant urban area. M20 motorway and Channel Tunnel rail link are increasing the development pressures on the catchment. River bed is open textured gravel of considerable depth, which is a feature of the River Stour from Wye to Canterbury.</p> <p>Select spatial data type to view: Rainfall</p> <table border="1"> <thead> <tr> <th>Catchment statistics</th> <th>Legend</th> </tr> </thead> <tbody> <tr> <td>SAAR 1941-1970: 761 mm</td> <td></td> </tr> <tr> <td>SAAR 1961-1990: 748 mm</td> <td></td> </tr> </tbody> </table> <p>Click on the labels above for more information on how these maps and statistics were derived.</p> <p>© UKCEH 2022. For Great Britain: Contains Ordnance Survey data © Crown copyright and database right 2022. Rainfall map based on Met Office Standard Average Annual Rainfall 1961-1990 © Crown copyright.</p>  <p>40011 - Great Stour at Horton</p> <p>Catchment Description: The east and west branches of the Stour flow over Weald Clay; below the confluence (at Ashford - the only significant urban area). Chalk dominates, also Gault Clay, Folkestone Beds, Sandgate Beds, Hythe Beds, Weald Clay, Remainder London Clay, Woolwich Beds, Thanet Beds, Atherfield Clay. A rural catchment with mixed land use. Ashford is the only significant urban area. M20 motorway and Channel Tunnel rail link are increasing the development pressures on the catchment. River bed is open textured gravel of considerable depth, which is a feature of the River Stour from Wye to Canterbury.</p> <p>Select spatial data type to view: Rainfall</p> <table border="1"> <thead> <tr> <th>Catchment statistics</th> <th>Legend</th> </tr> </thead> <tbody> <tr> <td colspan="2">Annual rainfall (SAAR 61-90), mm</td> </tr> <tr> <td>506 - 525</td> <td></td> </tr> <tr> <td>525.1 - 550</td> <td></td> </tr> <tr> <td>550.1 - 575</td> <td></td> </tr> <tr> <td>575.1 - 600</td> <td></td> </tr> <tr> <td>600.1 - 625</td> <td></td> </tr> <tr> <td>625.1 - 650</td> <td></td> </tr> <tr> <td>650.1 - 675</td> <td></td> </tr> <tr> <td>675.1 - 700</td> <td></td> </tr> <tr> <td>700.1 - 750</td> <td></td> </tr> <tr> <td>750.1 - 800</td> <td></td> </tr> <tr> <td>800.1 - 850</td> <td></td> </tr> <tr> <td>850.1 - 900</td> <td></td> </tr> <tr> <td>900.1 - 950</td> <td></td> </tr> <tr> <td>950.1 - 1,000</td> <td></td> </tr> <tr> <td>1,000.1 - 1,100</td> <td></td> </tr> <tr> <td>1,100.1 - 1,200</td> <td></td> </tr> <tr> <td>1,200.1 - 1,400</td> <td></td> </tr> <tr> <td>1,400.1 - 1,600</td> <td></td> </tr> <tr> <td>1,600.1 - 2,000</td> <td></td> </tr> <tr> <td>2,000.1 - 2,400</td> <td></td> </tr> <tr> <td>2,400.1 - 3,000</td> <td></td> </tr> <tr> <td>3,000.1 - 4,000</td> <td></td> </tr> <tr> <td>4,000.1 - 5,500</td> <td></td> </tr> </tbody> </table> <p>© UKCEH 2022. For Great Britain: Contains Ordnance Survey data © Crown copyright and database right 2022. Rainfall map based on Met Office Standard Average Annual Rainfall 1961-1990 © Crown copyright.</p> <p>The above suggests that the current nutrient budget calculations are correct.</p> <p>Nevertheless, Arcadis have undertaken a further sensitivity test to assess the potential implications of changing the rainfall band from 700.1-750 mm to 750.1- 800mm, as described below.</p>	Catchment statistics	Legend	SAAR 1941-1970: 761 mm		SAAR 1961-1990: 748 mm		Catchment statistics	Legend	Annual rainfall (SAAR 61-90), mm		506 - 525		525.1 - 550		550.1 - 575		575.1 - 600		600.1 - 625		625.1 - 650		650.1 - 675		675.1 - 700		700.1 - 750		750.1 - 800		800.1 - 850		850.1 - 900		900.1 - 950		950.1 - 1,000		1,000.1 - 1,100		1,100.1 - 1,200		1,200.1 - 1,400		1,400.1 - 1,600		1,600.1 - 2,000		2,000.1 - 2,400		2,400.1 - 3,000		3,000.1 - 4,000		4,000.1 - 5,500	
Catchment statistics	Legend																																																								
SAAR 1941-1970: 761 mm																																																									
SAAR 1961-1990: 748 mm																																																									
Catchment statistics	Legend																																																								
Annual rainfall (SAAR 61-90), mm																																																									
506 - 525																																																									
525.1 - 550																																																									
550.1 - 575																																																									
575.1 - 600																																																									
600.1 - 625																																																									
625.1 - 650																																																									
650.1 - 675																																																									
675.1 - 700																																																									
700.1 - 750																																																									
750.1 - 800																																																									
800.1 - 850																																																									
850.1 - 900																																																									
900.1 - 950																																																									
950.1 - 1,000																																																									
1,000.1 - 1,100																																																									
1,100.1 - 1,200																																																									
1,200.1 - 1,400																																																									
1,400.1 - 1,600																																																									
1,600.1 - 2,000																																																									
2,000.1 - 2,400																																																									
2,400.1 - 3,000																																																									
3,000.1 - 4,000																																																									
4,000.1 - 5,500																																																									

Natural England Comment from Appendix P	
	<p>Worst-case PCC Scenario 1 nutrient budget increased from 367.6 to 399.29 kg/year and the associated wetland area requirement increased from 30.64 ha to 33.27 ha</p> <p>Alternative, PCC Scenario 2 nutrient budget increased from 361.6 to 393.28 kg/year and the associated wetland area requirement increased from 30.14 ha to 32.77 ha</p> <p>Please note that the updated wetland proposals in Oct 2022 report gives a total of 35.68 ha and 35.21 ha of this is available within the current OPA. This also means that the current wetland provision in the OPA is still sufficient to achieve nutrient neutrality for the OPA.</p>
<p>Natural England, in partnership with The Rivers Trust and Constructed Wetland Association, has recently published the document 'Framework approach for Responding to Wetland Mitigation Proposals' which can be found on The Rivers Trust Constructed Wetland Hub. This wetland mitigation framework is being used by Natural England to adequately review wetland proposals and designs which are focused on Nutrient Neutrality mitigation. For this reason, we recommend that the developers utilise this document to assist in their wetland designs.</p> <p>Natural England notes that the Arcadis Nutrient Budget Analysis Update (July 2022) has used the medium nutrient removal efficiency ratings based on literature from Land et al., 2016, to calculate the required size of mitigation wetlands required for the development. However, we advise that this approach does not take into account the inlet concentration, which will strongly influence the load removal in most wetland treatment systems. If the inlet nutrient concentrations are low, then it is unlikely that the wetlands will remove the required load of nutrients sufficiently to achieve nutrient neutrality for the development. We therefore recommend that further design of the wetland should utilise industry best-practice approaches to calculate the nutrient removal and associated wetland area. These include;</p> <ul style="list-style-type: none"> • The P-K-C* approach • A 'plug flow' model termed the k-C* approach; or • Regression (or exponential decay) equations; <p>Please also note that we advise the wetland designs should use at least two of these approaches, and then the most</p>	<p>We understand from you that NE's recommendation for undertaking further design of the wetlands using the stated alternative industry best-practice approaches is only related to the next detailed design stage. We welcome this clarification and confirm that this will be suitably addressed during Tier 2 and Tier 3 stages, as already highlighted in Arcadis March 2022 WCS report and Oct 2022 Nutrient Budget Analysis Update Report.</p> <p>Therefore, the wastewater wetland design for each main development phase (or multiple phases) will be undertaken based on the recommended new guidance document (Framework approach for Responding to Wetland Mitigation Proposals) and any future detailed guidance provided by NE.</p> <p>The project team has consulted NE since June 2020 to agree the assessment method and key design parameters to develop our proposed nutrient mitigation strategy. As part of this process, NE has agreed to use the medium nutrient removal efficiency ratings based on literature from Land et al., 2016, to calculate the required size of mitigation wetlands required for the current OPA, considering the strategic and evolving nature of large and complex development such as Otterpool Park.</p>

Natural England Comment from Appendix P	
<p>precautionary calculation should be used to inform the nutrient removal rating of the wetland.</p> <p>Natural England notes that the Onsite WwTW will discharge effluent into one of the proposed wetlands. As the nutrient permit levels and effluent volume from the onsite WwTW are known, it is possible to utilise the recommended above approaches to accurately calculate the nutrient removal rate of this wetland.</p> <p>We advise that there are a multitude of factors that can influence the effectiveness of constructed mitigation wetlands. Therefore, we highly recommend that information found in the Wetland Mitigation Framework is considered when designing the nutrient mitigation wetlands. Additionally, further background information on constructed wetlands can be found within the 'Introduction to Freshwater Wetlands for Improving Water Quality (JP044)' report, which was recently published by Natural England.</p>	

5 Scope of HRA

5.1 Overview

5.1.1 All sites in the National Sites Network within 30km (totalling 18) were initially assessed for their potential to be affected by the proposed Development (Figure 2). Their qualifying features, conservation objectives and existing vulnerabilities were used as baseline data along with their proximity to the proposed Development (Table 6). An initial high level screening assessment was undertaken to assess whether the proposed Development has the potential to affect the integrity of any of the sites or their qualifying features.

5.1.2 The 18 sites are as follows:

- Dungeness, Romney Marsh and Rye Bay (with Marine Component) SPA, which is approximately 2.9km south of the proposed Development;
- Folkestone to Etchinghill Escarpment SAC, which is approximately 4.2km north-east of the proposed Development;
- Wye and Crundale Downs SAC, which is approximately 5.8km north of the proposed Development;
- Parkgate Down SAC, which is approximately 9.1km north-east of the proposed Development;
- Dungeness, Romney Marsh and Rye Bay Ramsar, which is approximately 9.9km south of the proposed Development;
- Dungeness SAC, which is approximately 9.9km south of the proposed Development;
- Lydden and Temple Ewell Downs SAC, which is approximately 15.1km north-east of the proposed Development;
- Dover to Kingsdown Cliffs SAC, which is approximately 20.1km north-east of the proposed Development;
- Blean Complex SAC, which is approximately 21.6km north of the proposed Development;
- Sandwich Bay SAC, which is approximately 28.9km north east of the proposed Development;
- Stodmarsh SAC, which is approximately 23.2km north of the proposed Development;
- Stodmarsh SPA, which is approximately 23.2km north of the proposed Development ;
- Stodmarsh Ramsar, which is approximately 23.2km north of the proposed Development;
- Tankerton Slopes and Swalecliffe SAC 29.5km
- The Swale SPA, which is approximately 25.2km north of the proposed Development;
- The Swale Ramsar, which is approximately 25.2km north of the proposed Development; and
- Thanet Coast and Sandwich Bay Ramsar which is approximately 26.5km north-east of the proposed Development
- Thanet Coast and Sandwich Bay SPA, which is approximately 28.5km north-east of the proposed Development.

5.2 Approach to Assessment

- 5.2.1 In line with the approach in Image 2, the first assessment to make is whether the proposed Development has the potential to impact any of the relevant designated sites. This was done by identifying the pathways through which the proposed Development (in the construction and operation phase) could impact upon the designated sites. The potential impact pathways relating to the proposed Development were largely determined by three key factors:
- whether there were any sites or qualifying features that could be directly affected by the proposed Development;
 - whether there are any sufficiently mobile qualifying features of the sites that, while distant from the proposed Development, may rely on functional habitat that would be affected by the proposed Development (largely birds and bats); and
 - whether any of the potential impacts of the proposed Development have the potential to indirectly affect receptors some distance from the proposed Development due to the zone of influence (for example through effects on water regime or increased traffic flow).
- 5.2.2 Professional judgement has been used in the assessment of relevant impact pathways, taking into account the conservation objectives for Sites in the National Sites Network and their vulnerabilities, to determine whether or not significant effects are likely to result from the proposed Development.
- 5.2.3 The following ES chapters contain information used as part of this assessment:
- Air Quality, Chapter 6;
 - Biodiversity Chapter 7 and particularly ES Appendices 7.15 and 7.16 the Breeding and Wintering Bird Reports;
 - Landscape and Visual Impact Chapter 12;
 - Socioeconomic Effects and Community Chapter 14;
 - Surface Water Resources and Flood Risk, Chapter 15; and
 - Transport Chapter 16.

5.3 Potential Vulnerabilities

- 5.3.1 The following vulnerabilities were listed on Site Improvement Plans (SIPs) for the Sites in the National Sites Network that have been scoped into the screening assessment. Vulnerabilities, comprising threats and pressures on particular interest features of the Sites in the National Sites Network, assist in focusing the HRA screening process to those areas of concern in relation to the integrity of the Sites in the National Sites Network and the favourable conservation status of their qualifying features:
- Invasive species;
 - Inappropriate scrub control;
 - Undergrazing;
 - Overgrazing;
 - Military pressure;
 - Illicit vehicle use;
 - Predation;
 - Habitat fragmentation;
 - Hydrological changes;
 - Changes in species distribution;
 - Direct impact from 3rd parties;

- Inappropriate water levels;
- Inappropriate ditch management;
- Fisheries: commercial marine and estuarine;
- Coastal squeeze;
- Air pollution
- Public access/disturbance; and
- Water pollution.

5.3.2 In addition to the above, habitat loss or degradation of functionally linked land has also been considered as part of this assessment.

5.4 Impacts Scoped Out

5.4.1 A number of the key threats (listed site vulnerabilities are either threats or pressures) listed within the SIPs relate to direct site-specific management issues which would not be related to potential impacts from the proposed Otterpool Development.

5.4.2 No habitat associated with the coastal environment (e.g. saltmarsh, intertidal habitat) will be directly impacted by the proposed Development, as such, coastal squeeze has been scoped out of the assessment.

5.4.3 With the exception of Stodmarsh, impacts associated with water pollution have been scoped out on surface water receptors beyond 1km of the site boundary, due to the lack of connectivity to the site and / or no shared water catchment area and therefore lack of a potential impact pathway. This is due to the large distances between the Sites in the National Sites Network and the proposed Development (the closest being Dungeness, Romney Marsh and Rye Bay (with Marine Component) SPA and Ramsar, with the marine component being approximately 2.9km south. ES Chapter 15 - Surface Water Resources and Flood Risk provides full details of the background and predicted proposed Development effects.

5.4.4 The exception, Stodmarsh SAC, SPA and Ramsar is due to advice received from Natural England (the site is linked to the proposed Development via the East Stour River catchment).

5.4.5 Temporary air quality impacts due to emissions of dust arising from the site clearance and construction phase of the proposed Development are scoped out due to their distance away from the designated sites. The Institute of Air Quality Management (IAQM, 2014) construction dust guidance requires that construction dust impacts are assessed up to 350m from the locations of demolition and areas within 50m from the route(s) used by construction vehicles on the public highway up to 500m from the main site entrance(s). The closest National Sites Network Site (formerly European Site) to the site are the marine component of the Dungeness, Romney Marsh and Rye Bay SPA (2.9km) and the next closest is Folkestone to Etchinghill Escarpment SAC (4.2km). The other sites are 8.9km to 28.5km

away. As no sites are located within these dust impact areas, this aspect of air quality impact is not considered within this report.

5.5 Impacts Scoped In

- 5.5.1 Fuller consideration of the likelihood of significant effects on the Sites in the National Sites Network in the context of their conservation objectives and vulnerabilities is reported in Section 6. This is summarised in the matrix presented in Appendix A.
- 5.5.2 Only those potential impacts and effects with potential relevance to the proposed Development and the qualifying features of the Sites in the National Sites Network, as listed in Table 6, have been scoped in for further consideration:
- Functionally linked land: changes in favourable condition of faunal species populations as a result of habitat loss/degradation/disturbance of functionally linked land.
 - Air pollution: impact of atmospheric nitrogen deposition – as a result of the increase in vehicular emissions during construction/operation.
 - Public access/disturbance – as a result of the increase in recreational pressure in the operational phase.
 - Water pollution: changes to water quality, specifically increased nutrient inputs (nitrogen and phosphorous) through wastewater, via water treatment works, and drainage to watercourses or ditches within the Stour catchment.
- 5.5.3 Further details of the rationale for scoping in these effects are presented below.

Functionally linked land - rationale for scoping in effect

- 5.5.4 Of the sites within 30km of the Otterpool site, only birds designated within SPAs and Ramsar sites were sufficiently mobile to potentially be supported or maintained by habitats within the Otterpool site (no SACs designated for bats were present within 30km).
- 5.5.5 During consultation with Natural England, while no particular concerns with regard to functionally linked land were raised, the following statement was made with regard to wintering birds:
- 5.5.6 “We are also pleased to note wintering bird surveys have commenced on the site, which will include establishing whether the site contains important habitat for waders and wildfowl. Given the distance between the proposed site and coastal SPAs/ Ramsar sites, it may be difficult to link birds to specific designated sites. However, the information will be useful in feeding into an overarching green infrastructure strategy for the site.” (extracted from communication presented in full in Appendix B).
- 5.5.7 The results of these surveys were used to determine the use of the site by populations of birds which are qualifying features of the SPA and Ramsar sites within the vicinity of the site.

Air pollution - rationale for scoping in effect

- 5.5.8 Some air pollutants (such as NO_x which are oxides of nitrogen) can have an effect on vegetation. Ambient concentrations of pollutants and deposition of particles can damage vegetation directly or affect plant health and productivity. Deposition of pollutants (such as nitrogen) to the ground and vegetation can affect the characteristics of the soil, which in turn can then affect plant health, productivity and species composition.
- 5.5.9 The operational phase of the proposed Development may affect air quality due to a change in vehicular emissions and pollutant concentrations resulting from changes to the flow, speed and composition of traffic on the road network and/or a change in road layout and

alignment, leading to a change in vehicular emissions and/or a change in the distance between vehicular emissions and receptors.

Public access/disturbance (recreation) – rationale for scoping in effect

5.5.10 This effect is scoped in due to the potential for a large number of additional people moving into the area. There is potential for sites to experience additional visitor numbers which could exacerbate effects from existing recreational pressure or add to the numbers of visitors to exceed a threshold and cause recreational pressure effects.

5.5.11 The sites that currently list recreational pressure as a vulnerability are the:

- Dungeness, Romney Marsh and Rye Bay (with Marine Component) SPA, of which the coastal component is 8.7km south of the proposed Development and the marine extension is approximately 2.9km south of the proposed Development;
- Dungeness, Romney Marsh and Rye Bay Ramsar, which is approximately 9.9km south of the proposed Development;
- Dungeness, Romney Marsh and Rye Bay SAC, which is approximately 9.9km south of the proposed Development;
- Lydden and Temple Ewell Downs SAC, which is approximately 15.1km north-east of the proposed Development;
- Sandwich Bay SAC, which is approximately 28.9km north east of the proposed Development;
- The Swale SPA, which is approximately 25.2km north of the proposed Development;
- The Swale Ramsar, which is approximately 25.2km north of the proposed Development; and
- Thanet Coast and Sandwich Bay SPA, which is approximately 28.5km north-east of the proposed Development.
- Thanet Coast and Sandwich Bay Ramsar, which is approximately 26.5km north-east of the proposed Development.

5.5.12 These impacts could be:

- Additional footfall causing degradation/erosion of habitats;
- Littering causing degradation of habitats;
- People walking potentially with accompanying dogs causing disturbance to sensitive species such as ground nesting birds;
- Dog fouling causing nutrient enrichment; and
- Inappropriate leisure activities such as camping and picnicking, potentially lighting fires, causing degradation and disturbance.

5.5.13 ES Chapter 14 Socio-economics and Community provides additional details of the predicted proposed Development effects on recreational impacts.

Water pollution - rationale for scoping in effect

5.5.14 The vulnerability of coastal, riverine and wetland National Sites Network Sites (formerly European Site) to nutrient inputs has been a cause for concern in recent years in relation to habitat degradation and maintenance of their favourable conservation status. Stodmarsh SAC, SPA and Ramsar site has been highlighted as being particularly vulnerable to water quality changes, specifically nitrogen and phosphorus. As such, Natural England has advised that all proposed Development within the Stour catchment that has the potential to lead to increased nutrient input (in the case of housing, this is through wastewater from water

treatment works, and drainage to watercourses or ditches within the catchment), must demonstrate nutrient neutrality.

5.6 Summary of Sites Scoped In

- 5.6.1 Of the 18 designated sites identified, all sites were scoped in for further assessment, as there was potential for one or more effects from the proposed Development.
- 5.6.2 Table 4 below presents all 18 sites and their qualifying features, along with existing vulnerabilities and conservation objectives to illustrate these scoping decisions.

Table 6 Sites in the National Sites Network scoping table

Protected Site	Approximate distance from study area (Km)	Qualifying features	Conservation objectives	Existing vulnerabilities	Summary of likely effects
Blean Complex SAC	21.6km N	Annex I habitats that are a primary reason for selection of this site: 9160. Sub-Atlantic and medio-European oak or oak-hornbeam forests of the <i>Carpinion betuli</i> ; Oak-hornbeam forests	Ensure that the integrity of the site is maintained or enhanced, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring; The extent and distribution of qualifying natural habitats The structure and function (including typical species) of qualifying natural habitats, and The supporting processes on which qualifying natural habitats rely	Threats identified in Site Improvement Plan include: Air pollution: impact of atmospheric nitrogen deposition	Potential effects from: Public access/disturbance, related to increased recreational pressure associated with development proposals.
Dover to Kingsdown Cliffs SAC	20.1km NE	Annex I habitats that are a primary reason for selection of this site: 1230 Vegetated sea cliffs of the Atlantic and Baltic coasts 6210 Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>)	Ensure that the integrity of the site is maintained or enhanced, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring; The extent and distribution of qualifying natural habitats The structure and function (including typical species) of qualifying natural habitats, and The supporting processes on which qualifying natural habitats rely	Threats identified in Site Improvement Plan include: Inappropriate scrub control Undergrazing Air pollution: impact of atmospheric nitrogen deposition	Potential effects from: Public access/disturbance, related to increased recreational pressure associated with development proposals
Dungeness SAC	9.9km S	Annex I habitats that are a primary reason for selection of this site: 1210 Annual vegetation of drift lines 1220 Perennial vegetation of stony banks Annex II species that are a primary reason for selection of this site: 1166 <i>Triturus cristatus</i> : Great crested newt	Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring; The extent and distribution of qualifying natural habitats and habitats of qualifying species The structure and function (including typical species) of qualifying natural habitats The structure and function of the habitats of qualifying species The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely The populations of qualifying species, and, The distribution of qualifying species within the site.	Threats identified in Site Improvement Plan include: Military pressure Illicit vehicle use Invasive species Inappropriate scrub control Overgrazing Public access/disturbance Direct impact from 3 rd parties Air pollution: impact of atmospheric nitrogen deposition Inappropriate water levels Water pollution	Potential effects from: Public access/disturbance, related to increased recreational pressure associated with development proposals
Dungeness, Romney Marsh and Rye Bay SPA (with Marine extension)	8.7km S (with Marine extension 2.9km S)	Qualifies under article 4.1 of the Directive (2009/147/EC), as it is regularly used by >1% of the UK population of the following Annex I species: <i>Bewick's swan</i> <i>Cygnus columbianus bewickii</i> <i>Bittern</i> <i>Botaurus stellaris</i> <i>Hen harrier</i> <i>Circus cyaneus</i>	Subject to natural change, maintain in favourable condition the habitats for the internationally important populations of the regularly occurring Annex 1 bird species, under the Birds Directive, in particular: Shingle Shallow coastal waters Sandflat and mudflat communities	Threats identified in Site Improvement Plan include: Military pressure Illicit vehicle use Predation Changes in species distribution	Potential effects from: Changes in species distribution, if Annex I bird species use functionally linked habitat on site which is lost/disturbed as a result of the development

Protected Site	Approximate distance from study area (Km)	Qualifying features	Conservation objectives	Existing vulnerabilities	Summary of likely effects
		<p>Golden plover <i>Pluvialis apricaria</i></p> <p>Ruff <i>Philomachus pugnax</i></p> <p>Aquatic warbler <i>Acrocephalus paludicola</i></p> <p>Marsh harrier <i>Circus aeruginosus</i></p> <p>Avocet <i>Recurvirostra avosetta</i></p> <p>Mediterranean gull <i>Larus melanocephalus</i></p> <p>Sandwich tern <i>Sterna sandvicensis</i></p> <p>Common tern <i>Sterna hirundo</i></p> <p>Little tern <i>Sterna albifrons</i></p> <p>Qualifies under article 4.2 of the Directive (2009/147/EC), as it is regularly used by >1% of the biogeographical populations of the following migratory species:</p> <p>Shoveler <i>Anas clypeata</i>: 485 wintering individuals (1.2% NW & C Europe non-breeding population)</p>		<p>Invasive species</p> <p>Public access/disturbance</p> <p>Direct impact from 3rd parties</p> <p>Inappropriate water levels</p> <p>Inappropriate ditch management</p> <p>Coastal squeeze</p> <p>Water pollution</p> <p>Fisheries: commercial marine and estuarine</p>	<p>Public access/disturbance, related to increased recreational pressure associated with development proposals</p>
Dungeness, Romney Marsh and Rye Bay Ramsar	9.9km S	<p>Criterion 1 (contains rare, unique examples of natural wetland types), including:</p> <p>Annual vegetation of drift lines and the coastal fringes of perennial vegetation of stony banks (Ramsar wetland type E – sand, shingle or pebble shores).</p> <p>Natural shingle wetlands: saline lagoons (Ramsar wetland type J – coastal brackish/saline lagoons), freshwater pits (Ramsar wetland type K – coastal freshwater lagoons) and basin fens (Ramsar wetland type U – non-forested peatlands).</p> <p>Criterion 2 (supports threatened ecological communities), including:</p> <p>Bryophytes e.g. wetland thread-mosses <i>Bryum</i> species</p> <p>Vascular plants e.g. sea barley <i>Hordeum marinum</i>, Borrer's saltmarsh-grass <i>Puccinellia fasciculata</i> and slender hare's-ear <i>Bupleurum tenuissimum</i>, sea-heath <i>Frankenia laevis</i>, sharp-leaved pondweed <i>Potamogeton acutifolius</i>, divided sedge <i>Carex divisa</i> and rootless duckweed <i>Wolffia arrhiza</i>.</p> <p>Invertebrates e.g. reed beetles <i>Donacia</i>, snail-killing flies (<i>Sciomyzidae</i>) and soldierflies (<i>Stratiomyidae</i>)</p> <p>It also supports vulnerable, endangered or critically endangered wetland species, including:</p> <p>greater water-parsnip <i>Sium latifolium</i></p> <p>Warne's thread-moss <i>Bryum warneum</i></p> <p>water vole <i>Arvicola amphibius</i></p> <p>aquatic warbler <i>Acrocephalus paludicola</i></p>	<p>Subject to natural change, maintain in favourable condition the habitats for the internationally important populations of the regularly occurring Annex 1 bird species, under the Birds Directive, in particular:</p> <p>Shingle</p> <p>Shallow coastal waters</p> <p>Sandflat and mudflat communities</p>	<p>Threats identified in Site Improvement Plan include:</p> <p>Military pressure</p> <p>Illicit vehicle use</p> <p>Predation</p> <p>Changes in species distribution</p> <p>Invasive species</p> <p>Public access/disturbance</p> <p>Direct impact from 3rd parties</p> <p>Inappropriate water levels</p> <p>Inappropriate ditch management</p> <p>Coastal squeeze</p> <p>Water pollution</p> <p>Fisheries: commercial marine and estuarine</p>	<p>Potential effects from:</p> <p>Changes in species distribution, if Ramsar bird species use functionally linked habitat on site which is lost/disturbed as a result of the development</p> <p>Public access/disturbance, related to increased recreational pressure associated with development proposals</p>

Protected Site	Approximate distance from study area (Km)	Qualifying features	Conservation objectives	Existing vulnerabilities	Summary of likely effects
		<p>great crested newt</p> <p>medicinal leech <i>Hirudo medicinalis</i></p> <p>a ground beetle <i>Omophron limbatum</i></p> <p>marsh mallow moth <i>Hydraecia osseola hucherardi</i></p> <p>De Folin's lagoon snail <i>Caecum amoricum</i></p> <p>Criterion 5 (regularly supports >20,000 waterbirds); in the non-breeding season the site supports 34,957 waterbirds (5-year peak mean 2002/3 – 2006/7).</p> <p>Criterion 6 (regularly supports 1% individuals in the population of the following species):</p> <p>Mute swan <i>Cygnus olor</i>; 348 wintering individuals (1.1% British population)</p> <p>Shoveler: 485 wintering individuals (1.2% NW & C Europe non-breeding population)</p>			
Folkestone to Etchinghill Escarpment SAC	4.2km NE	<p>Annex I habitats that are a primary reason for selection of this site:</p> <p>6210 Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>)</p>	<p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;</p> <p>The extent and distribution of qualifying natural habitats</p> <p>The structure and function (including typical species) of qualifying natural habitats, and</p> <p>The supporting processes on which qualifying natural habitats rely</p>	<p>Threats identified in the Site Improvement Plan include:</p> <p>Undergrazing</p> <p>Inappropriate scrub control</p> <p>Air pollution: impact of atmospheric nitrogen deposition</p>	<p>Potential effects from:</p> <p>Air pollution, related with increase in vehicle movements associated with development proposals</p> <p>Public access/disturbance, related to increased recreational pressure associated with development proposals</p>
Lydden and Temple Ewell Downs SAC	15.1km NE	<p>Annex I habitats that are a primary reason for selection of this site:</p> <p>6210 Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>)</p>	<p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;</p> <p>The extent and distribution of qualifying natural habitats</p> <p>The structure and function (including typical species) of qualifying natural habitats, and</p> <p>The supporting processes on which qualifying natural habitats rely</p>	<p>Threats identified in the Site Improvement Plan include:</p> <p>Overgrazing</p> <p>Public access/disturbance</p> <p>Air pollution: impact of atmospheric nitrogen deposition</p>	<p>Potential effects from:</p> <p>Public access/disturbance, related to increased recreational pressure associated with development proposals</p>

Protected Site	Approximate distance from study area (Km)	Qualifying features	Conservation objectives	Existing vulnerabilities	Summary of likely effects
Parkgate Down SAC	9.1km NE	Annex I habitats that are a primary reason for selection of this site: 6210 Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>)	Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring; The extent and distribution of qualifying natural habitats The structure and function (including typical species) of qualifying natural habitats, and The supporting processes on which qualifying natural habitats rely	Threats identified in the Site Improvement Plan include: Habitat fragmentation Air pollution: impact atmospheric nitrogen deposition	Potential effects from: Public access/disturbance, related to increased recreational pressure associated with development proposals
Sandwich Bay SAC	28.9km NE	Annex I habitats that are a primary reason for selection of this site: 2110 Embryonic shifting dunes 2120 Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ("white dunes") 2130 Fixed coastal dunes with herbaceous vegetation ("grey dunes") 2170 Dunes with <i>Salix repens ssp. argentea</i> (<i>Salicion arenariae</i>) Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site: 2190 Humid dune slacks	Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring; The extent and distribution of qualifying natural habitats The structure and function (including typical species) of qualifying natural habitats, and The supporting processes on which qualifying natural habitats rely	Threats identified in the Site Improvement Plan include: Invasive species Public access/disturbance Hydrological changes Air pollution: impact atmospheric nitrogen deposition Fisheries: commercial marine and estuarine	Potential effects from: Public access/disturbance, related to increased recreational pressure associated with development proposals
Stodmarsh SAC	23.2km N	Annex II species that are a primary reason for selection of this site: 1016 Desmoulin's whorl snail <i>Vertigo moulinsiana</i>	Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring; The extent and distribution of the habitats of qualifying species The structure and function of the habitats of qualifying species The supporting processes on which the habitats of qualifying species rely The populations of the qualifying species, and, The distribution of the qualifying species within the site.	Threats identified on the Site Improvement Plan include: Water pollution Invasive species Inappropriate scrub control Air pollution: impact of atmospheric nitrogen deposition	Notwithstanding the distance from the site, recreational pressure is considered to be a potential indirect effect that could result from the proposed Development; however, as the habitat is not currently under this threat and given the marginal and aquatic nature of this vegetation it would be an extremely unlikely effect from any additional recreational pressure. The proposed Development has potential to lead to significant effects associated with changes to water quality, specifically increased nutrient inputs (nitrogen and phosphorous) through wastewater via water treatment works, and drainage to watercourses or ditches within the Stour catchment.

Protected Site	Approximate distance from study area (Km)	Qualifying features	Conservation objectives	Existing vulnerabilities	Summary of likely effects
Stodmarsh SPA	23.2km N	<p>Qualifies under article 4.1 of the Directive (2009/147/EC), as it is regularly used by >1% of the UK population of the following Annex I species:</p> <p>Great bittern <i>Botaurus stellaris</i> (Non-breeding)</p> <p>Hen harrier <i>Circus cyaneus</i> (Non-breeding)</p> <p>Qualifies under article 4.2 of the Directive (2009/147/EC), as it is regularly used by >1% of the biogeographical populations of the following migratory species:</p> <p>Gadwall <i>Anas strepera</i> (Breeding)</p> <p>Northern shoveler <i>Anas clypeata</i> (Non-breeding)</p> <p>It further qualifies under Article 4.2 by virtue of regularly supporting a diverse waterbird and breeding bird assemblage.</p>	<p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;</p> <p>The extent and distribution of the habitats of the qualifying features</p> <p>The structure and function of the habitats of the qualifying features</p> <p>The supporting processes on which the habitats of the qualifying features rely</p> <p>The population of each of the qualifying features, and,</p> <p>The distribution of the qualifying features within the site.</p>	<p>Threats identified on the Site Improvement Plan include:</p> <p>Water pollution</p> <p>Invasive species</p> <p>Inappropriate scrub control</p> <p>Air pollution: impact of atmospheric nitrogen deposition</p>	<p>Potential effects from:</p> <p>changes in species distribution, if Annex I bird species use functionally linked habitat on site, which is lost/disturbed as a result of the development</p> <p>changes to water quality, specifically increased nutrient inputs (nitrogen and phosphorous) through wastewater via water treatment works, and drainage to watercourses or ditches within the Stour catchment.</p>
Stodmarsh Ramsar	23.2km N	<p>Criterion 2 (supports threatened ecological communities), including:</p> <p>Invertebrates (six British Red Data Book wetland species)</p> <p>Vascular plants (two nationally rare plants, and five nationally scarce species)</p> <p>Rare wetland birds</p>	As above.	As above.	<p>Potential effects from:</p> <p>changes in species distribution, if Ramsar bird species use functionally linked habitat on site, which is lost/disturbed as a result of the development</p> <p>changes to water quality, specifically increased nutrient inputs (nitrogen and phosphorous) through wastewater via water treatment works, and drainage to watercourses or ditches within the Stour catchment.</p>
The Swale Ramsar	25.2km N	<p>Criterion 2 (supports threatened ecological communities), including:</p> <p>nationally scarce plants e.g. <i>Bupleurum tenuissimum</i>, <i>Carex divisa</i>, <i>Hordeum marinum</i> and <i>Spartina maritima</i>.</p> <p>at least seven red data book invertebrates e.g. <i>Bagous cylindrus</i>, <i>Erioptera bivittata</i>, <i>Lejops vittata</i>, <i>Peocilobothris ducalis</i>, <i>Philonthus punctus</i>, <i>Micronecta minutissima</i>, <i>Malchius vulneratus</i>, <i>Campsicnemus majus</i>, <i>Elachiptera rufifrons</i> and <i>Myopites eximia</i></p> <p>the Mediterranean gull <i>Larus melanocephalus</i></p> <p>Criterion 5 (regularly supports >20,000 waterbirds); in the winter the site supports 77,501 waterbirds (5-year peak mean 1998/99 – 2002/03).</p> <p>Criterion 6 (regularly supports 1% individuals in the population of the following species):</p> <p>Ringed plover <i>Charadrius hiaticula</i>; 917 individuals in spring/autumn (1.2% of the Europe/Northwest Africa population)</p>	<p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;</p> <p>The extent and distribution of the habitats of the qualifying features</p> <p>The structure and function of the habitats of the qualifying features</p> <p>The supporting processes on which the habitats of the qualifying features rely</p> <p>The population of each of the qualifying features, and,</p> <p>The distribution of the qualifying features within the site.</p> <p>The qualifying features include:</p> <p>Dark bellied brent goose <i>Branta bernicla bernicla</i> (non-breeding)</p> <p>Dunlin <i>Calidris alpina alpina</i> (non-breeding)</p> <p>Breeding bird assemblage</p> <p>Waterbird assemblage</p>	<p>Threats identified on the Site Improvement Plan include:</p> <p>Coastal squeeze</p> <p>Public access/disturbance</p> <p>Illicit vehicle use</p> <p>Invasive species</p> <p>Fisheries: commercial marine and estuarine</p> <p>Changes in species distributions</p> <p>Air pollution: impact of atmospheric nitrogen deposition</p>	<p>Potential effects from:</p> <p>changes in species distribution, if Ramsar bird species use functionally linked habitat on site, which is lost/disturbed as a result of the development</p>

Protected Site	Approximate distance from study area (Km)	Qualifying features	Conservation objectives	Existing vulnerabilities	Summary of likely effects
		<p>Black-tailed godwit <i>Limosa limosa islandica</i>: 1504 individuals in winter (4.2% of the Iceland/W Europe population)</p> <p>Eurasian wigeon <i>Anas Penelope</i>: 15296 individuals in winter (1% of the NW Europe population)</p> <p>Northern pintail <i>Anas acuta</i>: 763 individuals in winter (1.2% of the NW Europe population)</p> <p>Northern shoveler <i>Anas clypeata</i>: 483 individuals in winter (1.2% of the NW & C Europe population)</p>			
The Swale SPA	25.2km N	<p>Qualifies under article 4.1 of the Directive (2009/147/EC), as it is regularly used by >1% of the UK population of the following Annex I species:</p> <p>Marsh Harrier <i>Circus aeruginosus</i></p> <p>Mediterranean Gull <i>Larus melanocephalus</i></p> <p>Avocet <i>Recurvirostra avosetta</i></p> <p>Bar-tailed Godwit <i>Limosa lapponica</i></p> <p>Golden Plover <i>Pluvialis apricaria</i></p> <p>Hen Harrier <i>Circus cyaneus</i></p> <p>Qualifies under article 4.2 of the Directive (2009/147/EC), as it is regularly used by >1% of the biogeographical populations of the following migratory species:</p> <p>Ringed Plover <i>Charadrius hiaticula</i></p> <p>Black-tailed Godwit <i>Limosa limosa islandica</i></p> <p>Grey Plover <i>Pluvialis squatarola</i></p> <p>Knot <i>Calidris canutus</i></p> <p>Pintail <i>Anas acuta</i></p> <p>Redshank <i>Tringa totanus</i></p> <p>Shoveler <i>Anas clypeata</i>,</p>	<p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;</p> <p>The extent and distribution of the habitats of the qualifying features</p> <p>The structure and function of the habitats of the qualifying features</p> <p>The supporting processes on which the habitats of the qualifying features rely</p> <p>The population of each of the qualifying features, and,</p> <p>The distribution of the qualifying features within the site.</p> <p>The qualifying features include:</p> <p>Dark bellied brent goose <i>Branta bernicla bernicla</i> (non-breeding)</p> <p>Dunlin <i>Calidris alpina alpina</i> (non-breeding)</p> <p>Breeding bird assemblage</p> <p>Waterbird assemblage</p>	<p>Threats identified on the Site Improvement Plan include:</p> <p>Coastal squeeze</p> <p>Public access/disturbance</p> <p>Illicit vehicle use</p> <p>Invasive species</p> <p>Fisheries: commercial marine and estuarine</p> <p>Changes in species distributions</p> <p>Air pollution: impact of atmospheric nitrogen deposition</p>	<p>Potential effects from:</p> <p>changes in species distribution, if Annex I bird species use functionally linked habitat on site, which is lost/disturbed as a result of the development</p>
Tankerton Slopes and Swalecliffe SAC	29.5km N	<p>Annex II species that are a primary reason for selection of this site:</p> <p>4035 Fisher's estuarine moth <i>Gortyna borelii lunatawye</i></p> <p>Tankerton Slopes and Swalecliffe supports the majority of the north Kent population of this moth which is approximately 20% of the UK population. The site's north facing slopes are composed of London Clay and support a tall herb community dominated by its food plant hog's fennel <i>Peucedanum officinale</i>, together with areas of neutral grassland also required by the species for egg laying.</p>	<p>While not a qualifying species there is an objective to maintain an area of coastal grassland supporting large populations of hog's fennel, 1001 - 3000 individual plants upon which the Fisher's estuarine moth depends.</p> <p>To maintain a viable population of <i>Agonopterix putridella</i></p> <p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;</p> <p>The extent and distribution of the habitats of qualifying species</p> <p>The structure and function of the habitats of qualifying species</p>	<p>There is no Site Improvement Plan for this site but NE have indicated that the sites are sloped and contain tall grassland and hogs fennel plants making them unattractive and difficult for people to access especially when compared with the well maintained paths and amenity grassland adjacent (Canterbury City Council 2014).</p>	<p>The sites are managed and monitored by the Council and are considered to be in a favourable condition. Natural England indicated that the main concern of with respect to this site was people moving off the paths damaging the plants that make up the moths habitat by trampling. At the present time this is not shown to occur and as such Natural England does not currently view this as an issue (Canterbury City Council 2014).</p>

Protected Site	Approximate distance from study area (Km)	Qualifying features	Conservation objectives	Existing vulnerabilities	Summary of likely effects
			<p>The supporting processes on which the habitats of qualifying species rely</p> <p>The populations of the qualifying species, and,</p> <p>The distribution of the qualifying species within the site.</p>		
Thanet Coast and Sandwich Bay SPA	28.5km NE	<p>Qualifies under article 4.2 of the Directive (2009/147/EC), as it is regularly used by >1% of the biogeographical populations of the following migratory species:</p> <p>Turnstone <i>Arenaria interpres</i></p>	<p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;</p> <p>The extent and distribution of the habitats of the qualifying features</p> <p>The structure and function of the habitats of the qualifying features</p> <p>The supporting processes on which the habitats of the qualifying features rely</p> <p>The population of each of the qualifying features, and,</p> <p>The distribution of the qualifying features within the site.</p>	<p>Threats identified in the Site Improvement Plan include:</p> <p>Changes in species composition</p> <p>Invasive species</p> <p>Public access/disturbance</p> <p>Water pollution</p> <p>Fisheries: commercial marine and estuarine</p>	<p>Potential effects from:</p> <p>changes in species distribution, if Annex I bird species use functionally linked habitat on site, which is lost/disturbed as a result of the development</p>
Thanet Coast and Sandwich Bay Ramsar	26.5km NE	<p>A coastal site, consisting of a long stretch of rocky shore, adjoining areas of estuary, sand dune, maritime grassland, saltmarsh and grazing marsh. The wetland habitats support 15 British Red Data Book invertebrates, as well as a large number of nationally scarce species. The site attracts internationally important numbers of turnstone <i>Arenaria interpres</i>, and nationally important numbers of nationally important wintering populations of four wader species: ringed plover, golden plover, grey plover and sanderling, as well as Lapland bunting. The site is used by large numbers of migratory birds.</p>	<p>There are a number of beach resorts around this Ramsar site, and the whole coastline is heavily used for recreation. Although there is more use in summer, there are a number of recreational activities that take place year-round on the coast, such as dog walking, and it is these that have most effect on wintering birds. The inland parts of this Ramsar Site are the only areas that are not heavily used for recreation. Water-based recreation includes jet-skiing, power-boat use, sailing, water-skiing and kite-surfing at a number of locations around the site. These activities happen mostly in spring, summer and autumn, but there is some year-round use. Kite-boarding has been noted at two locations and has caused bird disturbance problems. This activity happens intermittently but more often in summer.</p>	<p>Vegetation succession</p> <p>Recreation</p> <p>Water diversion for irrigation/domestic/industrial use</p> <p>Eutrophication</p> <p>Pollution – pesticides/agricultural runoff</p> <p>Recreational/tourism disturbance (unspecified)</p> <p>Unspecified development: urban use</p>	<p>Potential effects from recreation and functionally linked bird habitats.</p>
Wye and Crundale Downs SAC	5.8km N	<p>Annex I habitats that are a primary reason for selection of this site:</p> <p>6210 Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>)</p>	<p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;</p> <p>The extent and distribution of qualifying natural habitats</p> <p>The structure and function (including typical species) of qualifying natural habitats, and</p> <p>The supporting processes on which qualifying natural habitats rely</p>	<p>Threats identified in the Site Improvement Plan include:</p> <p>Overgrazing</p> <p>Inappropriate scrub control</p> <p>Air pollution: impact of atmospheric nitrogen deposition</p>	<p>Potential effects from:</p> <p>Public access/disturbance, related to increased recreational pressure associated with development proposals</p>

6 Assessment of Likely Significant Effects – (Stage 1)

6.1 Functionally Linked Land

Potential impacts to mobile species at SPA and Ramsar sites and surveys conducted

- 6.1.1 The potential effects of the proposed Development considered whether areas of habitat loss and/or degradation were of a type and quality that could support significant numbers of qualifying species of the SPAs and Ramsar sites which would therefore act as functionally linked land to the designated sites. This could also result in disturbance to qualifying features as a result of construction and/or operation.
- 6.1.2 Wintering bird surveys were undertaken on the site from November 2016 to February 2017, with an additional visit in November 2019 and update surveys in December 2020; breeding surveys were undertaken from March 2017 to July 2017 with additional visits undertaken in April 2020 and April 2021. The ES Chapter 7 Biodiversity and ES Appendices 7.15 and 7.16 present full details of the results. The results of the first breeding survey undertaken on 20/03/2017 were more reflective of wintering/passage numbers and behaviour with large flocks of birds such as black headed gull, common gull and field fare which were not observed during the breeding season. In order that this data did not skew the breeding bird assessment, this is discussed separately within the breeding and wintering bird reports. Data from bird surveys is summarised for assessment within this chapter.
- 6.1.3 For Tankerton Slopes and Swalecliffe SAC, the habitats present, (i.e. coastal cliffs with hog's fennel) that maintain the Fisher's estuarine moth *Gortyna borelii lunata* are not representative of the habitats on site. This species is not sufficiently mobile to be affected from proposed Development of the Otterpool site. Impacts are therefore screened out.

Assessment

Bird surveys

- 6.1.4 A wintering bird survey, consisting of walked transect surveys, according to methods adapted from Gilbert et al. 1998) was undertaken by skilled surveyors between November 2016 and February 2017 (inclusive). Surveys were undertaken twice a month, normally with a two-week gap between surveys. Each of the two survey visits undertaken each month comprised one dawn and one daytime survey (ending at dusk). The surveys were timed to take place across a variety of weather conditions in an attempt to obtain a representative picture of bird numbers and activity.
- 6.1.5 Prior to undertaking bird surveys, a habitat assessment was undertaken in October 2016 to identify habitats and areas likely to be of value for birds. During this survey, key habitat areas, including likely nesting, breeding and foraging areas were identified (habitat assessments were updated each year between 2018 and 2021).

Wintering Bird Surveys

- 6.1.6 Transects were walked at a constant pace and birds seen or heard were identified and counted. All bird species were mapped and recorded using standard British Trust for Ornithology (BTO) species and behaviour codes. The data was recorded digitally on hand-held tablets with mobile GIS and GPS capability. Each surveyor started from a different location on site in order to better cover the entire site within a reasonable amount of time, a

location which was varied for each visit to ensure that all parts of the site were surveyed (transect passed within 100m) at varying times of day.

- 6.1.7 Audio surveys were undertaken after each dusk transect survey in locations where surveyors were most likely to hear golden plover (*Pluvialis apricaria*) calls, for a period of 30 minutes after sunset.
- 6.1.8 A follow up survey was undertaken in November 2019. This survey followed the same transect based methodology but did not include audio surveys for golden plover.
- 6.1.9 2020 surveys comprised two transect / walkover surveys of different parts of the site on 21 and 22 December 2020.

Breeding Bird Surveys

- 6.1.10 A breeding bird survey, consisting of walked transect surveys, according to methods adapted from Gilbert et al. (1998) and in line with the BTO guidance for breeding bird surveys was undertaken by skilled surveyors between March 2017 and June 2017 (inclusive). Surveys were undertaken approximately once every two weeks, up to a total of eight visits. Further single update surveys were undertaken in April 2020 and April 2021. All survey visits began at dawn (approximately one hour before sunrise) or later if birds began singing later due to the weather conditions and low light levels. No two consecutive surveys were started from the same location – this was varied in an attempt to obtain a representative picture of bird numbers and activity.
- 6.1.11 Transect routes were chosen proactively to align within 100m of notable features and habitat potentially suitable for nesting birds, which was identified during the habitat assessment. The transect route was designed to cover all habitat types within the site.
- 6.1.12 During the survey, birds identified were placed into four categories: confirmed breeder, probable breeder, possible breeder and non-breeding. The early March results were excluded from breeding bird discussion as the results were indicative of wintering/passage birds.

Results and discussion

- 6.1.13 Of the breeding bird species that form qualifying features of the sites listed in Table 6, only one (Mediterranean gull) was recorded during breeding bird surveys (one individual on one occasion in late June 2017, 17 individuals recorded in March 2017 (however, this sampling point as previously discussed was more indicative of wintering/passage with no breeding behaviour), and two individuals in late April 2021) not exhibiting any breeding behaviour. The site does not feature suitable breeding habitat for this species, which breeds at coastal wetlands, therefore they are not considered to breed within the site. As a result, it is considered that the site is of no breeding value for this species, it is not functionally linked land and there will be no impact upon their status as a qualifying feature.
- 6.1.14 Ringed plover, a species listed on the designation for Thanet Coast & Sandwich Bay Ramsar Site was recorded on a single occasion (one individual). Considering the single record of this species over the five years of surveying, it is considered that the site is not functionally linked land and there will be no impact upon their status as a qualifying feature.
- 6.1.15 During the wintering bird surveys Mediterranean gull were recorded foraging in large numbers on one occasion where 334 birds were recorded on a single visit on 23/02/2017. In winter they are likely to be found feeding in coastal areas with some beaches in Norfolk and Kent attracting hundreds of birds, their diet is based on terrestrial and aquatic insects, marine molluscs and fish. These results indicate that the species were likely on passage to their

coastal breeding sites. Therefore, the Otterpool site is not functionally linked land and its development will have no impact upon the breeding fitness of the qualifying feature.

- 6.1.16 For the wintering bird's qualification, golden plover was recorded (which is listed on the designation for Dungeness Ramsar site and Thanet Coast & Sandwich Bay Ramsar Site). Three individuals were recorded on one occasion (05/12/16) during the wintering bird surveys. While golden plover can be found in lowland inland agricultural land their preferred habitat is around the coast on coastal marshes and estuaries and on wetlands. The peak count recorded at the Dungeness, Romney Marsh and Rye Bay SPA in 2016 was in the region of 4050 birds (Natural England, 2016). As a result, it is considered that the site is of very limited value for this species and therefore the site is not functionally linked land and there will be no impact upon their status as a qualifying feature.
- 6.1.17 The 2020 wintering bird surveys identified four more species associated with the Dungeness, Romney Marsh and Rye Bay SPA citation: pochard (single individual), little grebe (single individual), cormorant (two individuals) and lapwing (eleven individuals). These species are part of the wintering bird assemblage for the site. Pochard, little grebe and cormorant exceed 1% of the GB wintering or passage populations. Lapwing are noted to be present in sufficient numbers to warrant their being listed as a major component species of the assemblage (their numbers exceed 2,000 individuals (10% of the minimum qualifying assemblage of 20,000). It is therefore considered that the site is of very limited value for these species, the site is not functionally linked land and there will be no impact upon their status as a qualifying feature.
- 6.1.18 Under Ramsar Criterion 6, mute swan qualifies as a wintering species. This species was only observed as one individual on one occasion during the breeding season on 26/06/17, this was not observed to be breeding. The Folkestone Racecourse Lake offers limited potential breeding habitat. As a result, it is considered that the site is of very limited value for this species and therefore the site is not functionally linked land and there will be no impact upon their status as a qualifying feature.
- 6.1.19 Table 5 summarises the results of the qualifying features recorded on site.

Table 7 - Bird species listed as a qualifying feature of the Sites in the National Sites Network recorded on site

Species	Sites in the National Sites Network	Presence on site	Notes
Golden plover <i>Pluvialis apricaria</i>	Dungeness, Romney Marsh and Rye Bay SPA and Ramsar The Swale SPA and Ramsar	3 individuals recorded on 05/12/2016 survey visit	Recorded in very low numbers on a single visit.
Mediterranean gull <i>Larus melanocephalus</i>	Dungeness, Romney Marsh and Rye Bay SPA and Ramsar	1 individual recorded on one occasion within the breeding bird surveys. 388 individuals recorded in wintering surveys (November to February 2016/2017), and 17 in the March 2017 breeding survey that was considered to be typical of more wintering behaviour due to results the species recorded in breeding bird surveys. There were less than 25 on every visit with the exception of 334 of these individuals recorded on a single visit on 23/02/2017.	Listed in both designations due to breeding status on the designated sites. Considered not to breed within the site.

Species	Sites in the National Sites Network	Presence on site	Notes
		These birds are likely to be on passage to breeding sites elsewhere.	
Mute swan <i>Cygnus olor</i>	Dungeness, Romney Marsh and Rye Bay Ramsar	1 individual on one occasion during the breeding season on 26/06/17	Possible breeder but the site is unlikely to maintain this species
Pochard <i>Aythya farina</i>	Dungeness, Romney Marsh and Rye Bay SPA	1 individual recorded during the December 2020 wintering bird surveys	Recorded in very low numbers on a single visit.
Little grebe <i>Tachybaptus ruficollis</i>	Dungeness, Romney Marsh and Rye Bay SPA	1 individual recorded during the December 2020 wintering bird surveys	Recorded in very low numbers on a single visit.
Cormorant <i>Phalacrocorax carbo</i>	Dungeness, Romney Marsh and Rye Bay SPA	2 individuals recorded during the December 2020 wintering bird surveys	Recorded in very low numbers on a single visit.
Lapwing	Dungeness, Romney Marsh and Rye Bay SPA	11 individuals recorded during the December 2020 wintering bird surveys	Recorded in low numbers on a single visit.
Ringed Plover	Thanet Coast & Sandwich Bay Ramsar Site	1 individual recorded during the March 2017 bird surveys	Recorded in low numbers on a single visit.
Gadwall	Stodmarsh SPA and Ramsar Site	Peak count of 28 in December 2016 and January 2017	Recorded in low numbers on two visits only.

Conclusion

- 6.1.20 In conclusion, no likely significant effects are anticipated to any of the qualifying features of the SPAs or Ramsar sites within 30km, as a result of the proposed Development due to functionally linked land.
- 6.1.21 This assertion was supported by Natural England following the previous submission, and none of the findings of the subsequent surveys have provided any additional information that would cause this to be questioned.

6.2 Air Pollution Assessment (Screening - Stage 1)

Thresholds for Assessment

- 6.2.1 While many of the designated sites have air quality as sensitivities, there is a threshold of pollutants for the requirement to measure potential effects for air quality, set by National Highways' Design Manual for Roads and Bridges LA 105 Air Quality guidance (as below that level there would be no appreciable difference in air quality). This threshold criteria for air quality assessment is that sites within 200m of roads which meet any of a set of traffic change criteria as impacts from traffic emissions must be assessed. Beyond 200m from the emission source, impacts are generally accepted to be negligible. The change criteria are set at:
- a change of +/- 1000 vehicles per day,
 - +/- 200 Heavy Duty Vehicles (HDV).
 - A change in speed band; or
 - A change in carriageway alignment by ≥ 5 m.
- 6.2.2 Under these criteria, the only National Sites Network Sites (formerly European Sites) scoped into the assessment is the Folkestone to Etchinghill Escarpment SAC.
- 6.2.3 Full details of the assessment of roads and sites applicable to the proposed Development are provided within the Air Quality ES Chapter 6.

Potential impacts from poor air quality

- 6.2.4 Air pollution in the form of elevated nitrogen oxides (NO_x) concentrations and nitrogen (N) deposition generated as a result of traffic can adversely affect ecosystems, particularly where sensitive habitats including aquatic habitats are the qualifying features. The impact pathways are complex but this pollution can inhibit metabolic pathways and act as a macro-nutrient that will over stimulate growth of some species to the detriment of others (WHO 2000).

Impact Assessment

Deferring to the Local Plan HRA for ecological sites with a National Sites Network designation

- 6.2.5 The ecological assessment has been carried out in accordance with the methods and principles detailed in the Institute of Air Quality Management's (IAQM) designated sites guidance (2020).
- 6.2.6 The IAQM ecological guidance states that for impacts on sites with a SAC or SPA designation, the assessor should first consider whether the air quality issues have been considered in the Local Plan HRA. Additionally, it states that if this has been done then it is appropriate and in line with government guidance to defer to that over-arching Local Plan assessment. Deferring 'upwards' to the Local Plan also addresses the undesirable situation of having multiple traffic and air quality models for a single local authority area and the potential for the modelling inconsistencies that would follow.
- 6.2.7 The only site with a designation in the operational phase local air quality study area is the Folkestone to Etchinghill SAC. The proposed Development is included as an allocation in both the F&HDC Places and Policies Local Plan and Core Strategy Review (CSR) to the end of the respective Local Plan and Core Strategy Review periods in 2031 and 2037.
- 6.2.8 The CSR HRA (Ref 6.29) carried out on behalf of F&HDC in December 2018 by LUC concluded that there would be no adverse effects on Sites in the National Sites Network (including Folkestone to Etchinghill SAC) by the end of the CSR period in 2037 in a high

growth scenario whereby 8,000 residential units would be built out over the period (including 5,925 at the proposed Development).

- 6.2.9 An addendum to the CSR HRA was published by LUC in November 2019 (Ref 6.30). It stated that the addendum report was produced in response to proposed changes to the Folkestone and Hythe CSR, which contained a new housing need figure following the publication of the Government's new standard methodology for calculating housing need. This served to increase the allocated number of residential units at the proposed Development to 6,375 by 2037 (the current indicative schedule for the proposed Development estimates 6273 homes will be built by 2037), however the overall number of units built out across the CSR period is 7,700, which is below the 8,000 unit scenario assessed in the CSR HRA. The HRA addendum therefore concluded that as the overall housing quantum was lower, the findings of the CSR HRA would remain valid and that impacts from air pollution to Sites in the National Sites Network identified within the HRA will be adequately mitigated for and will not lead to adverse effects on integrity either alone or in-combination with other plans and projects.
- 6.2.10 Therefore, in line with the IAQM guidance, assessment of impacts on ecological sites from the operation of the proposed Development should be deferred upwards to the CSR HRA.
- 6.2.11 For impacts on Sites in the National Sites Network in 2044 (i.e. beyond the CSR period), it is highly likely that the assessment approach adopted in the air quality ES chapter (i.e. using 2030 emission rates with 2044 traffic (due to the horizon year of the current Defra tools) would produce overly worse case results as emission rates are expected to decrease over time. It would be inappropriate to undertake a HRA using such results given the inherent uncertainty associated with making predictions so far into the future. In any case the air quality issues would be explored in the future with a greater degree of certainty when the F&HDC are required to publish a Local Plan document that covers the period up to and beyond 2044. This future assessment would include information which the current 2044 traffic data used in the assessment presented in this chapter does not contain such as the traffic effect of any updated F&HDC Local Plan, or the Local Plans of neighbouring local authorities (the current 2044 assessment has accounted for future growth with generic annual growth factors).
- 6.2.12 Natural England were contacted regarding the approach to assessment of air quality impacts on Sites in the National Sites Network (Folkestone to Etchinghill SAC) with regards to deferring to the findings of the Local Plan HRA for the March 2022 submission of this HRA document. Natural England acknowledged receipt of the initial query and follow up queries on behalf of Otterpool LLP we also sent to Natural England (all correspondence can be seen in ES Appendix 7.2). No response was received at the time of writing the March 2022 submission of this HRA, therefore it was assumed to be acceptable to defer to the findings of the HRA completed on behalf of F&HDC in support of the People and Policies Plan and the draft Core Strategy Review, in line with current guidance (IAQM, 2020) A Guide to the Assessment of Air Quality Impacts on Designated Nature Sites. The relevant paragraphs of the guidance document are detailed as follows:

"5.3.3 For individual planning applications for conventional residential or mixed-use development where European sites are a consideration, the assessor should first investigate whether the air quality issues have already been fully explored for the Local Plan HRA. If this has been done, then it would be appropriate and in line with government guidance to defer to that over-arching Local Plan assessment. This should be a suitable approach for windfall development as well as actual allocations, as Local Plans all make an allowance for a specified quantum of windfall development in particular locations and this should be included in the strategic Local Plan air quality assessment and HRA.

5.3.4 Similarly, if a given local authority believes that Neighbourhood Plans will be coming forward in their authority boundary, they should consider including any sites allocated in those plans in their air quality modelling. This would also avoid problems for the planning application or Neighbourhood Plan

that might otherwise result from the Wealden judgment (see Box 3.1). Deferring ‘upwards’ to the Local Plan also addresses the undesirable situation of having multiple traffic and air quality models for a single local authority area and the potential inconsistencies that can be introduced in such circumstances.”

- 6.2.13 The guidance advises that where the development has been included and fully explored in the Local Plan (as is the case for Otterpool Park in the Core Strategy Review (CSR)), it would be appropriate for the developer/applicant to defer upwards to the findings of the Local Plan HRA. LUC and AECOM undertook various iterations of the Core Strategy Review HRA on behalf of FHDC between 2018 and 2020 where nitrogen deposition from NO_x was quantified across the CSR period and included the ‘Garden Settlement’ in the traffic and air quality estimates. The Core Strategy Review and HRA was adopted in March 2022 and did not consider ammonia related nitrogen deposition.
- 6.2.14 As outlined in Appendix M, Natural England subsequently raised concerns that the assessment should have considered ammonia deposition. This consideration was later clarified, as outlined in Appendix N, that this can be assessed at a subsequent stage of the planning process (this application is prepared at Tier 1 with two subsequent Tiers proposed within the planning approach). It is noted that ammonia from road emissions is an emerging area of concern and that it would be appropriate to assess this in full in future, as appropriate tools become available in the public domain, at subsequent stages of the tiered application process. This is in line with other aspects of Air Quality assessment within the submission, for example it has been secured with FHDC to defer the air quality damage cost assessments to tier 2/3 (phase-wide masterplanning and reserved matters stages of approval respectively) on a phase by phase basis rather than for the entire outline application owing to the uncertainty of predicting so far into the future within the confines of the damage cost methodology; this was partly due to Defra’s Emission Factor Toolkit (EFT) being periodically re-released to better reflect contemporary fleet projections/policy. As each phase is assessed the newest toolkit can be used taking into account the updated modelling. This stepped approach is in line with Natural England’s recommendations for Competent Authorities on the assessment of road traffic emissions³.
- 6.2.15 The Otterpool Park application ES (Chapter 6: Air Quality) presents a thorough and robust assessment of air quality impacts over the delivery of the development, culminating in the assessed ‘worst-case’ scenario in 2044 when full development build out is anticipated.
- 6.2.16 The assessment that these impacts will not result on an impact on the designated site (as predicted at this tier) is supported by an initial summary consideration of the issue of ammonia impacts which indicates that it is likely that ammonia levels will reduce from the road at the SAC in question over the assessment period with and without the proposed new garden settlement, due to changes in the makeup of the road traffic fleet (the rationale for this is presented in Appendix Q). The applicant is committed to monitoring the air quality position at future delivery milestones through the submission of ES updates at each phase of the development (note: NE will be consulted on these submissions as a matter of course, enabling further evidence to be presented at future relevant stages). For each submission,

³ NE Internal Guidance – Approach to Advising Competent Authorities on Road Traffic Emissions and HRAs V1.4 Final - June 2018

we will be able to take into account that phase in isolation plus in-combination effects with previous phases, using real world data and the most up to date emission factors.

- 6.2.17 Following outline application stage there are a further series of planning approval stages before any development can be fully consented and delivered.
- 6.2.18 There are phase-wide obligations that will likely include review of the environmental effects identified at outline stage and any relevant revised mitigation measures that would be relevant at that stage. It is at this stage where the effects of ammonia could be considered within an updated air quality assessment for agreement with relevant stakeholders, including Natural England.
- 6.2.19 Alternatively, the reserved matters stage offers an additional opportunity to address updates required to the ES material to reflect the environmental effects anticipated at that time.
- 6.2.20 As shown in the Flow Chart in Image 2, there are a number of mitigation options available in the unlikely event that impact pathways are identified, these could include:
- Removal of cattle from the SAC site (excretion from cattle is a major source of ammonia “The vast majority of ammonia emissions come from agriculture via the spreading of manures, slurries and fertilisers”⁴);
 - Removal of cattle at night-time from the SAC;
 - Changes to the road speed or layout (optimal road speeds result in lower emissions from vehicles);
 - Changes to the ventilation of the tunnel portal to reduce N loadings at portal areas (the tunnel portals concentrate emissions in these locations, if this is found to be an issue there are potential approaches to disperse the in-tunnel emissions).
- 6.2.21 It is proposed to include necessary requirements to monitor and assess updated air quality information as may reasonably be required prior to the approval of relevant reserved matters. Given that:
- The calculations to date show that ammonia deposition will reduce in all future scenarios with or without the development (Appendix Q). This calculation was conducted using a tool developed by National Highways (NH), as opposed to CREAM⁵; as the NH tool has been peer reviewed by the IAQM (and in development of the tool NH reviewed CREAM and advised against its use in NH scheme assessments). As the road is an NH managed road it was determined it was appropriate to use the NH tool. Natural England have accepted use of the NH tool on a number of NH schemes.
 - The SAC is currently in ‘Favourable’ condition with a requirement to ‘Maintain’ the designated features;
 - It is considered appropriate to defer assessment of impacts resulting from this impact pathway at this time.
- 6.2.22 This approach has been supported by Natural England. In an email dated 09/09/2022 (Appendix N), Natural England stated:

“Given the evolving approach to the inclusion of ammonia in road traffic assessments, we accept that further time may be needed to include ammonia as part of the air quality assessment. Whilst an air quality assessment will need to be included as part of the ES and HRA for the outline application, we would accept that an assessment which includes ammonia could follow at a later

⁴ Emissions of air pollutants in the UK – Ammonia (NH₃) - GOV.UK (www.gov.uk)

⁵ Air Quality Consultants - Air Quality Reports, Resources & Tools (aqconsultants.co.uk)

stage. As we discussed, the tiered approach to the consideration of this development provides the opportunity for Natural England to comment on this detailed aspect of the ES and HRA when this further assessment is produced.”

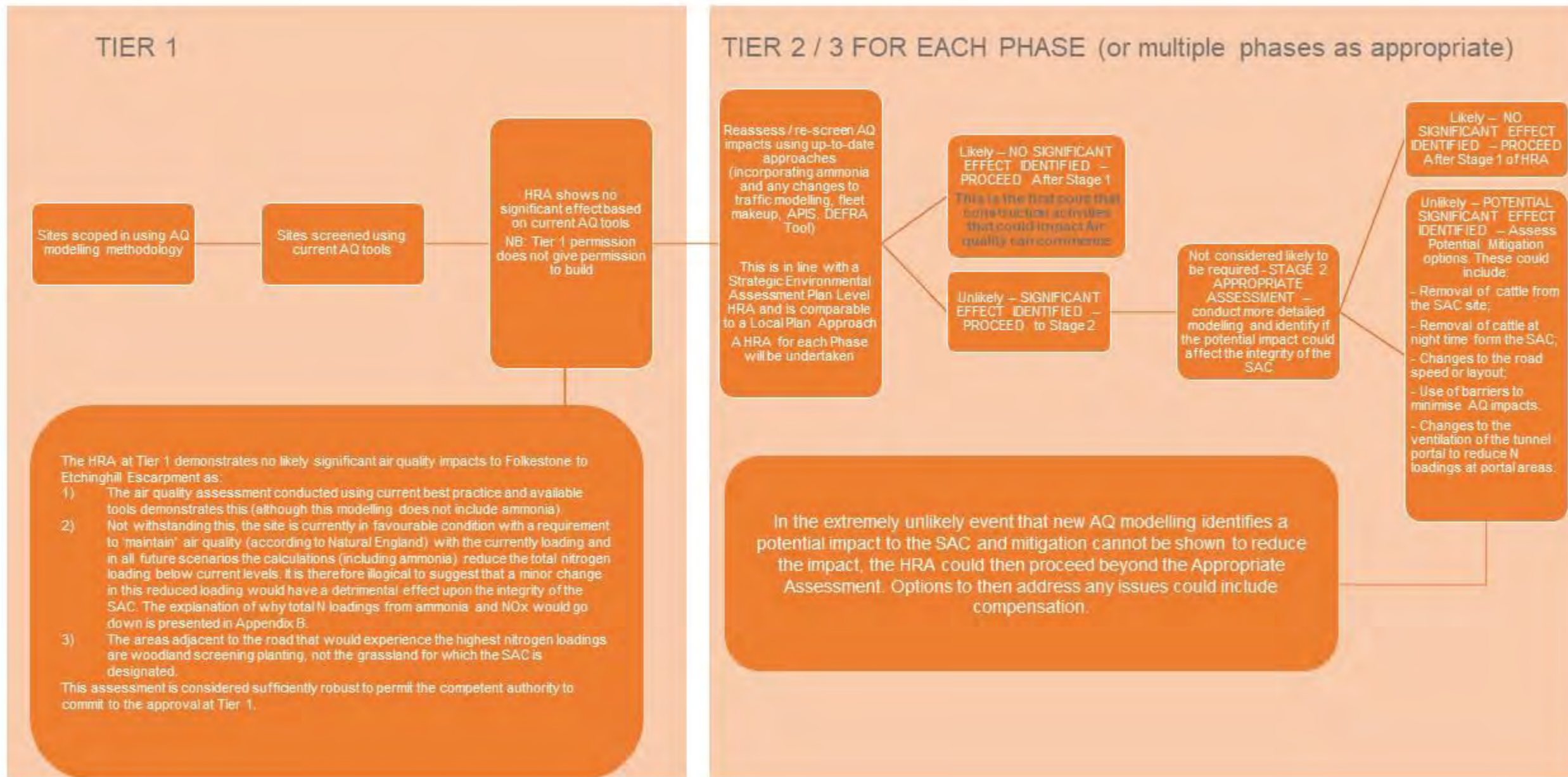
6.2.23 In line with this advice, a proposal of an approach to the screening of Air Quality Impacts within the HRA is presented in a flow chart in Image 2. The flow chart demonstrates the following key aspects):

- 1) The conclusion that the proposed development will not cause a significant impact to the SAC (impacting the integrity of the SAC) either as currently modelled, or once ammonia is added (through a logical assessment of the current status of the site and the projected future nitrogen deposition). This is based on the modelling presented in Appendix Q.
- 2) It is considered appropriate to conclude that air quality impacts are unlikely to result in an impact to the SAC (based on the information at this stage as a) this has been assessed through a robust assessment based on current guidance and tools which demonstrate no significant impact upon the SAC and b) that it can be shown that even with ammonia there is no logical reason that the future scenario would impact the condition of the SAC
- 3) That this impact pathway should be screened at subsequent stages, and that in the unlikely event future modelling (accounting for changes in the DEFRA emissions tool kits and the uncertainty surrounding the assessment of ammonia deposition) demonstrates an issue, there is a suite of mitigation that could be employed i.e. changes in management outlined above.

6.2.24 As demonstrated above and in the flow chart in Image 3, the current modelling indicates that there is no likely significant effect upon the SAC. The approach proposed however allows for future modelling to be assessed through HRA, as tools and models are updated. The process outlined demonstrates that there is no way that approval at Tier 1 could permit an impact to the SAC, and that all foreseeable outcomes from further assessments can be accommodated, and therefore this impact pathway can be screened through HRA at subsequent stages, as appropriate.

6.2.25 In summary, air quality impacts to Folkestone to Etchinghill Escarpment SAC are assessed within the Air Quality Assessment Presented in Appendix 6 of the ES. It is recommended that this impact pathway is screened through HRA at subsequent Tiers, to ensure subsequent assessments account for the ever evolving field of air quality assessment. HRA documentations should be obtained at subsequent tiers of the planning application process, in line with Natural England’s recommendations provided in Appendix N.

Image 3: Rationale for the proposed approach to ammonia modelling within HRA at the three Tiers of the Application process



6.3 Public Access/Recreational Disturbance

Sites with potential for impacts due to recreational pressure

6.3.1 The eighteen sites listed in Section 5 have the potential to be impacted as a result of recreational pressure. This section describes systematically how these sites have been taken forward for assessment. Firstly, four of the eighteen sites have been classified as being *without* existing recreational vulnerabilities, namely:

- Blean Complex SAC, which is approximately 21.6km north of the proposed Development;
- Stodmarsh SPA, SAC and Ramsar Site, each of which are approximately 23.2km north of the proposed Development.
- These sites have accordingly been scoped out of the public access / recreational disturbance assessment.

6.3.2 The Tankerton Slopes and Swalecliffe SAC currently has no Site Improvement Plan publicly available and no specific Conservation Objectives or Vulnerabilities listed. However, information from consultation with Natural England was referenced within the Canterbury District Local Plan HRA (Canterbury City Council 2014). NE have indicated that this site is sloped and contains tall grassland and hog's fennel plants making it unattractive and difficult for people to access especially when compared with the well-maintained paths and amenity grassland adjacent. The site is managed and monitored by the Council and considered to be in a favourable condition. NE indicated that the main concern with respect to this site was people moving off the paths trampling the plants that make up the moth's habitat. At the present time this is not shown to occur and as such NE does not currently view this as an issue. This added to being 29.5km from the proposed Development site scopes out the Tankerton Slopes and Swalecliffe SAC from any likely significant effects.

- Parkgate Down SAC, whilst being located within 10km of the proposed Development, is not accessible to the public. The site is designated for calcareous grassland and orchids and is currently managed as a nature reserve by the Kent Wildlife Trust (KWT). No public rights of way enter the site and a warden is employed by KWT to manage and monitor the site and oversee implementation of access restrictions to protect sensitive ecological features including the orchid assemblage for which the site is designated as a SAC. The entire site is currently in favourable condition as evidence of the current successful management. Furthermore, the site is located in excess of 5km from any notable residential settlements (LUC 2018). Therefore, the additional population from the proposed Development could not realistically have any negative effect on the integrity of the SAC or on its qualifying features. As such, effects are not considered to be significant and therefore this site has also been scoped out of the assessment

6.3.3 The following sites have been identified as having existing recreational vulnerabilities:

- Sandwich Bay SAC, which is approximately 28.9km north east of the proposed Development;
- Swale SPA, which is approximately 25.2km north of the proposed Development;
- Swale Ramsar, which is approximately 25.2km north of the proposed Development;
- Thanet Coast and Sandwich Bay SPA and Ramsar Site, which is approximately 28.5km north-east of the proposed Development; and
- Lydden and Temple Ewell Downs SAC, which is approximately 15.1km north-east of the proposed Development.

- 6.3.4 These sites are over 15km in distance from the proposed Development, with five of the six sites being over 20km from the proposed Development. None of these sites have been highlighted as being of concern from a public access / recreational disturbance perspective during consultations with NE. Given the likely behaviour of the residents of the proposed Development, these sites are likely to be too far away from the proposed Development to attract any significant numbers of visitors. Accordingly, effects on these sites are not considered to be significant and these five sites have also been scoped out of the assessment.
- 6.3.5 Finally, consultations with F&HDC and NE have identified six sites as being of potential concern in relation to recreational pressure arising from the proposed Development. These sites are as follows:
- Folkestone to Etchinghill Escarpment SAC, which is approximately 4.2km north-east of the proposed Development;
 - Wye and Crundale Downs SAC, which is approximately 5.8km north of the proposed Development;
 - Dover to Kingsdown Cliffs SAC, which is approximately 20.1km north-east of the proposed Development; and
 - Dungeness complex (comprising a total of three sites, namely the Dungeness, Romney Marsh and Rye Bay SPA and Ramsar Site and the Dungeness SAC) (nearest points, coastal 8.7km south, and marine 2.9km south).
- 6.3.6 These sites have been scoped in to the assessment and are discussed in further detail in the following section.

Sites of particular stakeholder concern

- 6.3.7 Consultations with F&HDC and Natural England identified the following to be of particular stakeholder concern (in relation to air quality and recreational pressure mainly), as presented in Appendix B and Appendix D, namely:
- Folkestone to Etchinghill Escarpment SAC, which is approximately 4.2km north-east of the proposed Development;
 - Wye and Crundale Downs SAC, which is approximately 5.8km north of the proposed Development;
 - Dover to Kingsdown Cliffs SAC, which is approximately 20.1km north-east of the proposed Development; and
 - Dungeness complex (comprising the Dungeness, Romney Marsh and Rye Bay SPA and Ramsar Site and the Dungeness SAC) (nearest points, coastal 8.7km south, and marine 2.9km south).
- 6.3.8 These locations are described below:
- The Folkestone to Etchinghill Escarpment SAC is located approximately 4km to the north-east of the proposed Development. This is the closest (terrestrial) site in proximity to the proposed Development. It is an extensive area (over 180 hectares) of chalk grassland to the north of Folkestone, designated as a SAC for its dry grasslands and scrublands on chalk or limestone, including important orchid sites (the site is home to three nationally rare plants). The escarpment is bisected by the A20, but it remains one of the largest remaining areas of unimproved chalk downland in Kent. It does not currently list recreational pressure as a threat.
 - Wye and Crundale Downs SAC is located approximately 6km to the north of the proposed Development. This is an extensive area of approximately 110 hectares of

chalk grassland located between the settlements of Wye and Hastingleigh. The site is designated as a SAC for its semi-natural dry grasslands and scrubland, including important orchid sites. The Downs sit between the M20 and A28 to the north of Ashford (on the southern edge of the North Downs). It does not currently list recreational pressure as a threat.

- The Dover to Kingsdown Cliffs SAC is located 20.1km north east of the proposed Development. It is designated for its vegetated sea cliffs and semi-natural dry calcareous grasslands and scrubland. These are primary reasons for designation of this site. The vegetated sea cliffs are generally dangerous to approach or physically inaccessible and are therefore inherently protected from recreational pressure. The cliff-top grasslands are crossed by numerous footpaths which are used by recreational walkers (URS 2012). It does not currently list recreational pressure as a threat.
- The Dungeness complex comprises the Dungeness, Romney Marsh and Rye Bay SPA and Ramsar Site and the Dungeness SAC. The terrestrial/coastal component is closest at 8.9km to the south west of the proposed Development, the marine component is 2.9km south. The terrestrial/coastal site was initially designated in 2016 for its importance for supporting breeding and wintering waterbirds, birds of prey and passage warblers. The marine component was recently designated in 2017 to include important marine foraging areas used by little, common and sandwich terns from breeding colonies within the existing SPA. The Dungeness SAC consists of the UK's largest shingle structure which is one of the best examples of a vegetated shingle beach in Britain and Europe. It is also designated for great crested newt as a primary qualifying feature of the site. Recreational pressure is currently listed as a threat.

Background and Methodology (for assessing sites with a vulnerability to recreational pressure)

6.3.9 In order to make an assessment of the potential effects of recreational pressure, the following method has been used. The potentially most sensitive sites have been assessed in detail using existing survey information or bespoke survey information under the assumption that the less sensitive sites, further from the development would be less likely to be affected by the proposal as follows:

- Baseline data relating to each of the sites of particular stakeholder concern and/or within 10km were collated, including existing information, where known, about visitor numbers and travel patterns. Existing visitor survey data was available for the Dungeness, Romney Marsh and Rye Bay area from surveys undertaken in 2014 and 2015 as part of the Core Strategies HRA for Rother District Council and F&HDC as well as information contained with the Dungeness Complex Sustainable Access and Recreation Management Strategy (SARMS) and supporting documents (The Places Team, 2017). Existing information on Parkgate Down SAC was available in the HRA on the F&HDC Places and Policies Plan 2017 (LUC 2018).
- Visitor surveys were undertaken at locations within carparks adjacent to the Folkestone to Etchinghill Escarpment SAC and the Wye and Crundale Downs SAC over the course of four days in 2017 – two consecutive weekdays (30th/31st August) and a weekend (23rd/24th September). Each survey day included early morning (7am – 9am) and early evening (5pm – 7pm) visitor counts, and interviews (where visitors may be more likely to be local residents) in addition to periods during the day. Surveyors undertook both counts of visitor numbers within specific time periods as well as interviews with visitors. This methodology was agreed with Natural England and F&HDC.
- Consideration of the potential effects of the proposed Development on recreational pressure, taking into account the likely population generated, the proposed

Development design which includes accessible recreational greenspace, and travel characteristics / visitor patterns identified from visitor surveys.

Survey data for sites of particular stakeholder concern

Folkestone to Etchinghill Escarpment SAC and the Wye and Crundale Downs SAC

- 6.3.10 The chalk grasslands and orchids, for which the SAC is designated, are susceptible to recreational activities including dog walking and associated nutrient enrichment which may alter the soil chemistry and increase the prevalence of competitive species, or by physical disturbances such as through trampling, vandalism, or fire. Due to the proximity of the site to Folkestone and other towns and villages in north east Shepway, parts of the SAC already receive relatively high levels of recreational access and discussions with the White Cliffs Countryside Partnership (WCCP) Project Manager, Kirk Alexander, revealed recent damage by trampling and theft of the rare orchid species, which has resulted in the management team to consider the potential for additional protective measures to conserve the orchid populations. (LUC 2018). Nevertheless, recreation at the site is currently well managed and recreation is not identified as a current pressure or threat in Natural England's Site Improvement Plan.
- 6.3.11 Visitor surveys were undertaken by Arcadis in 2017 at two locations in car parks adjacent to the Folkestone to Etchinghill Escarpment SAC and the Wye and Crundale Downs SAC.
- 6.3.12 These surveys were undertaken during August and September 2017 to determine level of use, principal recreational uses (e.g. walking, fitness, dog walking), likely catchment areas for visitors and principal mode of travel used to reach each destination. Over four days, a total of 164 visits were recorded. Key findings from the survey included that:
- Visitor numbers were understandably higher at the weekend than on a weekday;
 - The majority of people interviewed were day visitors rather than people visiting as part of a wider holiday;
 - The majority of visitors on both weekdays and weekends were from within a twenty-minute drive time (the majority of visitors to the Folkestone to Etchinghill Escarpment SAC were primarily from Folkestone and surrounding settlements, whilst the majority of visitors to the Wye and Crundale Downs SAC were from the towns of Ashford and Wye);
 - Reasons for people choosing these locations to visit included proximity to home, the variety of footpaths and tracks available, and the quality of the scenery; and
 - Walking and dog walking formed the principal activities undertaken at both locations.
- 6.3.13 A visitor survey undertaken by the AONB Unit identified that the main motivations for visiting the Kent Downs are for its beauty and tranquillity, with walking being the main activity (Kent Downs AONB unit, 2013).

The Dungeness complex (SPA, SAC and Ramsar)

- 6.3.14 The Dungeness complex (including Romney Marsh and Rye Bay) is designated as SPA, Ramsar and SAC. The area receives a high number of visitors – approximately 550,000 visits are made per annum, with the RSPB reserve receiving approximately 26,000 visitors in 2016 (The Places Team 2017).
- 6.3.15 The HRA prepared for the Core Strategies of Rother and Shepway Districts (URS 2011) identified that, for the Dungeness complex, approximately 33% of visitors lived more than 80km distant (i.e. outside Kent and East Sussex altogether with the largest single source in this zone being London, responsible for 5% of all visits). The remaining 66% of visitors were dispersed across an area of up to 50 miles/80km covering virtually all of Kent and East Sussex. Less than 10% of surveyed visitors to Dungeness actually came from the 'local' area (up to 16km from the site).
- 6.3.16 More recent visitor information is available as part of the SARMS prepared for Shepway and Rother District Councils in 2017, which included a Phase One Visitor Survey as part of its supporting information. The SARMS divides the Dungeness complex into six sub-areas, with key findings summarised as follows in relation to visitor numbers and profile (The Places Team 2017):
- **Pett Level and Pannel Valley** – visitor numbers in this area are likely to be low; whilst there is no data currently on visitor profile / origin, there are several caravan and mobile home sites in the area.
 - **Rye Harbour Nature Reserve** – around 300,000 visitors per year to the Rye Harbour area, including a mixture of holiday makers, wildlife watchers and day visitors. Just under a third of visitors surveyed as part of the Phase One Visitor Survey (conducted as part of the SARMS) travel more than 55km to the site; nearly two-thirds of visitors are either first-time visitors or visit less than once a month.
 - **Camber and Broomhill** – a highly visited area, particularly during the summer. A high percentage of first-time visitors (44%) and the highest number of visitors on holiday out of the six sub-areas. A high proportion of visitors travel long distances, reflecting the area's national profile as a destination. A popular daytrip destination from within the south-east region.
 - **Dungeness** – national profile and honeypot destination. The Phase One Visitor Survey found that 40% of visitors were there for the first time, 43% visit less than once per month and 6% visit at least once a week (SARMS 2017). Most visitors had travelled more than 55km (61%).
 - **Romney and Lade Foreshore** – car park data showed visitor numbers to be in the region of 26,500 in 2016 but the SARMS acknowledges this is likely to be an underestimate due to how the sub-area is accessed. Both Greatstone and Lade received the highest percentage of regular visitors within the sub-area; it is noted that Greatstone attracts visitors from a smaller catchment than other sites (49% of respondents travelling less than 5km).
 - **Romney Marsh** – little is known about visitors to this sub-area, which includes few accommodation providers or attractions. Visitor activities are thought to relate mainly to walking and cycling.
- 6.3.17 The Phase One Visitor Survey for the SARMS also highlighted that the most regular visitors to sites within the Dungeness complex live in Shepway or Rother District, with a high proportion living within a distance of 20km. Other points to note are that there is a high proportion of dog-walkers among regular visitors. Levels of outdoor recreation is highlighted as increasing nationally and that the coast is a particular draw for visitors, often in preference to local sites. The SARMS highlighted that in this area visitor numbers are also increasing

generally both as a result of niche recreational offers (such as kite surfing) and improved accessibility.

Dover to Kingsdown Cliffs SAC

6.3.18 The Dover to Kingsdown Cliffs SAC is a long and narrow site, designated as a SAC for its calcareous grassland, for which low levels of trampling (as a result of recreational activity) are required to maintain site integrity. The site is sensitive to nutrient enrichment arising from dog fouling. Part of the SAC falls within the ownership of the National Trust, with the remainder being in private ownership and not publicly accessible (URS 2012). Visitor surveys for other chalk grassland SAC's in Kent have identified that the core catchment for local visitors (the area from within which 75% of local visitors arose) was up to approximately 4km. It seems probable that Dover to Kingsdown Cliffs will have a similar catchment regarding usage by local residents (Dover District Council 2010).

Impacts of Covid-19 on Recreation

6.3.19 Other issues of relevance here relate to research undertaken into the impacts of Covid-19 on levels of recreation and usage of green space, which has shown changes in the way people interact with the outdoors as well as changes in people's perceptions of nature (ONS 2021). Survey data drawn from the People and Nature Survey for England gathers information on people's experiences and views about the natural environment. During April to June 2020, people were getting outside more often than usual with 40% of adults reporting that they had spent more time outside since the coronavirus restrictions began and 31% were exercising more in outdoor spaces. Over these three months, 58% of the adult population had visited a natural space in the last 14 days. The main reasons people gave for visiting natural spaces were for fresh air, physical and mental health, and to connect with wildlife/nature.

Recreational impact assessment

Potential areas of impact

6.3.20 The estimated new population of Otterpool Park, once fully built-out, is in the region of 20,400 people (based on 8,500 households and a household density of 2.4 people per dwelling) with the potential to increase to 10,000 homes post Development build out. The actual population increase to the area is likely to be lower (for example a proportion of the new population are likely to already live in the district, coupled with the fact that household sizes may be lower than has been the case historically). The total population also includes young children / the elderly / people who may not be sufficiently mobile to access the wider countryside.

6.3.21 As well as additional recreational pressure from populations once the proposed Development is fully built out, there is the potential for short-term additional pressure on designated sites during the construction and early occupation phases of the proposed Development.

6.3.22 Potential impacts also arise from the types of recreation being undertaken, with activities such as dogwalking potentially causing disturbance to wildlife. Nationally, approximately 26% of households own a dog (and this figure is known to have increased during recent coronavirus restrictions). For the proposed Development a 26% dog ownership rate would translate into approximately 2,000 dog-owning households (although in reality this figure may be lower as dog-ownership will also depend on accommodation type (houses / flats). Other potential impacts of relevance to designated sites include trampling and general disturbance.

Folkestone to Etchinghill Escarpment SAC and the Wye and Crundale Downs SAC

- 6.3.23 Visitor surveys undertaken by Arcadis at locations along the Folkestone to Etchinghill Escarpment SAC, and at the Wye and Crundale Downs SAC identified that a significant proportion of people use particular walking routes because of the proximity to their home and/or within 20 minutes maximum drive time. The areas most likely to be affected by the new population living at Otterpool Park are therefore likely to be those nearest to the proposed Development, for example the Lympne Escarpment SSSI which is 300m south of the proposed Development, rather than the environmentally sensitive areas identified in this HRA. Dog walking was the principal activity undertaken at both Sites in the National Sites Network.
- 6.3.24 The proposed Development includes a large proportion of publicly accessible open space and high-quality green infrastructure (over 50%), including parks, landscape areas and habitats. The incorporation of green infrastructure, open space and a variety of habitats and landscapes forms an intrinsic part of the design of Otterpool Park, as set out in the Green Infrastructure Strategy (ES Appendix 4.11). Planned green infrastructure includes:
- a variety of woodlands, wetlands, meadows, allotments, recreation areas all connected by green corridors with retained trees, hedgerows and water courses;
 - a landscaped green open space to create a setting for Westenhanger Castle;
 - creation of a Woodland Country Park on the upper slopes of the site between Harringe Brook Woods, Otterpool Manor and Upper Otterpool Farm;
 - use of the East Stour River corridor to incorporate both formal and informal walking and cycling routes connecting areas of open space and leisure / sports provision; and
 - creation of a landscape buffer between the proposed Development and the village of Lympne, with opportunities here for informal recreation, walking and horse-riding.
- 6.3.25 Green movement corridors have been designed to enable people to access open spaces in the wider landscape in the vicinity of Otterpool Park. Corridors provide access to off-site footpaths and spaces in the surrounding areas, including north towards Sellindge, west along the East Stour River, south towards Lympne and to footpaths that lead to the woodlands and parkland to the east of the site. The design takes into account the sensitivity of these areas and places and discourages high levels of access where recreational pressure may have an adverse impact.
- 6.3.26 It is therefore likely that a significant proportion of those seeking recreational activity including dogwalkers in particular, will utilise the spaces and routes within the proposed Development for regular activities.
- 6.3.27 The Green Infrastructure Strategy (ES Appendix 4.11) prepared for the proposed Development identifies a phased approach for green infrastructure as part of development proposals. National green infrastructure guidance (including Natural England's publication NE176) recommends where possible that structural planting proposals are implemented in advance of the construction of built development. In addition to other benefits, this approach can help mitigate construction-related effects, allow distinct character areas within the proposed Development to evolve more quickly and deliver health, wellbeing and recreational resources for the emerging community. There is also an opportunity for the use of 'meanwhile spaces' to provide additional green infrastructure areas during the construction phase. Further proposals are for the town park to the south of Westenhanger Castle to be developed in the first five years of the proposed Development, thus benefitting 'early occupiers'. As such it is not considered that there would be an unacceptable increase in recreational pressure on the Folkestone to Etchinghill Escarpment SAC or Wye and Crundale Downs SAC during the early stages of the development.

Dungeness Complex

- 6.3.28 Visitor surveys highlighted that most regular visitors to sites within the Dungeness complex live in Shepway or Rother District, with a high proportion of regular visitors living within 20km. However, there is much variation as to how sites within the complex are used and the visitor profiles associated with each; sub-areas with the highest level of recreational pressure are Camber and Broomhill, Rye Harbour and the Romney and Lade Foreshore areas. The visitor surveys also identify a range of visitor activities taking place across the six sub-areas, including birdwatching, walking, cycling and beach-based activities. Dogwalking was noted as a regular activity across much of the Dungeness complex. Evidence seems to suggest that regular dog walking is an activity that takes place within close proximity to place of residence – Greatstone within the Dungeness complex is a good example here, where the majority of visitors citing dog walking as the primary purpose for their visit (58%) were from within a 5km radius (The Places Team 2017).
- 6.3.29 The purpose of the SARMS is to address recreational pressure experienced at the Dungeness complex and provide a strategic, cross-boundary approach to issues relating to disturbance. The strategy aims to 'ensure that any increases in access and recreational usage resulting from the planning policies of either Council (F&HDC or Rother District Council) do not adversely impact on the integrity of these internationally important wildlife sites and proposes supporting actions to ensure sensitive management of recreation and access'. The strategy states that regard should be had to increases in visitors which may occur as a result of 'substantial population growth' within the main catchment area. Mitigation measures outlined in the SARMS relate to:
- Ongoing / regular visitor surveys in order to monitor visitor numbers and profile (including activities and season of visit) with site specific programmes at certain locations within the complex;
 - A programme of visitor education to raise awareness of the importance of the Dungeness complex and appropriate behaviours for visitors to it; and
 - Measures around access control and enforcement.
- 6.3.30 The probable increase in visitors to the Dungeness complex as a result of the potential population increase in Shepway could be expected to be approximately 5% (note that the HRA prepared for the Core Strategies of Rother and Shepway Districts in 2011 estimated 8,000 new dwellings (including those provided within Otterpool), however the additional dwellings would be unlikely to affect this approximate estimate). This also assumes that all of the proposed Development's residents will be new to the area which is unlikely. Survey data suggests that proximity to site is an important factor for recreational users; the draw of the coast however has also been noted within the SARMS. It is considered that although there is likely to be an increase in visitors as a result of the proposed Development, this is capable of being mitigated by the actions and recommendations proposed for visitor management generally within the SARMS, for example visitor education and awareness raising measures focusing on potential adverse impacts arising from trampling, littering and disturbance. The scope for ongoing monitoring of visitor numbers provides additional reassurance, particularly in light of evidence around increasing visitor numbers over time as a result of factors described earlier (including niche recreational offers, increased accessibility and an increase in appreciation of the outdoors and nature as a result of the coronavirus restrictions).
- 6.3.31 As stated earlier, the proposed Development includes a large proportion of publicly accessible open space and high quality green infrastructure (over 50%) which is integral to the development. The design of green and open spaces within the proposed Development will include provision of recreational space for dogwalking. Natural England recommendations are for 8ha per 1,000 people for dogwalking provision in sites where

Suitable Alternative Natural Green Spaces (SANGs) are required; this would be supported at Otterpool Park by a commitment to a community engagement and ownership code.

6.3.32 It is therefore likely that a significant proportion of residents of Otterpool Park seeking recreational activity (including dogwalking in particular) will utilise the spaces and routes within the proposed Development for regular activities and therefore limit impacts to sites on the National Sites Register.

Dover to Kingsdown Cliffs SAC

6.3.33 The assessment of potential recreational impacts upon this site were primarily based upon data collected by URS to inform the HRA for the Core Strategy in 2012. Population projection data obtained by Shepway Council (now F&HDC) from Kent County Council since the original HRA reported in URS (URS 2012) was undertaken identifies that a 10.1% population increase is expected in the Shepway urban area (from which most visitors to Dover to Kingsdown Cliffs SAC originating in Shepway can be expected to arise) (Strategic Housing Market Assessment, 2017). If one assumes that a 10.1% increase in the population of the urban area will likely result in a 10.1% increase in Shepway's contribution to SAC visitors then that means a further 1,632 visitors per annum or an increase in pressure of 0.7% due to Shepway, i.e. extremely small. This confirms (based on actual visitor survey data) that while an increased population in Shepway probably will result in more visits to the SAC, the core catchment of the SAC with regard to local residents is essentially the Dover town area, and the increase from the proposed Otterpool Park development is not considered to be significant.

6.3.34 The proposed Development includes a large proportion of publicly accessible open space and high-quality green infrastructure (50%) which is integral to the development. This includes parks, landscape and habitats, as described above.

6.3.35 It is therefore likely that a significant proportion of those seeking recreational activity including dogwalkers in particular, will utilise the spaces and routes within the proposed Development for regular activities.

Conclusion

6.3.36 Eighteen sites were identified within 30km of the proposed Development. Of these:

- Four sites were scoped out due to there being no existing recreational vulnerabilities identified (Blean Complex SAC, Stodmarsh SPA, Stodmarsh SAC and Stodmarsh Ramsar Site).
- Tankerton Slopes and Swalecliffe SAC was scoped out of any potentially significant effect due to absence of stakeholder concerns together with distance from the proposed Development.
- Parkgate Down SAC, whilst being located within 10km of the proposed Development, is not accessible to the public and no significant effects were identified.
- Six sites were identified as having existing recreational vulnerabilities, however all six sites are over 15km from the site, with five being over 20km distant. Given the likely behaviour of the residents of the proposed Development these are likely to be too far away to attract any significant numbers of visitors. These sites were also not highlighted as being of particular concern by stakeholders including NE.
- Six sites were highlighted as being of particular stakeholder concern and were taken forward for assessment. This identified that the sites may experience a slight increase in the number of users from the proposed Development, primarily the Folkestone to Etchinghill Escarpment SAC which is over 4km away and the Dungeness complex, however the relatively small number of additional users is not considered to be

significant. Visits for dog walking are less likely due to the proposed Development inclusion of a significant portion of accessible green space for recreation including dog walking and the behaviour derived from surveys which indicate that proximity is a primary factor in dog walking. In conclusion, no likely significant effects are anticipated to the integrity of the sites nor any of their qualifying features and recreational impacts are scoped out of the assessment.

- 6.3.37 In summary, the HRA identifies that proposals are not likely to have a significant effect on the Folkestone to Etchinghill Escarpment SAC and Wye and Crundale Downs SAC through recreational pressure. The conclusions have been informed both by baseline evidence, notably visitor surveys undertaken at these sites, together with changing behaviours in relation to open space and the needs of the population. For example, the HRA describes the changing ways in which people interact with the outdoors since the Covid-19 pandemic in addition to the different needs that people have – whether this be for dog walking, exercising, or being ‘in nature’. People experience outdoor spaces for a variety of purposes is important and means that future residents of the proposed Development are likely to visit different types of spaces to fulfil different needs, particularly those in proximity to their home. Areas such as the Folkestone to Etchinghill Escarpment SAC and Wye and Crundale Downs SAC form one type of space amongst many. Other factors that have informed the conclusions include the distance of the sites from the proposed Development. The conclusions that no likely significant effects are anticipated is founded on these factors, together with the multiplicity of alternative outdoor spaces that are provided either as part of the proposed Development or in its vicinity. The requirement for the preparation of an access strategy serves as a further measure by which these areas can be monitored and protected. Further engagement with Natural England about the content of the access strategy would be welcomed at a later stage in the design, for example when further detail is available at Tier 2. ; i.e. in line with Natural England’s recommendation “that the Otterpool Park application revisits the potential for recreational impacts at the detailed design stage”.

6.4 Water Pollution

Potential impacts and effects from poor water quality

- 6.4.1 Increased inputs of nutrients into the Stour catchment from the proposed Development has the potential to lead to degradation of the wetland habitats upon which the qualifying features rely. Habitats associated with Stodmarsh SAC, SPA and Ramsar comprise open water bodies (standing water and running water), reedbeds, grazing marsh and alder carr.
- 6.4.2 The River Stour feeds into the Stodmarsh designated sites. The river is vulnerable to receipt of increased nutrients via direct input from wastewater treatment works and drainage/surface runoff. With regard to the proposed Development, wastewater from new development is considered to be the primary issue of concern.

Impact assessment

- 6.4.3 Habitat of note in relation to the qualifying feature of Stodmarsh SAC (Desmoulin’s whorl snail) comprise ditches within pasture on the floodplain of the River Stour. Degradation of water quality associated with the river has potential to enter the ditch system and alter the hydrological (calcareous) conditions of the habitat upon which this snail is highly dependent upon.
- 6.4.4 The qualifying features of the SPA and Ramsar designations comprise important bird species and assemblages, and uncommon invertebrates and plants associated with wetland

habitats. Again, degradation of water quality and supporting habitat for these species, has the potential for significant effects to occur.

- 6.4.5 Nutrient budget calculations have been undertaken for the proposed Development to determine the requirement for mitigation with regards to nutrient neutrality, in accordance with Natural England's Nutrient Neutrality Methodology Guidance Note (November, 2020). The precautionary calculation has determined that in order for nutrient neutrality to be achieved for the proposed Otterpool Park Framework Masterplan (the OPA area and additional development within the wider Otterpool Framework Masterplan area), and Sellindge Phase 2 Sites (CSD9A and CSD9B – two sites located adjacent to Sellindge – full details in ES Chapter 2) mitigation is required in the form of new wetland habitat (the area of which is required to be between 23.9ha and 24.9ha) and 35ha of new woodland to offset the projected nutrient burden, in conjunction with a new state of art onsite Wastewater Treatment Works (WwTW) This includes a minimum of 11.7ha of wetland area to remove the nutrients from wastewater discharges suitably located near to the proposed onsite WwTW at the north-western portion of the proposed Development. However, only 8.8ha of new wetland is required to achieve the nutrient neutrality from the extra wastewater discharges from the current Tier 1 Outline Planning Application, along with 11.9ha of new stormwater wetland and 35ha of new woodland. As on-site mitigation is required, in line with CJEU C-323/17 People Over Wind and Peter Sweetman vs Coillte Teoranta, this impact to the Stodmarsh SAC SPA and Ramsar Site is carried forward to HRA Stage 2 – Appropriate Assessment. This is reported in Section 8 of this report.

Conclusions

- 6.4.6 Natural England's current advice with regards to any proposed Development project of this nature within the Stour catchment is that mitigation needs to be implemented in order to achieve nutrient neutrality; this has further been confirmed through undertaking project nutrient budget calculations. In accordance with current guidance and case law, mitigation cannot be considered as part of the HRA at the screening stage. Therefore, in the absence of mitigation, the proposed Development has the potential to lead to likely significant effects in relation to Stodmarsh SAC, SPA and Ramsar associated with water quality. As on-site mitigation is required, in line with CJEU C-323/17 People Over Wind and Peter Sweetman vs Coillte Teoranta, this impact to the Stodmarsh SAC SPA and Ramsar Site is carried forward to HRA Stage 2 – Appropriate Assessment. This is reported in Section 8 of this report.

7 In-combination Effects

- 7.1.1 A review of the Local Plan HRAs, namely the F&HDC Places and Policies Local Plan (PPLP) and Core Strategy Review (LUC 2018) was carried out to assess other plans and projects which could lead to likely significant effects on Sites in the National Sites Network when considered in combination with the proposed Development.
- 7.1.2 Most policies and potential sources of impact were ruled out at the Screening Stage of the F&HDC PPLP, assuming implementation of safeguards and specific mitigation for recreational and air quality impacts. For recreational impacts this included project level HRA assessment (where appropriate), completion of a visitor study, monitoring and provision of green infrastructure. For air quality impacts this included a commitment to monitoring NOx along the A20 road, over the People and Places Local Plan (PPLP) period, to track projected improvements in air quality.
- 7.1.3 As potential likely significant effects could not be ruled out at the Screening Stage for recreational impacts to adversely affect qualifying features of the Dungeness Complex (which includes the SAC, SPA and Ramsar), the issues were further assessed in an Appropriate Assessment. Assuming implementation of the mitigation policies built into the PPLP and the successful delivery of recommendations detailed within the Dungeness Complex - Sustainable Access and Recreation Management Strategy (SARMS) (Prepared for F&HDC and Rother District Council, 2017) the Appropriate Assessment concluded that the F&HDC PPLP would not result in adverse effects on the Dungeness Complex or other Sites in the National Sites Network either alone or in-combination.
- 7.1.4 The F&HDC Core Strategy Review HRA reviewed the changes to policies since the 2013 Core Strategy, which included policies specific to the proposed Development, namely Policy SS6 (New Garden Settlement – Development Requirements), Policy SS7 (New Garden Settlement – Place Shaping Principles), Policy SS9 (New Garden Settlement – Sustainability and Healthy New Town Principles) and Policy SS9 (New Garden Settlement – Infrastructure, Delivery and Management). As a result of the screening assessment, Policy SS6 was considered to potentially result in a likely significant effect on Sites in the National Sites Network.
- 7.1.5 However, with the implementation of the potential mitigation/avoidance measures (including the delivery of the overarching SARMS, the likelihood of impacts being limited by distance to Sites in the National Sites Network, existing site management, provision of natural greenspace as part of the masterplan and updated air quality assessment and precautionary measures to be included in Core Strategy), the conclusions reached in the F&HDC Core Strategy Review HRA, were that there would be no likely significant effect on Sites in the National Sites Network as a result of the F&HDC Core Strategy Review, either alone or in-combination.
- 7.1.6 Natural England's current advice with regards to any proposed Development project of this nature within the Stour catchment is that mitigation needs to be implemented in order to achieve nutrient neutrality. Without this, there is considered to be the potential for significant effects to occur in relation to the proposed Development in combination with other schemes in the region in terms of water quality in relation to Stodmarsh SAC, SPA and Ramsar.
- 7.1.7 As outlined in section 8 below (the Appropriate Assessment), the on-site mitigation to achieve the nutrient neutrality relies on no change in loadings from the proposed Otterpool Development, and demonstrates that this is achievable. As such, the proposed Development will have no additional impact beyond the baseline state once this is implemented, and therefore there is no potential for a cumulative impact. As such, the assessment of in-combination effects does not need to include an assessment of water quality impacts upon the Stodmarsh SPA, SAC and Ramsar site.

8 Appropriate Assessment (Stodmarsh SAC, SPA and Ramsar)

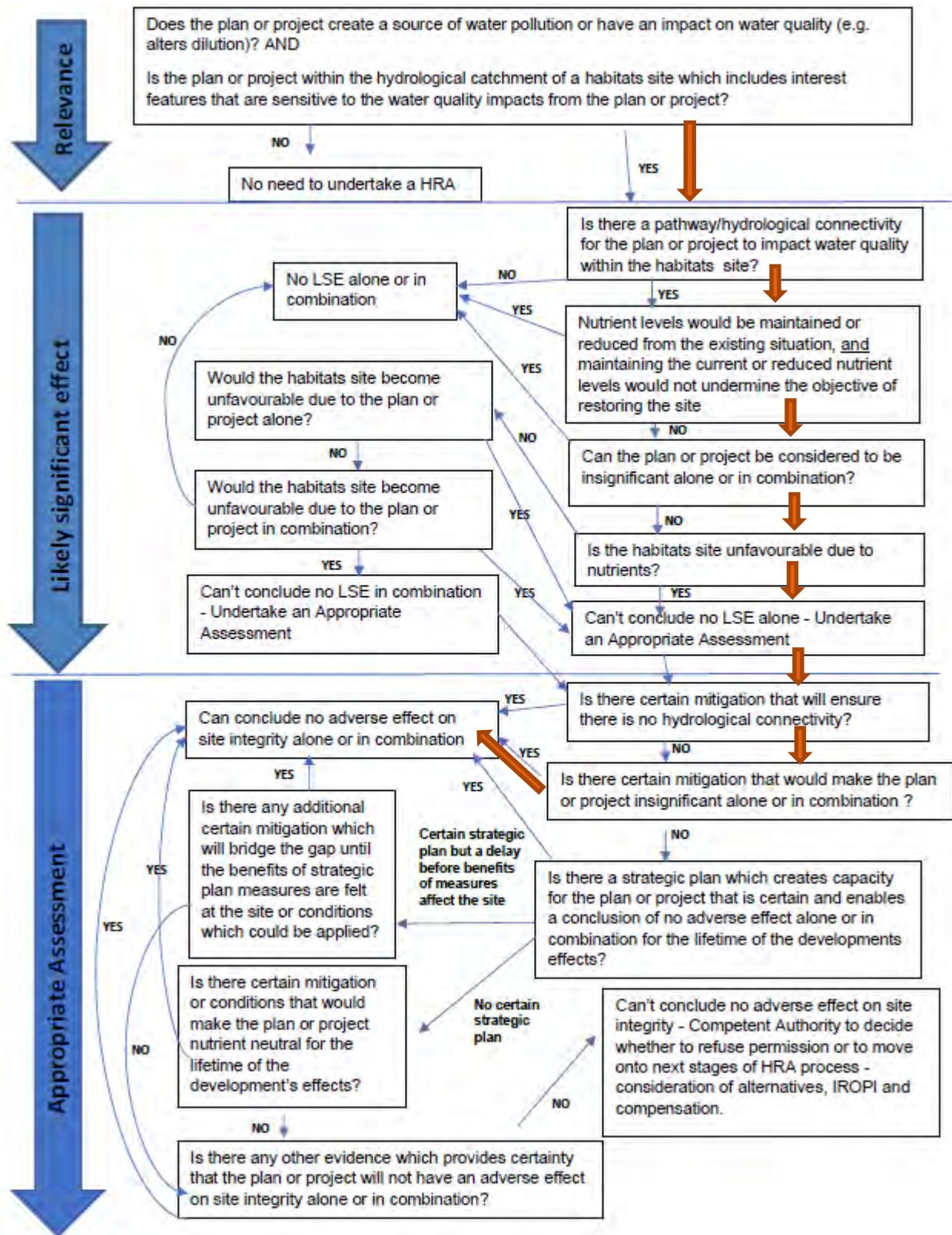
8.1 Water Pollution / Nutrient Neutrality

Potential impacts and effects from poor water quality

- 8.1.1 Increased inputs of nutrients into the Stour catchment from the proposed Development has the potential to lead to degradation of the wetland habitats upon which the qualifying features rely on. Habitats associated with Stodmarsh SAC, SPA and Ramsar comprise open water bodies (standing water and running water), reedbeds, grazing marsh and alder carr.
- 8.1.2 The River Stour feeds into the Stodmarsh designated sites. The river is vulnerable to receipt of increased nutrients via direct input from wastewater treatment works and drainage/surface runoff. With regard to the proposed Development, wastewater from new development is considered to be the primary route of concern.
- 8.1.3 This approach, and the requirement for this Appropriate Assessment is illustrated in Image 4, taken from Natural England's 'Advice for development proposals with the potential to

affect water quality resulting in adverse nutrient impacts on habitats sites' (Natural England 2022).

Image 4: Approach to addressing Nutrient Neutrality in relation to this Plan / Project (project response in orange)



Assessment

- 8.1.4 In the absence of mitigation, there is potential for changes in nutrient levels to impact the designated site. However, as a component of the design of the development, on-site mitigation has been outlined that will ensure that the development is nutrient neutral. The full details of the onsite mitigation to ensure that nutrient neutrality can be achieved are presented in the Water Cycle Study (ES Appendix 15.2) and Appendix L, a summary is presented below (extracted from the Water Cycle Study):
- 8.1.5 “Wastewater in the District is currently collected and treated by Southern Water (SW). There are two potential offsite treatment options for the proposed Development to discharge. This would be either to the nearby Sellindge Wastewater Treatment Works (WwTW) approximately 1km to the west or West Hythe WwTW in the adjoining catchment, approximately 7km to the southeast. SW has completed a feasibility study to identify what additional wastewater infrastructure upgrades would be required to serve the proposed Development at their preferred Sellindge WwTW. This feasibility study confirmed that a new rising main and major upgrade to the existing works will be required in a phased manner. SW has not identified any fundamental reasons why development should not go ahead as the required new infrastructure can be delivered through the water industry’s five-yearly business planning process to match with the proposed Development trajectory and phasing plans at Otterpool Park. The current Asset Management Plan (AMP7), which covers the period 2020 to 2025 has already made the necessary provisions to undertake the required detailed investigations and initial infrastructure upgrades to accommodate Otterpool Park. As part of this, a Risk and Value exercise is currently underway by SW.
- 8.1.6 However, Sellindge WwTW and other WwTWs that are discharging into the River Stour and surroundings are currently also subject to a separate detailed investigation in connection with their potential negative impacts on the Stodmarsh European designated sites under the Environment Agency’s (EA’s) Water Industry National Environment Programme (WINEP) that will report in 2022. This WINEP investigation has been initiated to investigate potential links between the River Stour and the Stodmarsh lakes systems, then propose appropriate, possible and cost-effective solutions to resolve any identified impacts. Until this WINEP study is complete, including any mitigation solutions are fully implemented (i.e., if deemed required) all new development in the impacted Stour catchment must achieve nutrient neutrality as per the latest Natural England’s (NEs) guidance for Stodmarsh sites. Therefore, it is currently proposed that the initial development phases will be served by a dedicated onsite WwTW with suitable additional onsite nutrient neutrality mitigation. This will include constructed wetlands and woodland planting to offset surplus Nitrogen and Phosphorous, due to the wastewater and surface water discharges from the proposed Development. This approach has been agreed with NE and the EA in principle so that Otterpool Park will ensure nutrient neutrality, as per the required precautionary principle to protect the integrity of the downstream Stodmarsh SPA SAC and Ramsar site.
- 8.1.7 The onsite WwTW will be located within the application site boundary towards the northwest corner and two options have been identified for the final treated effluent discharge outfall location, one upstream location on the River East Stour near to the onsite WwTW and a second further downstream location on the same watercourse near to the Sellindge WwTW. The latest discussions with Severn Trent Connect (STC), who has been identified as the New Appointment and Variation (NAV) for Otterpool Park, indicate that providing onsite works to achieve both the nutrient neutrality and the EA’s proposed discharge permits are viable. The modular onsite WwTW will be constructed and commissioned in four main phases to match with the proposed Development trajectory. This phased approach will also ensure the flexibility to connect the later development phases of the Otterpool Framework

Masterplan Area to Sellindge WwTW, if deemed required following the implementation of ongoing WINEP study recommendations.

- 8.1.8 A new appointment is made where a limited company is appointed by Ofwat to provide water and/or sewerage services. A NAV, therefore, involves one company replacing another as the appointee for a specific geographic area. In line with the current EA legislation and policies, new discharges should first consider connecting to existing infrastructure, where reasonable although as stated above this is currently not viable due to the ongoing WINEP study and the limited capacity currently available within the existing network and Sellindge WwTW.”
- 8.1.9 The WCS produced in support of the ES (as updated through the Nutrient Budget provided in Appendix L) fully details how the above mitigation requirements will be met at the Otterpool Park at Tier 1 OPA and Otterpool Framework Masterplan Area, including the preliminary designs undertaken to date. Sufficient amount of wastewater treatment wetlands and stormwater treatment wetlands have been strategically located within the relevant wastewater and stormwater catchments. Further refinements to the nutrient budgets and detailed mitigation designs (including wetland designs, supporting hydraulic calculations and maintenance plans) will be undertaken as the project moves to the detailed design stage at Tier 2 and Tier 3 stages, through the implementation of suitable planning conditions.
- 8.1.10 The report presented in Appendix L provides the latest nutrient budget calculations and associated mitigation proposals to demonstrate that Nutrient Neutrality can be achieved at the Proposed Development as part of Otterpool Park OPA, including the remaining FMP. This is through the provision of a new Onsite WwTW serving the proposed development, accompanied by the proposed four interlinked constructed wetlands system, which will protect the integrity of the downstream Stodmarsh designated sites. Thereby, the updated development proposals and this report demonstrate that they can meet the required key tests under the Habitats Regulation Assessment, which are based on average household occupancy rate of 2.4, Per Capita Consumption (PCC) rate of 120 l/p/d, 90% of discharge permit values (i.e. 90% of TP limit of 0.1 mg/l and TN limit of 7.2 mg/l) for the proposed Severn Trent Connect Onsite WwTW option as well as the latest NE methodology for land use nutrient budget assessment:
- 8.1.11 Nutrient Neutrality at Otterpool Park will be achieved by the implementation of the measures previously identified in Arcadis (March 2022) OP5 – Appendix 15.2 – Water Cycle Study, which have been now updated by this report to include the following:
- Direct treatment mitigation with the proposed Severn Trent Connect Onsite WwTW option
 - Direct mitigation, which includes up to 35.68 ha of onsite wastewater and stormwater wetlands, including 35ha of new onsite woodland planting
 - Indirect mitigation, which includes changing existing agricultural land use to a lower nutrient use, such as stormwater SuDS, SANG and ecology/landscape mitigation.
- 8.1.12 The above mitigation will be implemented, as per an agreed and phased implementation plan with NE and the LPA for each development phase or multiple phases. Therefore, this demonstrates that the Proposed Development within the current OPA will have No Likely Significant Effect on Stodmarsh designated sites and thereby can meet the required tests of the Appropriate Assessment under the Habitats Regulation Assessment in respect to the potential nutrients impact.

Effects in Combination with Other Plans and Projects

8.1.13 As the proposed development implements on-site mitigation to address nutrient issues, the Otterpool Park development has no potential to have an effect in combination with other plans and projects.

Conclusions

8.1.14 Natural England's current advice with regard to any proposed Development project of this nature within the Stour catchment is that mitigation needs to be implemented in order to achieve nutrient neutrality; this has further been confirmed through undertaking precautionary project nutrient budget calculations.

8.1.15 Proposals are outlined as a component of the proposed Development that have been agreed in principle with NE and the EA , which would ensure that the site can achieve nutrient neutrality. As it can be demonstrated that the proposal will not adversely affect the integrity of the site (when the mitigation on site is implemented), no further stages of HRA are required.

9 Conclusions

- 9.1.1 Eighteen Sites in the National Sites Network were assessed for the potential effects from the proposed Development due to functionally linked land, reduction in air quality, water pollution (from nutrients) and recreational pressure.
- 9.1.2 Birds were the only sufficiently mobile receptor to have the potential to use habitat functionally linked to the proposed Development site. These were screened out as no qualifying bird features were being supported or maintained by the site from the bird survey results, nor does the proposed Development support habitat that would be likely to support the qualifying features in any significant numbers.
- 9.1.3 Only one site was within the threshold for air quality assessment, the Folkestone to Etchinghill Escarpment SAC (Figure 3). In line with the IAQM's designated sites guidance (2020), this HRA defers to the Local Plan HRA. No significant effects are predicted for the proposed Development in terms of air quality impacts. Comments received from Natural England on the March 2022 HRA submission in relation to air quality, specifically ammonia are addressed and a high-level assessment and rationale for future assessment is outlined which permits screening at subsequent Tiers of the planning process.
- 9.1.4 A number of sites were of particular stakeholder concern due to a potential increase in recreational pressure, primary and secondary data were analysed for these sites: the Folkestone to Etchinghill Escarpment SAC, the Wye and Crundale Downs SAC, the Dover to Kingsdown Cliffs SAC and the Dungeness complex (SPA, SAC and Ramsar). While small numbers of additional visitors may be expected, visitor behaviour predicted that the proposed Development's residents were unlikely to travel to these sites in any significant numbers and the primary recreational use was dog walking. Given the large amount of accessible greenspace integral to the design (Figure 1) it is anticipated that a significant proportion of residents would utilise this space for dog walking and visits to the designated sites would be in small numbers for recreational purposes associated with the appreciation of the designated features.
- 9.1.5 Of the nine remaining sites one is not publicly accessible, Parkgate Down SAC. The remaining eight sites are over 15km away and seven of these are over 20km away. Residents of the proposed Development are unlikely to use these sites in any significant numbers. This assessment was supported by Natural England in the response to the 2019 submission. Comments received from Natural England on the March 2022 HRA submission in relation to Recreational Pressure are addressed separately and no further assessment was needed
- 9.1.6 With regards to impacts resulting from water pollution, Natural England's current advice with regard to any proposed Development project of this nature within the Stour catchment is that mitigation needs to be implemented in order to achieve nutrient neutrality; this has further been confirmed through undertaking precautionary project nutrient budget calculations and providing suitable mitigation proposals. The potential impact of the site with designed mitigation applied is assessed through an Appropriate Assessment.
- 9.1.7 Proposals are outlined as a component of the development that have been agreed in principle with NE and the EA, which would ensure that the site can achieve nutrient neutrality. Detailed designs and maintenance plans of the mitigation proposals will be produced during Tier 2 and Tier 3 Stages through the implementation of Tier 1 outline planning conditions. As it can be demonstrated at the Appropriate Assessment stage that

the proposal will not adversely affect the integrity of the Stodmarsh SAC, SPA and Ramsar site, no further stages of HRA are required.

- 9.1.8 A review of the Local Plan HRAs, namely the F&HDC Core Strategy Review (LUC, 2018) and the F&HDC PPLP (LUC, 2018), was carried out to assess other plans and projects which could lead to likely significant effects on Sites in the National Sites Network when considered in combination with the proposed Development. It concluded that there were no likely significant effects, there are no additional developments of note since this assessment that in combination with the proposed Development would change this assessment.

10 References

Reference Description
Arcadis Environmental Statement Volume 2, Chapter 15 - Surface Water Resources and Flood Risk
Arcadis Environmental Statement Volume 2, Chapter 15 Appendix 2 Water Cycle Study
Arcadis Environmental Statement Volume 2, Chapter 2: Socio-economics and Community
Arcadis Environmental Statement Volume 2, Chapter 7 - Biodiversity of the ES
Canterbury City Council (2014) Canterbury District Local Plan review Public Examination 2014 Topic Paper no 3 Habitat Regulations Issues
Dungeness Complex - Sustainable Access and Recreation Management Strategy – Draft (Prepared for Shepway and Rother District Council, 2017)
ECLI:EU:C:2018:244, Judgment of the Court (Seventh Chamber), 12 April 2018, Reference for a preliminary ruling — Environment — Directive 92/43/EEC — Conservation of natural habitats — Special areas of conservation — Article 6(3), available online at: http://curia.europa.eu/juris/document/document.jsf?docid=200970&doclang=EN [accessed 17/01/2019]
European Commission (2000), Managing Natura 2000 sites: The provisions of Article 6 of the Habitats Directive 92/43/EEC;
European Commission (2001), Assessment of plans and projects significantly affecting Natura 2000 sites;
European Commission (2007), Guidance document on Article 6(4) of the Habitats Directive 92/43/EEC;
European Commission guidance (2001)
Folkestone to Etchinghill Escarpment SSSI – S15 Arpinge Range (003)
Gilbert, G., Gibbons, D., Evans, J. (1998) Bird Monitoring Methods: A Manual of Techniques for Key UK Species. Pelagic Publishing, Exeter.
Highways England IAN 174/13 (2013)
Kent Downs AONB Unit (2013) Kent Downs AONB Management Plan Second Revision Final Draft Text Version
Lunt, J., and Lischak, K. (2008) Natural England – a new dawn? Rights and responsibilities towards the natural environment and how these may change – the 'Dilly Lane' case. Environmental Law & Management 246 (2008) 20. Lawtext Publishing Limited www.lawtext.com : Case reference [2008] EWHC 1204 (Admin)
Natural England (2022) Advice for development proposals with the potential to affect water quality resulting in adverse nutrient impacts on habitats sites.
LUC (2018) F&HDC Core Strategy Review
LUC (2018) F&HDC Places and Policies Local Plan 2017
LUC (2018) Folkestone & Hythe Proposed Submission Core Strategy Review – Habitats Regulations Assessment
LUC (2019) Folkestone & Hythe Core Strategy Review – HRA addendum
RSPB (2013) Residential volunteering on RSPB nature reserves 2013
CJEU C-323/17 People Over Wind and Peter Sweetman vs Coillte Teoranta CURIA - List of results (europa.eu)
The Conservation of Habitats and Species Regulations 2017 (as amended);
The Design Manual for Roads and Bridges (DMRB) Volume 11 Environmental Assessment (2007)
The Design Manual for Roads and Bridges (DMRB) LA 105 Air Quality guidance

Reference Description

The Highway Agency (HA) Interim Advice Note 141/11: Assessment of Implications (of Highways and/or Roads Projects) on Sites in the National Sites Network (Including Appropriate Assessment) (2011)

The Places Team (2017) Dungeness Complex Sustainable Access and Recreation Management Strategy (SARMS) prepared for Shepway District Council and Rother District Council

The Planning Inspectorate Habitat Regulations Assessment Advice Note Ten: Habitat Regulations Assessment relevant to nationally significant infrastructure projects, Version 5, August 2013

UK Department for Transport's (DfT's) Transport Analysis Guidance (TAG) Unit A3: Environmental Impact Appraisal (2015)

URS (2011) Rother and Shepway Core Strategies Habitat Regulations Assessment (Dungeness SAC, Dungeness to Pett Level SPA and future SPA extension and Ramsar site)

URS (2012) Shepway Core Strategy Habitat Regulations Assessment (Sites other than the Dungeness complex)

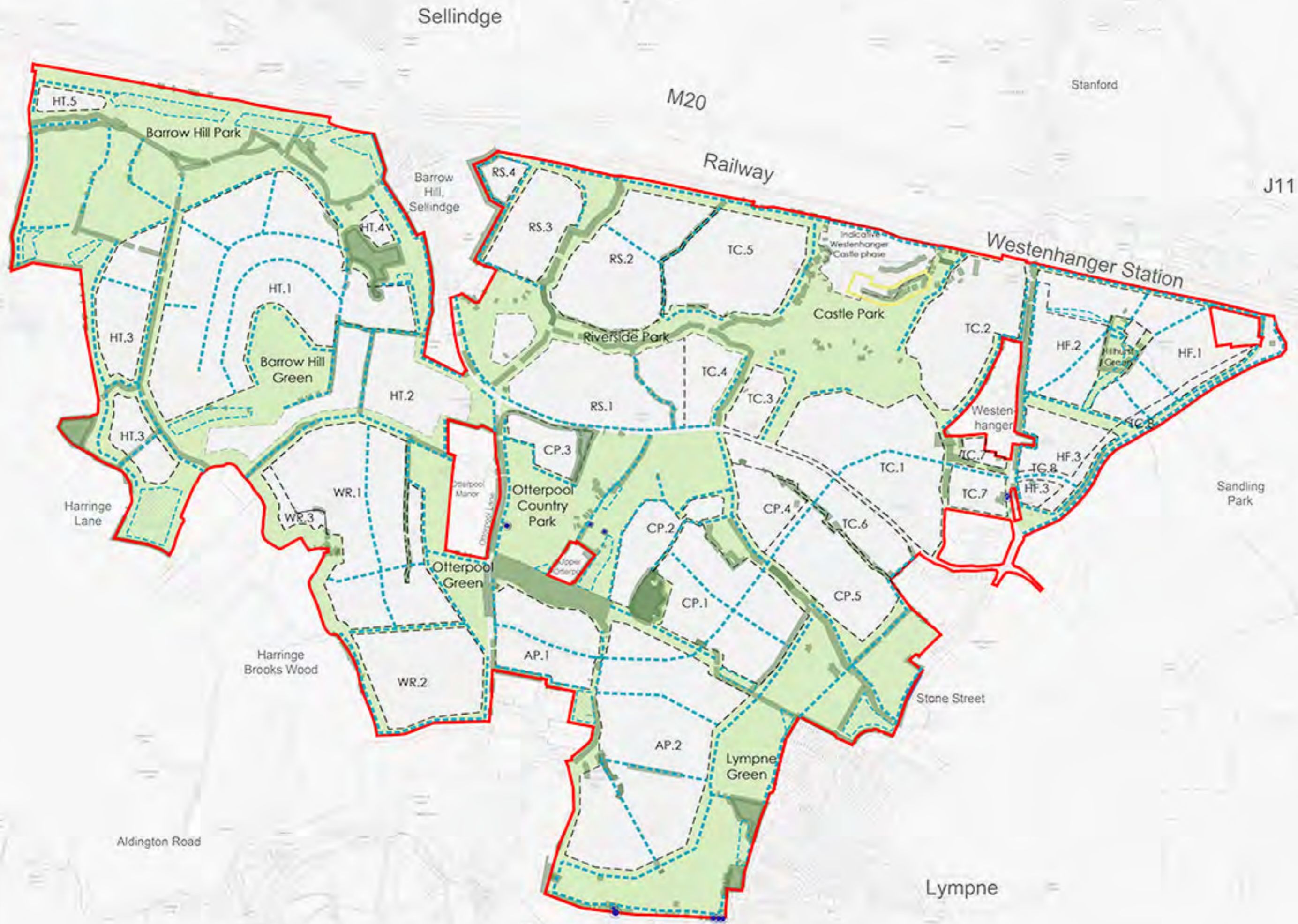
Dover District Council (2010) Whitfield Urban Expansion Supplementary Planning Document HRA Consultation Draft

WHO (2000), Effects of nitrogen containing air pollutants: critical levels Air Quality Guidelines – Second Edition, Chapter 11. WHO Regional Office for Europe, Copenhagen, Denmark, 2000

Holman et al (2020). A guide to the assessment of air quality impacts on designated nature conservation sites. v1.1. Institute of Air Quality Management, London.

CIEEM (2021) Advice on Ecological Assessment of Air Quality Impacts. Chartered Institute of Ecology and Environmental Management. Winchester, UK.

Figure 1: Proposed Development Design Showing Accessible Green Infrastructure Provision



Existing

- Existing woodlands, trees, treebelts and hedgerows retained. This Parameter Plan shows where vegetation is proposed to be retained. Breaks in this retained vegetation may however be required to facilitate the proposed development. This will be confirmed at the Tier 2 and Tier 3 stages once detailed tree and vegetation surveys have been conducted and the design has been further progressed.
- Area in front of Westenhanger Castle with vegetation to be removed subject to further survey and Conservation Management Plan
- Existing trees with TPO retained

Proposed

- Proposed development areas
- n.n Numbered key to reflect development areas in illustrative phasing plan
- Proposed indicative Westenhanger Castle phase
- The indicative Westenhanger Castle phase relates to an area of development will be the subject of future consideration/approval
- Proposed areas of structural planting
- Proposed rows of structural planting
- Structural planting must be provided in the general location indicated on this Parameter Plan. The precise location and type of structural planting is to be defined at Tier 2. To inform the Tier 2 structural planting proposals see the Green Infrastructure Strategy for details regarding planting type, location and the necessary advance planting required.
- Proposed open space
- Application Red Line Boundary



Client:
Otterpool Park LLP

Masterplanner:
FARRELLS

Project:
Otterpool Park

Drawing:
Open Space & Vegetation

Scale:
1:7,500 @ A1, 1:15,000 @A3

Status:
For Approval

Drawing No. OPM(P)4002_rev YY

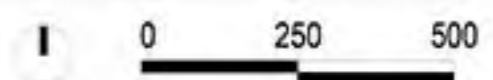
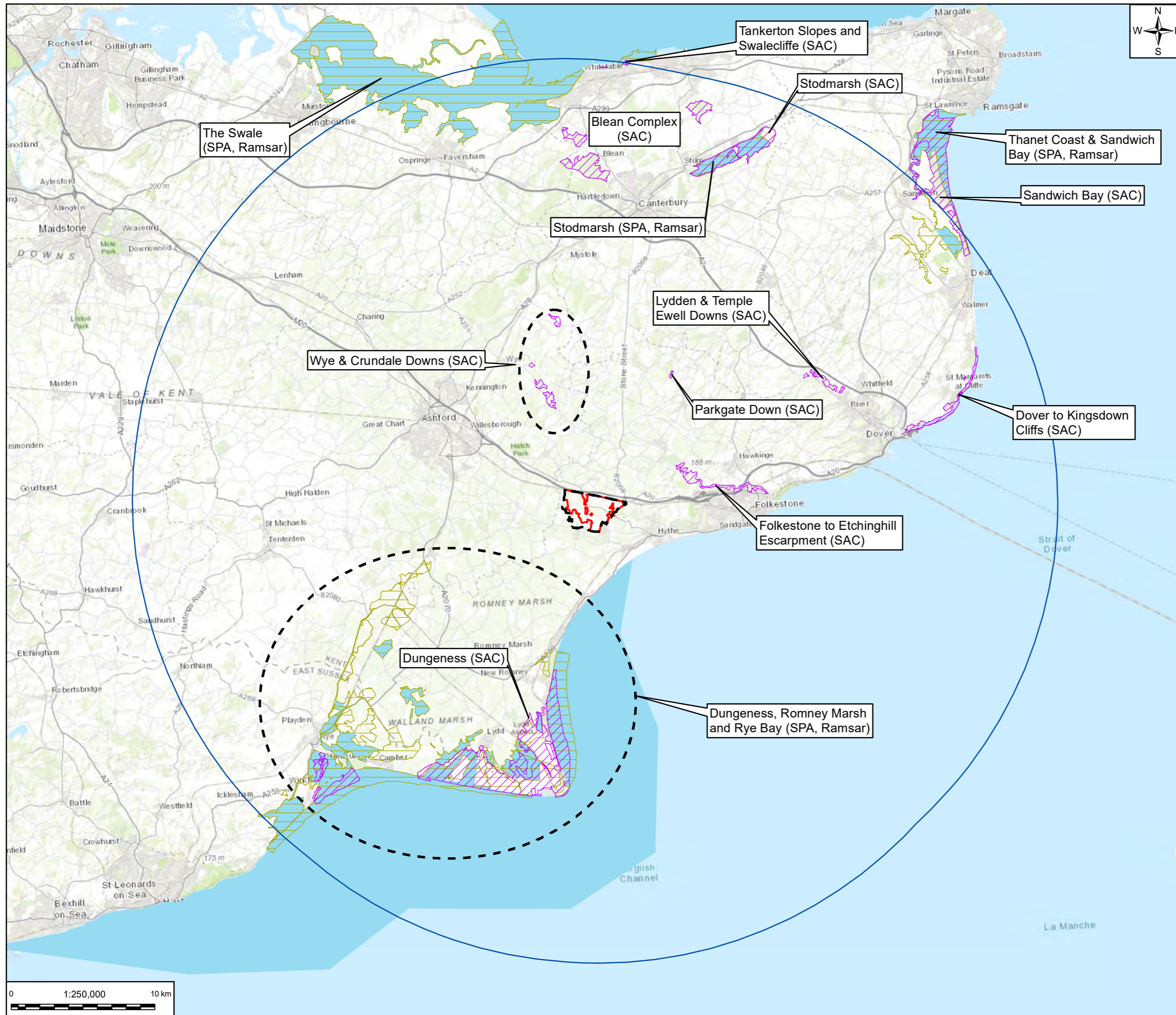


Figure 2: Sites in the National Sites Network within 30km



- Legend**
- Outline Planning Application Boundary
 - Framework Masterplan Boundary
 - 30 km Study Area
 - Special Area of Conservation (SAC)
 - Ramsar
 - Special Protection Area (SPA)

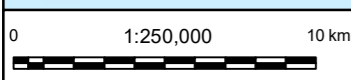
Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN,

REV	Date	Description	Drawn	Check	Approv
02	18/11/21	FOR INFORMATION	RM	BM	MG
01	22/10/18	FOR INFORMATION	EP	BM	MG

ARCADIS
 80Fen
 80 Fenchurch Street
 London
 EC3M 4BY

OTTERPOOL PARK
 COUNTRYSIDE · CONNECTED · CREATIVE

Figure 2
 Internationally Designated Sites
 within 30km of the Site



scale	original size	datum	grid
1:250,000	A3	Sx	BNG

Appendix A: Screening Matrices

Potential Impacts to Designated Sites

Potential impacts upon the European site(s)^{††} which are considered within the Stage 1 Habitats Regulations Assessment (HRA) Report are provided in the table below (Table 8: HRA screening matrix). Impacts have been grouped where appropriate for ease of presentation.

Table 8: HRA screening matrix

Protected Site	Approximate distance from study area (km)	Qualifying features	Existing vulnerabilities	Recreational Pressure	Air Quality	Functionally Linked Land	Water pollution	Appropriate Assessment Outcome
Blean Complex SAC	21.6km N	Annex I habitats that are a primary reason for selection of this site: <ul style="list-style-type: none"> 9160. Sub-Atlantic and medio-European oak or oak-hornbeam forests of the <i>Carpinion betuli</i>; Oak-hornbeam forests 	Threats identified in Site Improvement Plan include: <ul style="list-style-type: none"> Air pollution: impact of atmospheric nitrogen deposition 	Scoped in for assessment Does not list recreational pressure as a current sensitivity. This site is located approximately 21.6km north of the proposed Development t. In line with the assessment provided for the Dover to Kingsdown Cliffs SAC, the low visitor numbers predicted from the proposed Development residents due to, surveys indicating a limited travelling distance (approx. 20 minutes drive) the distance of the site from the proposed Development and the proximity of over 50% accessible greenspace within the proposed Development, make significant effects due to recreational pressure extremely unlikely. Screened out at stage 1	Scoped in for assessment Site is not within 200m of roads which meet any of a set of traffic change criteria as impacts from traffic emissions must be assessed. The change criteria are set at: <ul style="list-style-type: none"> a change of +/- 1000 vehicles per day, +/- 200 Heavy Duty Vehicles (HDV), 10kph change in daily average speed or 20kph change in peak hour speeds. Screened out at stage 1	Scoped in for assessment No mobile qualifying features nor any connecting habitat to the proposed Development. Screened out at stage 1	Scoped out for assessment. Site is not hydrologically connected to the proposed Development site.	N/A
Dover to Kingsdown Cliffs SAC	20.1km NE	Annex I habitats that are a primary reason for selection of this site: <ul style="list-style-type: none"> 1230 Vegetated sea cliffs of the Atlantic and Baltic coasts 6210 Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>) 	Threats identified in Site Improvement Plan include: <ul style="list-style-type: none"> Inappropriate scrub control Undergrazing Air pollution: impact of atmospheric nitrogen deposition 	Scoped in for assessment Does not list recreational pressure as a current sensitivity. Was identified by stakeholders as a site of particular concern. Studies identified a likely increase in pressure of 0.7% due to Shepway, i.e. extremely small. This confirms (based on actual visitor survey data) that while an increased population in Shepway probably will result in more visits to the SAC, the core catchment of the SAC with regard to local residents is essentially the Dover town area. The low visitor numbers predicted from the proposed Development residents due to, surveys indicating a limited travelling distance (approx. 20 minutes drive) the distance of the site from the	Scoped in for assessment Site is not within 200m of roads which meet any of a set of traffic change criteria as impacts from traffic emissions must be assessed. The change criteria are set at: <ul style="list-style-type: none"> a change of +/- 1000 vehicles per day, +/- 200 Heavy Duty Vehicles (HDV), 10kph change in daily average speed or 20kph change in peak hour speeds. Screened out at stage 1	Scoped in for assessment No mobile qualifying features nor any connecting habitat to the proposed Development. Screened out at stage 1	Scoped out for assessment. Site is not hydrologically connected to the proposed Development site.	N/A

^{††} As defined in Advice Note 10.

Protected Site	Approximate distance from study area (km)	Qualifying features	Existing vulnerabilities	Recreational Pressure	Air Quality	Functionally Linked Land	Water pollution	Appropriate Assessment Outcome
				proposed Development and the proximity of over 50% accessible greenspace within the proposed Development, make significant effects due to recreational pressure extremely unlikely. Screened out at stage 1				
Dungeness SAC	9.9km S	Annex I habitats that are a primary reason for selection of this site: <ul style="list-style-type: none"> 1210 Annual vegetation of drift lines 1220 Perennial vegetation of stony banks Annex II species that are a primary reason for selection of this site: <ul style="list-style-type: none"> 1166 <i>Triturus cristatus</i>: Great crested newt 	Threats identified in Site Improvement Plan include: <ul style="list-style-type: none"> Military pressure Illicit vehicle use Invasive species Inappropriate scrub control Overgrazing Public access/disturbance Direct impact from 3rd parties Air pollution: impact of atmospheric nitrogen deposition Inappropriate water levels Water pollution 	Scoped in for assessment Was identified by stakeholders as a site of particular concern. Surveys suggested that the probable increase in visitors as a result of the potential population increase in Shepway could be expected to be approximately 5%. Additionally, given the existing survey data, it is not likely that those new visitors would be frequent visitors and the Arcadis survey data highlighted that proximity to the site for recreational users is a key factor. The low visitor numbers predicted from the proposed Development residents due to, surveys indicating a limited travelling distance (approx. 20 minutes drive) the distance of the site from the proposed Development and the proximity of over 50% accessible greenspace within the proposed Development, make significant effects due to recreational pressure extremely unlikely. Screened out at stage 1	Scoped in for assessment Site is not within 200m of roads which meet any of a set of traffic change criteria as impacts from traffic emissions must be assessed. The change criteria are set at: <ul style="list-style-type: none"> a change of +/- 1000 vehicles per day, +/- 200 Heavy Duty Vehicles (HDV), 10kph change in daily average speed or 20kph change in peak hour speeds. Screened out at stage 1	Scoped in for assessment No sufficiently mobile qualifying features nor any connecting habitat to the proposed Development. Screened out at stage 1 Screened out at stage 1	Scoped out for assessment. Site is not hydrologically connected to the proposed Development site.	N/A
Dungeness, Romney Marsh and Rye Bay SPA (with Marine extension)	8.7km S (with Marine extension 2.9km S)	Qualifies under article 4.1 of the Directive (2009/147/EC), as it is regularly used by >1% of the UK population of the following Annex I species: <ul style="list-style-type: none"> Bewick's swan <i>Cygnus columbianus bewickii</i> Bittern <i>Botaurus stellaris</i> Hen harrier <i>Circus cyaneus</i> Golden plover <i>Pluvialis apricaria</i> Ruff <i>Philomachus pugnax</i> Aquatic warbler <i>Acrocephalus paludicola</i> 	Threats identified in Site Improvement Plan include: <ul style="list-style-type: none"> Military pressure Illicit vehicle use Predation Changes in species distribution Invasive species Public access/disturbance Direct impact from 3rd parties Inappropriate water levels Inappropriate ditch management 	Scoped in for assessment Was identified by stakeholders as a site of particular concern. Surveys suggested that the probable increase in visitors as a result of the potential population increase in Shepway could be expected to be approximately 5%. Additionally, given the existing survey data, it is not likely that those new visitors would be frequent visitors and the Arcadis survey data highlighted that proximity to the site for recreational users is a key factor.	Scoped in for assessment Site is not within 200m of roads which meet any of a set of traffic change criteria as impacts from traffic emissions must be assessed. The change criteria are set at: <ul style="list-style-type: none"> a change of +/- 1000 vehicles per day, +/- 200 Heavy Duty Vehicles (HDV), 	Scoped in for assessment No likely significant effects are anticipated to any of the qualifying features of the SPAs or Ramsar sites within 30km, as a result of the proposed Development. Significant numbers of species that form qualifying features of the site were not present with surveys undertaken for the proposed Development area nor	Scoped out for assessment. Site is not hydrologically connected to the proposed development site.	N/A

Protected Site	Approximate distance from study area (km)	Qualifying features	Existing vulnerabilities	Recreational Pressure	Air Quality	Functionally Linked Land	Water pollution	Appropriate Assessment Outcome
		<ul style="list-style-type: none"> Marsh harrier <i>Circus aeruginosus</i> Avocet <i>Recurvirostra avosetta</i> Mediterranean gull <i>Larus melanocephalus</i> Sandwich tern <i>Sterna sandvicensis</i> Common tern <i>Sterna hirundo</i> Little tern <i>Sterna albifrons</i> <p>Qualifies under article 4.2 of the Directive (2009/147/EC), as it is regularly used by >1% of the biogeographical populations of the following migratory species:</p> <ul style="list-style-type: none"> Shoveler <i>Anas clypeata</i>: 485 wintering individuals (1.2% NW & C Europe non-breeding population) 	<ul style="list-style-type: none"> Coastal squeeze Water pollution Fisheries: commercial marine and estuarine 	<p>The low visitor numbers predicted from the proposed Development residents due to, surveys indicating a limited travelling distance (approx. 20 minutes drive) the distance of the site from the proposed Development and the proximity of over 50% accessible greenspace within the proposed Development, make significant effects due to recreational pressure extremely unlikely.</p> <p>Screened out at stage 1</p>	<ul style="list-style-type: none"> 10kph change in daily average speed or 20kph change in peak hour speeds. <p>Screened out at stage 1</p>	<p>was habitat within the proposed Development area suitable for supporting or maintaining significant numbers of qualifying features.</p> <p>The is evidenced in Sections 5.2 and 6.3 this chapter and ES appendix 7.15 and 7.16.</p> <p>Screened out at stage 1</p>		
Dungeness, Romney Marsh and Rye Bay Ramsar	9.9km S	<p>Criterion 1 (contains rare, unique examples of natural wetland types), including:</p> <ul style="list-style-type: none"> Annual vegetation of drift lines and the coastal fringes of perennial vegetation of stony banks (Ramsar wetland type E – sand, shingle or pebble shores). Natural shingle wetlands: saline lagoons (Ramsar wetland type J – coastal brackish/saline lagoons), freshwater pits (Ramsar wetland type K – coastal freshwater lagoons) and basin fens (Ramsar wetland type U – non-forested peatlands). <p>Criterion 2 (supports threatened ecological communities), including:</p> <ul style="list-style-type: none"> Bryophytes e.g. wetland thread-mosses <i>Bryum</i> species Vascular plants e.g. sea barley <i>Hordeum marinum</i>, Borrer's saltmarsh-grass <i>Puccinellia fasciculata</i> and slender hare's-ear <i>Bupleurum tenuissimum</i>, sea-heath <i>Frankenia laevis</i>, sharp-leaved pondweed <i>Potamogeton acutifolius</i>, divided sedge <i>Carex divisa</i> and rootless duckweed <i>Wolffia arrhiza</i>. Invertebrates e.g. reed beetles <i>Donacia</i>, snail-killing flies (<i>Sciomyzidae</i>) and soldierflies (<i>Stratiomyidae</i>) 	<ul style="list-style-type: none"> As above. 	<p>Scoped in for assessment</p> <p>Was identified by stakeholders as a site of particular concern. Surveys suggested that the probable increase in visitors as a result of the potential population increase in Shepway could be expected to be approximately 5%. Additionally, given the existing survey data, it is not likely that those new visitors would be frequent visitors and the Arcadis survey data highlighted that proximity to the site for recreational users is a key factor.</p> <p>The low visitor numbers predicted from the proposed Development residents due to, surveys indicating a limited travelling distance (approx. 20 minutes drive) the distance of the site from the proposed Development and the proximity of over 50% accessible greenspace within the proposed Development, make significant effects due to recreational pressure extremely unlikely.</p> <p>Screened out at stage 1</p>	<p>Scoped in for assessment</p> <p>Site is not within 200m of roads which meet any of a set of traffic change criteria as impacts from traffic emissions must be assessed. The change criteria are set at:</p> <ul style="list-style-type: none"> a change of +/- 1000 vehicles per day, +/- 200 Heavy Duty Vehicles (HDV), 10kph change in daily average speed or 20kph change in peak hour speeds. <p>Screened out at stage 1</p>	<p>Scoped in for assessment</p> <p>No likely significant effects are anticipated to any of the qualifying features of the SPAs or Ramsar sites within 30km, as a result of the proposed Development. Significant numbers of species that form qualifying features of the site were not present with surveys undertaken for the proposed Development area nor was habitat within the proposed Development area suitable for supporting or maintaining significant numbers of qualifying features.</p> <p>The is evidenced in Sections 5.2 and 6.3 this chapter and ES appendix 7.15 and 7.16.</p> <p>Screened out at stage 1</p>	<p>Scoped out for assessment.</p> <p>Site is not hydrologically connected to the proposed Development site.</p>	N/A

Protected Site	Approximate distance from study area (km)	Qualifying features	Existing vulnerabilities	Recreational Pressure	Air Quality	Functionally Linked Land	Water pollution	Appropriate Assessment Outcome
		<p>It also supports vulnerable, endangered or critically endangered wetland species, including:</p> <ul style="list-style-type: none"> greater water-parsnip <i>Sium latifolium</i> Warne's thread-moss <i>Bryum warneum</i> water vole <i>Arvicola amphibius</i> aquatic warbler <i>Acrocephalus paludicola</i> great crested newt medicinal leech <i>Hirudo medicinalis</i> a ground beetle <i>Omophron limbatum</i> marsh mallow moth <i>Hydraecia osseola hucherardi</i> De Folin's lagoon snail <i>Caecum amoricum</i> <p>Criterion 5 (regularly supports >20,000 waterbirds); in the non-breeding season the site supports 34,957 waterbirds (5-year peak mean 2002/3 – 2006/7).</p> <p>Criterion 6 (regularly supports 1% individuals in the population of the following species):</p> <ul style="list-style-type: none"> Mute swan <i>Cygnus olor</i>; 348 wintering individuals (1.1% British population) Shoveler: 485 wintering individuals (1.2% NW & C Europe non-breeding population) 						
Folkestone to Etchinghill Escarpment SAC	4.2km NE	<p>Annex I habitats that are a primary reason for selection of this site:</p> <ul style="list-style-type: none"> 6210 Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>) 	<p>Threats identified in the Site Improvement Plan include:</p> <ul style="list-style-type: none"> Undergrazing Inappropriate scrub control Air pollution: impact of atmospheric nitrogen deposition 	<p>Scoped in for assessment</p> <p>Does not list recreational pressure as a current sensitivity.</p> <p>Was identified by stakeholders as a site of particular concern. Visitor surveys undertaken by Arcadis identified that a significant proportion of people use particular walking routes because of the proximity to their home and/or within 20 minutes maximum drive time.</p> <p>The low visitor numbers predicted from the proposed Development residents due to, surveys indicating a limited travelling distance (approx. 20 minutes drive) the distance of the site from the</p>	<p>Scoped in for assessment</p> <p>The worst-case increase in Nitrogen was c.2% of critical load above the predicted Do Minimum scenario in 2046, however this was still below the critical loads for the habitats present, and below the current levels of N for the site and therefore no significant effect on the site is predicted.</p> <p>Screened out at stage 1</p>	<p>Scoped in for assessment</p> <p>No mobile qualifying features nor any connecting habitat to the proposed Development.</p> <p>Screened out at stage 1</p>	<p>Scoped out for assessment.</p> <p>Site is not hydrologically connected to the proposed Development site.</p>	N/A

Protected Site	Approximate distance from study area (km)	Qualifying features	Existing vulnerabilities	Recreational Pressure	Air Quality	Functionally Linked Land	Water pollution	Appropriate Assessment Outcome
				<p>proposed Development and the proximity of over 50% accessible greenspace within the proposed Development, make significant effects due to recreational pressure extremely unlikely.</p> <p>Screened out at stage 1</p>				
Lydden and Temple Ewell Downs SAC	15.1km NE	<p>Annex I habitats that are a primary reason for selection of this site:</p> <ul style="list-style-type: none"> 6210 Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>) 	<p>Threats identified in the Site Improvement Plan include:</p> <ul style="list-style-type: none"> Overgrazing Public access/disturbance Air pollution: impact of atmospheric nitrogen deposition 	<p>Scoped in for assessment</p> <p>This site is located approximately 15km to the northeast of the proposed Development. In line with the assessment provided for the Dover to Kingsdown Cliffs SAC, the low visitor numbers predicted from the proposed Development residents due to, surveys indicating a limited travelling distance (approx. 20 minutes drive) the distance of the site from the proposed Development and the proximity of over 50% accessible greenspace within the proposed Development, make significant effects due to recreational pressure extremely unlikely.</p> <p>Screened out at stage 1</p>	<p>Scoped in for assessment</p> <p>Site is not within 200m of roads which meet any of a set of traffic change criteria as impacts from traffic emissions must be assessed. The change criteria are set at:</p> <ul style="list-style-type: none"> a change of +/- 1000 vehicles per day, +/- 200 Heavy Duty Vehicles (HDV), 10kph change in daily average speed or 20kph change in peak hour speeds <p>Screened out at stage 1</p>	<p>Scoped in for assessment</p> <p>No mobile qualifying features nor any connecting habitat to the proposed Development.</p> <p>Screened out at stage 1</p>	<p>Scoped out for assessment.</p> <p>Site is not hydrologically connected to the proposed Development site.</p>	N/A
Parkgate Down SAC	9.1km NE	<p>Annex I habitats that are a primary reason for selection of this site:</p> <ul style="list-style-type: none"> 6210 Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>) 	<p>Threats identified in the Site Improvement Plan include:</p> <ul style="list-style-type: none"> Habitat fragmentation Air pollution: impact atmospheric nitrogen deposition 	<p>Scoped in for assessment</p> <p>Recreational pressure is not considered an existing vulnerability.</p> <p>No public rights of way enter the site and a warden is employed by KWT to manage and monitor the site and oversee implementation of access restrictions to protect sensitive ecological features including the orchid assemblage for which the site is designated.</p> <p>Screened out at stage 1</p>	<p>Scoped in for assessment</p> <p>Site is not within 200m of roads which meet any of a set of traffic change criteria as impacts from traffic emissions must be assessed. The change criteria are set at:</p> <ul style="list-style-type: none"> a change of +/- 1000 vehicles per day, +/- 200 Heavy Duty Vehicles (HDV), 10kph change in daily average speed or 20kph change in peak hour speeds <p>Screened out at stage 1</p>	<p>Scoped in for assessment</p> <p>No likely significant effects are anticipated to any of the qualifying features of the SPAs or Ramsar sites within 30km, as a result of the proposed Development. Habitats that form qualifying features of the site were not present on the development in significant quantities. Qualifying features are not mobile and as such there is no functionally linked land on the development.</p> <p>Screened out at stage 1</p>	<p>Scoped out for assessment.</p> <p>Site is not hydrologically connected to the proposed Development site.</p>	N/A

Protected Site	Approximate distance from study area (km)	Qualifying features	Existing vulnerabilities	Recreational Pressure	Air Quality	Functionally Linked Land	Water pollution	Appropriate Assessment Outcome
Sandwich Bay SAC	28.9km NE	<p>Annex I habitats that are a primary reason for selection of this site:</p> <ul style="list-style-type: none"> 2110 Embryonic shifting dunes 2120 Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ("white dunes") 2130 Fixed coastal dunes with herbaceous vegetation ("grey dunes") 2170 Dunes with <i>Salix repens ssp. argentea</i> (<i>Salicion arenariae</i>) <p>Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site:</p> <ul style="list-style-type: none"> 2190 Humid dune slacks 	<p>Threats identified in the Site Improvement Plan include:</p> <ul style="list-style-type: none"> Invasive species Public access/disturbance Hydrological changes Air pollution: impact atmospheric nitrogen deposition Fisheries: commercial marine and estuarine 	<p>Scoped in for assessment</p> <p>This site is located approximately 28.9km north of the proposed Development. In line with the assessment provided for the Dover to Kingsdown Cliffs SAC, the low visitor numbers predicted from the proposed Development residents due to, surveys indicating a limited travelling distance (approx. 20 minutes drive) the distance of the site from the proposed Development and the proximity of over 50% accessible greenspace within the proposed Development, make significant effects due to recreational pressure extremely unlikely.</p> <p>Screened out at stage 1</p>	<p>Scoped in for assessment</p> <p>Site is not within 200m of roads which meet any of a set of traffic change criteria as impacts from traffic emissions must be assessed. The change criteria are set at:</p> <ul style="list-style-type: none"> a change of +/- 1000 vehicles per day, +/- 200 Heavy Duty Vehicles (HDV), 10kph change in daily average speed or 20kph change in peak hour speeds <p>Screened out at stage 1</p>	<p>Scoped in for assessment</p> <p>No likely significant effects are anticipated to any of the qualifying features of the SPAs or Ramsar sites within 30km, as a result of the proposed Development. Significant numbers of species that form qualifying features of the site were not present on the development.</p> <p>The is evidenced in Sections 5.2 and 6.3 this chapter and ES appendix 7.15 and 7.16.</p> <p>Screened out at stage 1</p>	<p>Scoped out for assessment.</p> <p>Site is not hydrologically connected to the proposed Development site.</p>	N/A
Stodmarsh SAC	23.2km N	<p>Annex II species that are a primary reason for selection of this site:</p> <ul style="list-style-type: none"> 1016 Desmoulin's whorl snail <i>Vertigo moulinsiana</i> 	<p>Threats identified on the Site Improvement Plan include:</p> <ul style="list-style-type: none"> Water pollution Invasive species Inappropriate scrub control Air pollution: impact of atmospheric nitrogen deposition 	<p>Scoped out of assessment</p> <p>Too distant from the proposed Development for any significant effect direct effect on features (over 23.2km away)</p>	<p>Scoped out of assessment</p> <p>Too distant from the proposed Development for any significant effect direct effect on features (over 23.2km away)</p>	<p>Scoped out of assessment</p> <p>Too distant from the proposed Development for any significant effect direct effect on features (over 23.2km away)</p>	<p>Scoped in for assessment.</p> <p>The proposed Development has potential to lead to significant effects associated with changes to water quality, specifically increased nutrient inputs (nitrogen and phosphorous) through wastewater via water treatment works, and drainage to watercourses or ditches within the Stour catchment.</p> <p>Stage 2 Appropriate Assessment required.</p> <p>On site works will achieve nutrient neutrality therefore no residual effects will remain. The HRA is completed at Stage 2.</p>	<p>On-site mitigation is outlined which ensures nutrient neutrality. No assessment beyond Stage 2 required.</p>
Stodmarsh SPA	23.2km N	<p>Qualifies under article 4.1 of the Directive (2009/147/EC), as it is regularly used by >1% of the UK population of the following Annex I species:</p>	<p>Threats identified on the Site Improvement Plan include:</p> <ul style="list-style-type: none"> Water pollution 	<p>Scoped in for assessment</p> <p>This site is located approximately 23.2km north of the proposed Development. In line with the</p>	<p>Scoped in for assessment</p> <p>Site is not within 200m of roads which meet any of a set of traffic change criteria</p>	<p>Scoped in for assessment</p> <p>No likely significant effects are anticipated to any of the qualifying features of</p>	<p>Scoped in for assessment</p> <p>The proposed Development has</p>	<p>On-site mitigation is outlined which ensures nutrient</p>

Protected Site	Approximate distance from study area (km)	Qualifying features	Existing vulnerabilities	Recreational Pressure	Air Quality	Functionally Linked Land	Water pollution	Appropriate Assessment Outcome
		<ul style="list-style-type: none"> Great bittern <i>Botaurus stellaris</i> (Non-breeding) Hen harrier <i>Circus cyaneus</i> (Non-breeding) <p>Qualifies under article 4.2 of the Directive (2009/147/EC), as it is regularly used by >1% of the biogeographical populations of the following migratory species:</p> <ul style="list-style-type: none"> Gadwall <i>Anas strepera</i> (Breeding) Northern shoveler <i>Anas clypeata</i> (Non-breeding) <p>It further qualifies under Article 4.2 by virtue of regularly supporting a diverse waterbird and breeding bird assemblage.</p>	<ul style="list-style-type: none"> Invasive species Inappropriate scrub control Air pollution: impact of atmospheric nitrogen deposition 	<p>assessment provided for the Dover to Kingsdown Cliffs SAC, the low visitor numbers predicted from the proposed Development residents due to, surveys indicating a limited travelling distance (approx. 20 minutes drive) the distance of the site from the proposed Development and the proximity of over 50% accessible greenspace within the proposed Development, make significant effects due to recreational pressure extremely unlikely.</p> <p>Screened out at stage 1</p>	<p>as impacts from traffic emissions must be assessed. The change criteria are set at:</p> <ul style="list-style-type: none"> a change of +/- 1000 vehicles per day, +/- 200 Heavy Duty Vehicles (HDV), 10kph change in daily average speed or 20kph change in peak hour speeds <p>Screened out at stage 1</p>	<p>the SPAs or Ramsar sites within 30km, as a result of the proposed Development. Significant numbers of species that form qualifying features of the site were not present with surveys undertaken for the proposed Development area nor was habitat within the proposed Development area suitable for supporting or maintaining significant numbers of qualifying features.</p> <p>The is evidenced in Sections 5.2 and 6.3 this chapter and ES appendix 7.15 and 7.16.</p> <p>Screened out at stage 1</p>	<p>potential to lead to significant effects associated with changes to water quality, specifically increased nutrient inputs (nitrogen and phosphorous) through wastewater via water treatment works, and drainage to watercourses or ditches within the Stour catchment.</p> <p>Stage 2 Appropriate Assessment required. On site works will achieve nutrient neutrality therefore no residual effects will remain. The HRA is completed at Stage 2.</p>	<p>neutrality. No assessment beyond Stage 2 required.</p>
Stodmarsh Ramsar	23.2km N	<p>Criterion 2 (supports threatened ecological communities), including:</p> <ul style="list-style-type: none"> Invertebrates (six British Red Data Book wetland species) Vascular plants (two nationally rare plants, and five nationally scarce species) Rare wetland birds 	As above.	<p>Scoped in for assessment</p> <p>This site is located approximately 23.2km north of the proposed Development. In line with the assessment provided for the Dover to Kingsdown Cliffs SAC, the low visitor numbers predicted from the proposed Development residents due to, surveys indicating a limited travelling distance (approx. 20 minutes drive) the distance of the site from the proposed Development and the proximity of over 50% accessible greenspace within the proposed Development, make significant effects due to recreational pressure extremely unlikely.</p> <p>Screened out at stage 1</p>	<p>Scoped in for assessment</p> <p>Site is not within 200m of roads which meet any of a set of traffic change criteria as impacts from traffic emissions must be assessed. The change criteria are set at:</p> <ul style="list-style-type: none"> a change of +/- 1000 vehicles per day, +/- 200 Heavy Duty Vehicles (HDV), 10kph change in daily average speed or 20kph change in peak hour speeds Screened out at stage 1 	<p>Scoped in for assessment</p> <p>No likely significant effects are anticipated to any of the qualifying features of the SPAs or Ramsar sites within 30km, as a result of the proposed Development. Significant numbers of species that form qualifying features of the site were not present on the development.</p> <p>The is evidenced in Sections 5.2 and 6.3 this chapter and ES appendix 7.15 and 7.16.</p> <p>Screened out at stage 1</p>	<p>Scoped in for assessment</p> <p>The proposed Development has potential to lead to significant effects associated with changes to water quality, specifically increased nutrient inputs (nitrogen and phosphorous) through wastewater via water treatment works, and drainage to watercourses or ditches within the Stour catchment.</p> <p>Stage 2 Appropriate Assessment required. On site works will achieve nutrient neutrality therefore no residual effects will remain. The HRA is completed at Stage 2.</p>	<p>On-site mitigation is outlined which ensures nutrient neutrality. No assessment beyond Stage 2 required.</p>

Protected Site	Approximate distance from study area (km)	Qualifying features	Existing vulnerabilities	Recreational Pressure	Air Quality	Functionally Linked Land	Water pollution	Appropriate Assessment Outcome
The Swale Ramsar	25.2km N	<p>Criterion 2 (supports threatened ecological communities), including:</p> <ul style="list-style-type: none"> nationally scarce plants e.g. <i>Bupleurum tenuissimum</i>, <i>Carex divisa</i>, <i>Hordeum marinum</i> and <i>Spartina maritima</i>. at least seven red data book invertebrates e.g. <i>Bagous cylindrus</i>, <i>Erioptera bivittata</i>, <i>Lejops vittata</i>, <i>Peocilobothris ducalis</i>, <i>Philonthus punctus</i>, <i>Micronecta minutissima</i>, <i>Malchius vulneratus</i>, <i>Campsicnemus majus</i>, <i>Elachiptera rufifrons</i> and <i>Myopites eximia</i> the Mediterranean gull <i>Larus melanocephalus</i> <p>Criterion 5 (regularly supports >20,000 waterbirds); in the winter the site supports 77,501 waterbirds (5-year peak mean 1998/99 – 2002/03).</p> <p>Criterion 6 (regularly supports 1% individuals in the population of the following species):</p> <ul style="list-style-type: none"> Ringed plover <i>Charadrius hiaticula</i>: 917 individuals in spring/autumn (1.2% of the Europe/Northwest Africa population) Black-tailed godwit <i>Limosa limosa islandica</i>: 1504 individuals in winter (4.2% of the Iceland/W Europe population) Eurasian wigeon <i>Anas Penelope</i>: 15296 individuals in winter (1% of the NW Europe population) Northern pintail <i>Anas acuta</i>: 763 individuals in winter (1.2% of the NW Europe population) Northern shoveler <i>Anas clypeata</i>: 483 individuals in winter (1.2% of the NW & C Europe population) 	<p>Threats identified on the Site Improvement Plan include:</p> <ul style="list-style-type: none"> Coastal squeeze Public access/disturbance Illicit vehicle use Invasive species Fisheries: commercial marine and estuarine Changes in species distributions Air pollution: impact of atmospheric nitrogen deposition 	<p>Scoped in for assessment</p> <p>This site is located approximately 25.2km north of the proposed Development. In line with the assessment provided for the Dover to Kingsdown Cliffs SAC, the low visitor numbers predicted from the proposed Development residents due to, surveys indicating a limited travelling distance (approx. 20 minutes drive) the distance of the site from the proposed Development and the proximity of over 50% accessible greenspace within the proposed Development, make significant effects due to recreational pressure extremely unlikely.</p> <p>Screened out at stage 1</p>	<p>Scoped in for assessment</p> <p>Site is not within 200m of roads which meet any of a set of traffic change criteria as impacts from traffic emissions must be assessed. The change criteria are set at:</p> <ul style="list-style-type: none"> a change of +/- 1000 vehicles per day, +/- 200 Heavy Duty Vehicles (HDV), 10kph change in daily average speed or 20kph change in peak hour speeds. <p>Screened out at stage 1</p>	<p>Scoped in for assessment</p> <p>No likely significant effects are anticipated to any of the qualifying features of the SPAs or Ramsar sites within 30km, as a result of the proposed Development. Significant numbers of species that form qualifying features of the site were not present with surveys undertaken for the proposed Development area nor was habitat within the proposed Development area suitable for supporting or maintaining significant numbers of qualifying features.</p> <p>The is evidenced in Sections 5.2 and 6.3 this chapter and ES appendix 7.15 and 7.16.</p> <p>Screened out at stage 11</p>	<p>Scoped out for assessment.</p> <p>Site is not hydrologically connected to the proposed Development site.</p>	

Protected Site	Approximate distance from study area (km)	Qualifying features	Existing vulnerabilities	Recreational Pressure	Air Quality	Functionally Linked Land	Water pollution	Appropriate Assessment Outcome
The Swale SPA	25.2km N	<p>Qualifies under article 4.1 of the Directive (2009/147/EC), as it is regularly used by >1% of the UK population of the following Annex I species:</p> <ul style="list-style-type: none"> Marsh Harrier <i>Circus aeruginosus</i> Mediterranean Gull <i>Larus melanocephalus</i> Avocet <i>Recurvirostra avosetta</i> Bar-tailed Godwit <i>Limosa lapponica</i> Golden Plover <i>Pluvialis apricaria</i> Hen Harrier <i>Circus cyaneus</i> <p>Qualifies under article 4.2 of the Directive (2009/147/EC), as it is regularly used by >1% of the biogeographical populations of the following migratory species:</p> <ul style="list-style-type: none"> Ringed Plover <i>Charadrius hiaticula</i> Black-tailed Godwit <i>Limosa limosa islandica</i> Grey Plover <i>Pluvialis squatarola</i> Knot <i>Calidris canutus</i> Pintail <i>Anas acuta</i> Redshank <i>Tringa totanus</i> Shoveler <i>Anas clypeata</i>, 	<p>Threats identified on the Site Improvement Plan include:</p> <ul style="list-style-type: none"> Coastal squeeze Public access/disturbance Illicit vehicle use Invasive species Fisheries: commercial marine and estuarine Changes in species distributions Air pollution: impact of atmospheric nitrogen deposition 	<p>Scoped in for assessment</p> <p>This site is located approximately 25.2km to the north of the development proposed under Policies SS6 and CSD9 and therefore, in line with the reasoning provided above for the Dover to Kingsdown Cliffs SAC, the distance between these locations is considered sufficient to negate impacts associated with recreational pressures.</p> <p>Screened out at stage 1</p>	<p>Scoped in for assessment</p> <p>Site is not within 200m of roads which meet any of a set of traffic change criteria as impacts from traffic emissions must be assessed. The change criteria are set at:</p> <ul style="list-style-type: none"> a change of +/- 1000 vehicles per day, +/- 200 Heavy Duty Vehicles (HDV), 10kph change in daily average speed or 20kph change in peak hour speeds. <p>Screened out at stage 1</p>	<p>Scoped in for assessment</p> <p>No likely significant effects are anticipated to any of the qualifying features of the SPAs or Ramsar sites within 30km, as a result of the proposed Development. Significant numbers of species that form qualifying features of the site were not present with surveys undertaken for the proposed Development area nor was habitat within the proposed Development area suitable for supporting or maintaining significant numbers of qualifying features.</p> <p>The is evidenced in Sections 5.2 and 6.3 this chapter and ES appendix 7.15 and 7.16.</p> <p>Screened out at stage 1</p>	<p>Scoped out for assessment.</p> <p>Site is not hydrologically connected to the proposed Development site.</p>	
Tankerton Slopes and Swalecliffe SAC	29.5km N	<p>Annex II species that are a primary reason for selection of this site: 4035 Fisher's estuarine moth <i>Gortyna borelii lunatawye</i></p> <p>Tankerton Slopes and Swalecliffe supports the majority of the north Kent population of this moth which is approximately 20% of the UK population. The site's north facing slopes are composed of London Clay and support a tall herb community dominated by its food plant hog's fennel <i>Peucedanum officinale</i>, together with areas of neutral grassland also required by the species for egg laying.</p>	<p>There is no Site Improvement Plan for this site but NE have indicated that the sites are sloped and contain tall grassland and hogs fennel plants making them unattractive and difficult for people to access especially when compared with the well maintained paths and amenity grassland adjacent.</p>	<p>Scoped in for assessment</p> <p>This site is located approximately 29.5km to the north-east of the development proposed under Policies SS6 and CSD9 and therefore, in line with the reasoning provided above for the Dover to Kingsdown Cliffs SAC, the distance between these locations is considered sufficient to negate impacts associated with recreational pressures.</p> <p>Screened out at stage 1</p>	<p>Scoped in for assessment</p> <p>Site is not within 200m of roads which meet any of a set of traffic change criteria as impacts from traffic emissions must be assessed. The change criteria are set at:</p> <ul style="list-style-type: none"> a change of +/- 1000 vehicles per day, +/- 200 Heavy Duty Vehicles (HDV), 10kph change in daily average speed or 20kph change in peak hour speeds. <p>Screened out at stage 1</p>	<p>Scoped out for assessment</p> <p>Too distant from the proposed Development for any significant effect direct effect on habitats (over 29.5km away);</p> <p>No sufficiently mobile qualifying features present that would use the site as functionally linked land;</p>	<p>Scoped out for assessment.</p> <p>Site is not hydrologically connected to the proposed Development site.</p>	

Protected Site	Approximate distance from study area (km)	Qualifying features	Existing vulnerabilities	Recreational Pressure	Air Quality	Functionally Linked Land	Water pollution	Appropriate Assessment Outcome
Thanet Coast and Sandwich Bay Ramsar	26.5km NE	A coastal site, consisting of a long stretch of rocky shore, adjoining areas of estuary, sand dune, maritime grassland, saltmarsh and grazing marsh. The wetland habitats support 15 British Red Data Book invertebrates, as well as a large number of nationally scarce species. The site attracts internationally important numbers of turnstone <i>Arenaria interpres</i> , and nationally important numbers of nationally important wintering populations of four wader species: ringed plover, golden plover, grey plover and sanderling, as well as Lapland bunting. The site is used by large numbers of migratory birds.	<ul style="list-style-type: none"> Vegetation succession Recreation Water diversion for irrigation/domestic/industrial use Eutrophication Pollution – pesticides/agricultural runoff Recreational/tourism disturbance (unspecified) Unspecified development: urban use 	<p>Scoped in for assessment</p> <p>This site is located approximately 26.5km to the north-east of the development proposed under Policies SS6 and CSD9 and therefore, in line with the reasoning provided above for the Dover to Kingsdown Cliffs SAC, the distance between these locations is considered sufficient to negate impacts associated with recreational pressures.</p> <p>Screened out at stage 1</p>	<p>Scoped in for assessment</p> <p>Site is not within 200m of roads which meet any of a set of traffic change criteria as impacts from traffic emissions must be assessed. The change criteria are set at:</p> <ul style="list-style-type: none"> a change of +/- 1000 vehicles per day, +/- 200 Heavy Duty Vehicles (HDV), 10kph change in daily average speed or 20kph change in peak hour speeds. <p>Screened out at stage 1</p>	<p>Scoped in for assessment</p> <p>No likely significant effects are anticipated to any of the qualifying features of the SPAs or Ramsar sites within 30km, as a result of the proposed Development. Significant numbers of species that form qualifying features of the site were not present with surveys undertaken for the proposed Development area nor was habitat within the proposed Development area suitable for supporting or maintaining significant numbers of qualifying features.</p> <p>The is evidenced in Sections 5.2 and 6.3 this chapter and ES appendix 7.15 and 7.16.</p> <p>Screened out at stage 1</p>	<p>Scoped out for assessment.</p> <p>Site is not hydrologically connected to the proposed Development site.</p>	
Thanet Coast and Sandwich Bay SPA	28.5km NE	<p>Qualifies under article 4.2 of the Directive (2009/147/EC), as it is regularly used by >1% of the biogeographical populations of the following migratory species:</p> <ul style="list-style-type: none"> Turnstone <i>Arenaria interpres</i> 	<p>Threats identified in the Site Improvement Plan include:</p> <ul style="list-style-type: none"> Changes in species composition Invasive species Public access/disturbance Water pollution Fisheries: commercial marine and estuarine 	<p>Scoped in for assessment</p> <p>This site is located approximately 28.5km to the north-east of the development proposed under Policies SS6 and CSD9 and therefore, in line with the reasoning provided above for the Dover to Kingsdown Cliffs SAC, the distance between these locations is considered sufficient to negate impacts associated with recreational pressures.</p> <p>Screened out at stage 1</p>	<p>Scoped in for assessment</p> <p>Site is not within 200m of roads which meet any of a set of traffic change criteria as impacts from traffic emissions must be assessed. The change criteria are set at:</p> <ul style="list-style-type: none"> a change of +/- 1000 vehicles per day, +/- 200 Heavy Duty Vehicles (HDV), 10kph change in daily average speed or 20kph change in peak hour speeds. <p>Screened out at stage 1</p>	<p>Scoped in for assessment</p> <p>No likely significant effects are anticipated to any of the qualifying features of the SPAs or Ramsar sites within 30km, as a result of the proposed Development. Significant numbers of species that form qualifying features of the site were not present with surveys undertaken for the proposed Development area nor was habitat within the proposed Development area suitable for supporting or maintaining significant numbers of qualifying features.</p> <p>The is evidenced in Sections 5.2 and 6.3 this chapter and ES appendix 7.15 and 7.16.</p> <p>Screened out at stage 1</p>	<p>Scoped out for assessment.</p> <p>Site is not hydrologically connected to the proposed Development site.</p>	

Protected Site	Approximate distance from study area (km)	Qualifying features	Existing vulnerabilities	Recreational Pressure	Air Quality	Functionally Linked Land	Water pollution	Appropriate Assessment Outcome
Wye and Crundale Downs SAC	5.8km N	Annex I habitats that are a primary reason for selection of this site: <ul style="list-style-type: none"> 6210 Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>) 	Threats identified in the Site Improvement Plan include: <ul style="list-style-type: none"> Overgrazing Inappropriate scrub control Air pollution: impact of atmospheric nitrogen deposition 	Scoped in for assessment Was identified by stakeholders for assessment. Visitor surveys undertaken by Arcadis identified that a significant proportion of people use particular walking routes because of the proximity to their home and/or within 20 minutes maximum drive time. The proposed Development includes a large proportion of publicly accessible open space and high-quality green infrastructure (over 50%) which is integral to the development. This includes parks, landscape areas and habitats. It is therefore likely that a significant proportion of those seeking recreational activity including dogwalkers in particular, will utilise the spaces and routes within the proposed Development for regular activities. Screened out at stage 1	Scoped in for assessment Site is not within 200m of roads which meet any of a set of traffic change criteria as impacts from traffic emissions must be assessed. The change criteria are set at: <ul style="list-style-type: none"> a change of +/- 1000 vehicles per day, +/- 200 Heavy Duty Vehicles (HDV), 10kph change in daily average speed or 20kph change in peak hour speeds. Screened out at stage 1	Scoped in for assessment No likely significant effects are anticipated to any of the qualifying features of the SPAs or Ramsar sites within 30km, as a result of the proposed Development. Habitats that form qualifying features of the site were not present on the development in significant quantities. Qualifying features are not mobile and as such there is no functionally linked land on the development. Screened out at stage 1	Scoped out for assessment. Site is not hydrologically connected to the proposed Development site.	

Appendix B: Natural England DAS letter (ref DAS/11529/202390)

Date: 15 December 2016
Our ref: DAS/11529/202390



Ben Hilder, Landscape Architect, Arcadis
Brandon Murray, Principal Ecologist, Arcadis

cc Julia Wallace, Project Manager, Shepway DC
James Simpson, Development Manager, Arcadis
Ben Geering, Head of Planning, Shepway DC
Chris Lewis, Planning officer, Shepway DC

Customer Services
Hombeam House
Crewe Business Park
Electra Way
Crewe
Cheshire
CW1 6GJ

BY EMAIL ONLY

0300 060 3900

Dear Ben Hilder and Brandon Murray,

**Discretionary Advice Service (Charged Advice)
DAS 2158**

Development proposal and location: Otterpool Park garden town

Thank you for meeting with us on the above on 07 December 2016, at our Ashford office.

This advice is being provided as part of Natural England's Discretionary Advice Service (DAS). Arcadis, on behalf of Shepway DC, has asked Natural England to provide advice upon:

- Designated sites including:
 - Sites of Special Scientific Interest (SSSIs)
 - European sites including Special Protection Areas (SPAs), Special Areas of Conservation (SAC) and Ramsar sites
- Habitat Regulations Assessment (HRA) approach
- Green infrastructure
- Scope for future detailed advice

This advice is provided in accordance with the Quotation and Agreement dated 02 December 2016.

The following advice is based upon the discussion that took place during the meeting including various draft maps and plans available only at the meeting.

Summary

The location, scale and complexity of the Otterpool Park proposed development mean there are significant environmental implications, both in terms of impact and opportunity.

The site is surrounded to the north, east and south by the Kent Downs Area of Outstanding Natural Beauty (AONB). Otterpool Park will be clearly visible from the escarpment to the north, along which runs the North Downs Way National Trail. The setting of the AONB is a special quality for which it is designated, the impacts on which will require detailed assessment. In particular, Otterpool Park will need to be assessed in combination with other permitted or proposed development including Operation Stack and the eastern extension to Sellindge, as together, these developments present widespread and significant urbanisation in the immediate setting of the AONB.

The proposals also present significant opportunity, in the form of green infrastructure and making use of its multiple ecosystem services and benefits for people. Given the early stage of planning, GI should form a fundamental part of it, with the aim of achieving a high quality GI network which forms the fabric of the new community. There is the chance to make Otterpool Park an exemplar case in

sustainable development and green planning.

We have welcomed the opportunity to discuss the proposals at this very early stage, and are keen to engage further with Arcadis and Shepway DC on the following issues as the project progresses:

- Protected landscape – Landscape and Visual Impact Assessment (LVIA)
- Designated sites – Otterpool Quarry SSSI and Habitat Regulations Assessment (HRA)
- Protected species
- Green infrastructure
- Soils and Agricultural Land Classification (ALC)

Please see our further detailed comment on these below.

Protected sites

Habitat Regulations Assessment (HRA)

We briefly discussed key impact pathways which will need consideration in the HRA for the Otterpool Park proposals. These include:

- *Air quality* – European sites within 10km of Otterpool Park which are located at least partly within 200m of strategic roads which are likely to be used by traffic generated by the proposals. In particular this should include the nearby Folkestone to Etchinghill Escarpment SAC to the east, much of which lies close to the M20 (near J13), A20 and A259. Modelling will be required on traffic flows and air quality likely to arise from the Otterpool Park development for the course of its lifetime, including construction.
- *Recreational pressure* – potential impacts will need to be considered on a number of sites including several SACs notified for calcareous grassland (eg Folkestone to Etchinghill Escarpment SAC, Parkgate SAC, Dover to Kingsdown Cliffs SAC and Lydden and Temple Downs SAC) and the Blean Complex SAC notified for woodland habitats.

The Dungeness designated sites (Dungeness SAC and Dungeness, Romney Marsh and Rye Bay SPA and Ramsar site) will also need consideration, in particular for impacts of trampling on vegetated shingle and disturbance to SPA birds. We suggest you refer to Shepway DC's ongoing work on the Sustainable Access Strategy (SAS). Visitor survey data obtained as part of the project has established most visitors to Dungeness originate from outside Shepway District. It will be necessary to consider key travel routes that will connect Otterpool Park to Dungeness and the likelihood of residents visiting the sites.

We are also pleased to note wintering bird surveys have commenced on the site, which will include establishing whether the site contains important habitat for waders and wildfowl. Given the distance between the proposed site and coastal SPAs/ Ramsar sites, it may be difficult to link birds to specific designated sites. However, the information will be useful in feeding into an overarching green infrastructure strategy for the site.

We would be happy to advise in further detail on the HRA scope, impact assessment and mitigation measures as necessary.

SSSI

Otterpool Quarry SSSI

The proposed site includes Otterpool Quarry SSSI. This site is notified for its geological importance, containing an exposure of the Cretaceous Hythe Beds and Sandgate Beds above. It is important for the exposure to remain available for scientific research (for further details please see the [site citation](#)).

Any development or activities which may affect the SSSI should avoid undermining the stability of

the exposure. The exposure needs to be maintained and enhanced where possible should researchers want to examine more of the stratigraphy.

In terms of site management, the site is currently maintained by sheep grazing, and there is no public access. Any changes to management practices and/ or access by the public will need to be discussed and agreed with Natural England, and embedded into a long term management plan.

This will need to include how the site will be protected from unauthorised or reckless fossil collecting, which could become an issue as the site becomes more widely known by the public. There could also be opportunities for the SSSI arising from the proposals, through enhancement measures and improved, well-managed access.

Natural England's Responsible Officer for Otterpool Quarry SSSI site is Abbi Bamping. We would be happy to provide further detailed advice on the SSSI through DAS as necessary.

Protected landscape

The proposed site lies immediately within the setting of the Kent Downs AONB, surrounded by it to the north, east and south.

A Landscape and Visual Impact Assessment (LVIA) will be required in order to assess the impacts of the proposals on the special qualities for which the Kent Downs AONB is designated. This includes the setting of the AONB (Dramatic landform and views). It will be important for a representative sample of viewpoints to be assessed from within the AONB, particularly from prominent locations along the escarpment to the north, including along the North Downs Way National Trail.

The assessment should relate to relevant planning policy including paragraph 115 of the National Planning Policy Framework (NPPF) which gives the highest status of protection for the 'landscape and scenic beauty' of AONBs. Relevant Shepway DC Local Plan policies in the adopted Core Strategy (2014-2026) and emerging Places and Policies Local Plan (PPLP) should also be referred to, including CSD4 *Green Infrastructure of Natural Networks, Open Spaces and Recreation* and NE3 *To protect the District's landscapes and countryside*, respectively.

It will also be crucial for the LVIA to consider cumulative impacts resulting from the Otterpool Park proposals in conjunction with other proposed/ permitted development. In particular this should include the nearby Operation Stack just to the north of the M20, and the potential significant extension of Sellindge on its eastern boundary of approximately 160 homes (current planning application reference Y16/1122/SH). Together, these three developments could result in significant, widespread urbanisation within the immediate setting of the AONB.

Natural England can provide further detailed advice on LVIA methodology including selection of viewpoints, assessment of impacts and proposed mitigation. In order to do this, it will be necessary to visit the site and surrounding AONB. We are pleased to note Arcadis is also engaging with the Kent Downs AONB Unit, which will be crucial given their local expertise of the AONB and its setting.

Protected species

We understand initial surveys and review of existing data indicate a number of European Protected Species may be affected by the proposals including dormice, great crested newt and bats, as well as some nationally protected species such as water vole, common reptiles and badgers.

Natural England would be pleased to offer pre-application detailed advice on protected species, including scoping of surveys, assessment of impacts and proposed mitigation. Susie Moore is our main contact on this aspect at Natural England. This will also include the possibility of applying the new Kent strategic Great Crested Newt licencing process to this development. This is a new landscape scale approach to great crested newt licencing which was first trialled in Woking and has just started to be implemented in Kent.

Biodiversity/ green infrastructure enhancements

The Otterpool Park proposals present a considerable opportunity to plan and deliver an extensive green infrastructure (GI) network, which should form the fabric of the community and achieve the development's status as a garden town.

The multi-functional benefits of GI to the local environment and community are substantial and becoming more widely acknowledged. To name but a few, these range from countering climate change, supporting habitats and wildlife and providing flood storage, to improving landscape character, sense of place, and benefitting people's health and wellbeing.

The drive for integrating GI into planning and development is underpinned in national planning policy (NPPF paragraph 114 requiring local authorities to positively plan for green infrastructure at the strategic level), and Shepway DC's adopted Core Strategy policy *CSD4 – Green infrastructure of Natural Networks, Open Spaces and Recreation*. We understand the council is also developing a district-wide GI Plan in parallel with the Local Plan, of which Otterpool Park would form an important part.

Further evidence and advice on green infrastructure, including the economic benefits of GI can be found on the Natural England [Green Infrastructure web pages](#). In addition, examples of incorporating GI into building design can be found here:

- Green walls examples:
<http://www.staffs.ac.uk/research/greenwall/case-studies/>
- Green roofs examples:
<https://www.cityoflondon.gov.uk/services/environment-and-planning/planning/heritage-and-design/Documents/Green-roof-case-studies-28Nov11.pdf>
http://www.thegreenroofcentre.co.uk/green_roofs/case_studies

Effective GI will be pivotal in addressing potential impacts of the proposals on landscape, biodiversity and flood risk, as well as making a successful and sustainable new community. It is therefore crucial that GI forms a fundamental part of planning Otterpool Park, from the beginning. It will require bold, inventive and forward-thinking planning and design, collectively with partners and stakeholders, including the Environment Agency. The aim should be high, to achieve an outstanding green and sustainable community that can be regarded as an exemplar case in the country.

Natural England is very keen to engage further on this aspect as the masterplanning develops, and potential impacts and opportunities transpire.

Soils

We are pleased to note Arcadis is undertaking soil classification work across the site. We hold records for existing Agricultural Land Classification (ALC) surveys for the north-eastern part of the site. It will be important to establish what proportion of best and most versatile (BMV) land is contained as a whole on the site, and what proportion could potentially be damaged or lost.

We would be pleased to provide existing ALC reports and specialist advice on soil survey methodology, results and best practice construction measures, as necessary.

For clarification of any points in this letter, please contact Julia Coneybeer on 0208 0268033.

This letter concludes Natural England's Advice within the Quotation and Agreement dated 02 December 2016.

commercialservices@naturalengland.org.uk

We would appreciate your feedback to help shape this service. We have attached a feedback form to this letter and would welcome any comments you might have about our service.

The advice provided in this letter has been through Natural England's Quality Assurance process

The advice provided within the Discretionary Advice Service is the professional advice of the Natural England adviser named below. It is the best advice that can be given based on the information provided so far. Its quality and detail is dependent upon the quality and depth of the information which has been provided. It does not constitute a statutory response or decision, which will be made by Natural England acting corporately in its role as statutory consultee to the competent authority after an application has been submitted. The advice given is therefore not binding in any way and is provided without prejudice to the consideration of any statutory consultation response or decision which may be made by Natural England in due course. The final judgement on any proposals by Natural England is reserved until an application is made and will be made on the information then available, including any modifications to the proposal made after receipt of discretionary advice. All pre-application advice is subject to review and revision in the light of changes in relevant considerations, including changes in relation to the facts, scientific knowledge/evidence, policy, guidance or law. Natural England will not accept any liability for the accuracy, adequacy or completeness of, nor will any express or implied warranty be given for, the advice. This exclusion does not extend to any fraudulent misrepresentation made by or on behalf of Natural England.

Yours sincerely,

Julia Coneybeer

Lead Advisor
Sustainable Development, Sussex and Kent

cc commercialservices@naturalengland.org.uk

Appendix C: Arcadis Scoping letter (May 2018)

Our ref: 10011914
Date: 4 May 2018
By email only

Dear Julia Coneybeer,

We are writing in regards to our proposed Habitat Regulations Assessment (HRA) Screening Report for the proposed new Garden Town development in relation to European Sites within the zone of influence of Otterpool Park.

Overview

Arcadis Consulting (UK) Limited was commissioned on behalf of key landowners and promoters of Otterpool Park (namely Folkstone & Hythe District Council (FHDC) and Cozumel Estates) with regards to a suite of consultancy services required to submit an outline masterplan and associated Environmental Impact Assessment for the development of the site.

Proposed Development

The site is located within the authority of Folkstone & Hythe District Council (FHDC), in Kent and spans an area located south-west of Junction 11 of the M20 motorway, and railway line with Westenhanger Station to the north and south of the Channel Tunnel Rail Link (CTRL). The site is approximately 713 hectares in area, much of the site is greenfield in nature and is predominantly occupied by agricultural uses and associated farm holdings. The agricultural uses comprise both arable and pasture fields. There is also a now disused horse racing course with a small artificial lake ('Folkestone Racecourse Lake'), areas modified from historical use (airfields), existing historic settlements as well as some residential and light commercial uses.

The villages around the site sit within a largely rural setting including the Kent Downs AONB (Area of Outstanding Natural Beauty). This AONB extends to the east beyond which lies the town of Hythe and to the south which includes Lympe village, and lies to the north beyond the M20 and the village of Stanford. The site also includes Barrow Hill, Sellindge, Westenhanger, Newingreen and Lympe Industrial Park, and some areas of woodland. The site is centred on Ordnance Survey Grid Reference TR 111 363. Image 1 presents the outline planning application boundary (in red) and the framework masterplan boundary (in black).

The development proposals are to be submitted in outline, comprising up to 8,500 dwellings and other uses including commercial, retail, education, health, community and leisure facilities, parking, landscaping, and public open space.

A suite of ecological surveys has been undertaken as part of the EIA and initial results of these are reported upon in the Otterpool Park EIA Scoping Report submitted 30 April 2018. These also inform extensive and ongoing ecological mitigation design across the site.



Image 1 Outline planning application and framework masterplan boundary

Consultation to Date

Arcadis have consulted with NE on several occasions with regards to this proposed development, the summary of which are indicated in the table below. Following these discussions and prior to drafting the HRA Screening Report, we would like formal confirmation from NE as to agreement on the scope of that assessment.

Consultee	Contact/ Date	Summary of Issues Raised/Agreed
Natural England	Julia Coneybeer 7 December 2016	An initial meeting was undertaken between Arcadis Landscape and Biodiversity team members on 7 December 2016. During this meeting key issues were discussed, including potential impacts to Natura 2000 and Ramsar sites. This consultation was formalised by Julia Coneybeer in a letter dated 15/12/2016 Reference DAS/11529/202390.
Natural England	Julia Coneybeer 10 May 2017	Due to the scale of the project and assumed build-out, strict application of the standard NE survey guidance was considered to be inappropriate to apply to the scheme in some respects. NE was contacted to discuss an appropriate survey scope and programme and its responses is awaited. An appropriate scope has been devised based upon professional judgement.
Natural England (NE)	1 December 2017 Attendees: <ul style="list-style-type: none"> • Julia Coneybeer (NE) • Daniel Fagan (NE) • Sarah Holman (NE) • Brandon Murray (Arcadis) 	General overview of findings to date was provided, along with outline of design, potential / proposed mitigation and phasing of subsequent surveys was discussed. Inclusion of the scheme within the roll out of District Level Licensing for Great Crested Newt was discussed.

Habitat Regulations Assessment (HRA) Screening Report Outline

Sites for Screening

Initially a 'long-list' of European Sites with the potential to be impacted by the proposed development was drawn up, this included: European Sites up to 30km from the site (See Appendix A). We will include these sites in the HRA Screening Report. From this list a short list of sites with the potential to be impacted by the proposed development were identified, these are presented in the table below and continued overleaf.

European Site (Designation) / Distance	Citation Summary
Dungeness (SAC) / 9.96km south at closest point	<p>Annex I habitats that are a primary reason for selection of this site</p> <p>1210 Annual vegetation of drift lines</p> <p>The Dungeness foreland has a very extensive and well-developed shoreline, although with sparse vegetation and in places some human disturbance. It is one of two representatives of Annual vegetation of drift lines on the south coast of England. The strandline community on this site comprises Babington's orache <i>Atriplex glabriuscula</i>, which occurs mostly on the accreting eastern shoreline, although it is also present on the eroding southern shoreline.</p> <p>1220 Perennial vegetation of stony banks</p> <p>Dungeness is the UK's largest shingle structure and represents the habitat type on the south-east coast of England. The total area of exposed shingle covers some 1,600 ha, though the extent of the buried shingle ridges is much greater. Despite considerable disturbance and destruction of the surface shingle, the site retains very large areas of intact parallel ridges with characteristic zonation of vegetation. It still has the most diverse and most extensive examples of stable vegetated shingle in Europe, including the best representation of scrub on shingle, notably prostrate forms of broom <i>Cytisus scoparius</i> and blackthorn <i>Prunus spinosa</i>. A feature of the site, thought to be unique in the UK, is the small depressions formed within the shingle structure, which support fen and open-water communities.</p> <p>Annex II species that are a primary reason for selection of this site</p> <p>1166 Great crested newt <i>Triturus cristatus</i></p> <p>Dungeness in south-east England has the largest shingle expanse in Europe and contains a large number of waterbodies within its 2,000 ha. This extensive site hosts a large and viable great crested newt <i>Triturus cristatus</i> population in a range of natural and anthropogenic habitats. These include natural pools and those resulting from gravel extraction and other activities. Terrestrial habitat of importance for feeding and shelter is provided by a range of open shingle vegetation with scrub in the vicinity of some of the waterbodies.</p>
Dungeness, Romney Marsh and Rye Bay (SPA) / 8.7km (with marine extension / 2.9km) south at closest point	For the SPA citation details, i.e. breeding, wintering and migratory bird assemblage see Appendix B for details. Please note our site has no habitats relating to the marine extension.
Dungeness, Romney Marsh and Rye Bay (Ramsar) / 8.7km south at closest point	For the Ramsar citation the site qualifies under Criterion 1 because it contains representative, rare, or unique examples of natural or near-natural wetland types: Annual vegetation of drift lines and the coastal fringes of

European Site (Designation) / Distance	Citation Summary
	<p>perennial vegetation of stony banks (Ramsar wetland type E – sand, shingle or pebble shores).</p> <p>The site also qualifies under Criterion 2 because it supports threatened ecological communities: a complex network of wetland habitats including saltmarsh, natural freshwater pits, fens, ponds, gravel pits, and grazing marsh and ditches. Also under Criterion 2 it supports vulnerable, endangered or critically endangered species including important vascular plants, bryophytes and invertebrates among other protected and endangered species including great crested newt and water vole <i>Arvicola amphibius</i>.</p> <p>The site qualifies under Criterion 5 because it regularly supports 20,000 or more waterbirds: In the non-breeding season, the site regularly supports 34,957 individual waterbirds (5 year peak mean 2002/3 – 2006/7).</p> <p>The site qualifies under Criterion 6 because it regularly supports 1% of the individuals in the populations of the following species or subspecies of waterbird in any season: Mute swan <i>Cygnus olor</i> and Shoveler <i>Anas clypeata</i></p>
Folkestone to Etchinghill Escarpment (SAC) / 4.2km north-east	<p>Annex I habitats that are a primary reason for selection of this site 6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites)</p> <p>This site hosts the priority habitat type "orchid rich sites". This site consists of extensive G4 <i>Brachypodium pinnatum</i> and CG5 <i>Bromus erectus</i> – <i>Brachypodium pinnatum</i> calcareous grasslands, together with smaller areas of short-turf CG2 <i>Festuca ovina</i> – <i>Avenula pratensis</i> grassland. The site contains an important assemblage of rare and scarce species, including early spider-orchid <i>Ophrys sphegodes</i>, late spider-orchid <i>O. fuciflora</i> and burnt orchid <i>Orchis ustulata</i>.</p>
Parkgate Down (SAC) / 9.1km north	<p>Annex I habitats that are a primary reason for selection of this site 6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites)</p> <p>This site hosts the priority habitat type "orchid rich sites". Parkgate Down is situated on the chalk of the North Downs and consists largely of NVC type CG4 <i>Brachypodium pinnatum</i> grassland. The site contains an outstanding assemblage of orchids including the nationally rare monkey orchid <i>Orchis simia</i> and late spider orchid <i>Ophrys fuciflora</i> together with the nationally scarce musk orchid <i>Herminium monorchis</i> and lady orchid <i>Orchis purpurea</i></p>
Wye and Crundale Downs (SAC) / 5.8km north	<p>Annex I habitats that are a primary reason for selection of this site 6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites)</p> <p>This site hosts the priority habitat type "orchid rich sites". Wye and Crundale Downs consists mostly of NVC types CG4 <i>Brachypodium pinnatum</i> and CG5 <i>Bromus erectus</i>–<i>Brachypodium pinnatum</i> grasslands, although small areas of CG2 <i>Festuca ovina</i>–<i>Avenula pratensis</i> grassland also occur. It has an important assemblage of rare, scarce and uncommon orchids, including early spider-orchid <i>Ophrys sphegodes</i>, late spider-orchid <i>O. fuciflora</i>, burnt orchid <i>Orchis ustulata</i> and lady orchid <i>Orchis purpurea</i>. The site contains the largest UK colony of <i>O. fuciflora</i>, representing about 50% of the national population.</p>

European Site (Designation) / Distance	Citation Summary
Dover to Kingsdown Cliffs (SAC) / 20.1km north-east	<p>Annex I habitats that are a primary reason for selection of this site 1230 Vegetated sea cliffs of the Atlantic and Baltic Coasts</p> <p>Dover to Kingsdown cliffs support a full zonation of maritime cliff communities found on chalk substrates, reflecting different levels of exposure to wind and salt spray. The most exposed, lowest parts of the cliff face support rock-crevice communities with rock samphire <i>Crithmum maritimum</i>, rock sea-lavender <i>Limonium binervosum</i> and thrift <i>Armeria maritima</i>, with the rare hoary stock <i>Matthiola incana</i> in places. On more sheltered slopes there is a community restricted to south-facing chalk cliffs characterised by wild cabbage <i>Brassica oleracea</i>. There are good paramaritime grassland transitions to chalk grassland. The endangered oxtongue broomrape <i>Orobanche artemisiae-campestris</i>, confined in the UK to unstable coastal chalk cliffs of southern England, has a stronghold on this site. The cliffs are internationally important as a stratigraphic reference site for chalk cliff exposures.</p> <p>Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site 6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites)</p>
Lydden and Temple Ewell Downs (SAC) / 15km north-east	<p>Annex I habitats that are a primary reason for selection of this site 6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites)</p> <p>This site hosts the priority habitat type "orchid rich sites". This site consists largely of CG4 <i>Brachypodium pinnatum</i> and CG5 <i>Bromus erectus</i> – <i>Brachypodium</i></p>
Blean Complex (SAC)/ 21.6km north	<p>Annex I habitats that are a primary reason for selection of this site 9160 Sub-Atlantic and medio-European oak or oak-hornbeam forests of the Carpinion betuli.</p> <p>At Blean in south-east England, hornbeam <i>Carpinus betulus</i> coppice occurs interspersed with pedunculate oak <i>Quercus robur</i> stands and introduced sweet chestnut <i>Castanea sativa</i>. Great wood-rush <i>Luzula sylvatica</i> is locally dominant in the woodland, and the characteristic greater stitchwort <i>Stellaria holostea</i> is found in more open patches. The stands have traditionally been managed as coppice, and are one of the British strongholds for the heath fritillary butterfly <i>Mellicta athalea</i>.</p>

Proposed Impacts

At the meeting with NE on the 7 December 2016 we briefly discussed key impact pathways which will need consideration in the HRA Screening Report for the Otterpool Park proposals. These include:

- **Air quality** – European sites within 10km of Otterpool Park which are located at least partly within 200m of strategic roads which are likely to be used by traffic generated by the proposals. In particular will include the nearby Folkestone to Etchinghill Escarpment SAC to the east, much of which lies close to the M20 (near J13), A20 and A259. Modelling will be required on traffic flows and air quality likely to arise from the Otterpool Park development for the course of its lifetime, including construction.

- **Recreational pressure** – potential impacts will need to be considered on a number of sites including several SACs notified for calcareous grassland (e.g. Folkestone to Etchinghill Escarpment SAC, Parkgate SAC, Dover to Kingsdown Cliffs SAC and Lydden and Temple Downs SAC) and the Blean Complex SAC notified for woodland habitats. The Dungeness designated sites (Dungeness SAC and Dungeness, Romney Marsh and Rye Bay SPA and Ramsar site) will also need consideration, in particular for impacts of trampling on vegetated shingle and disturbance to SPA birds. The 'Sustainable Access Strategy' (SAS) is an ongoing project with Rother District Council in partnership with Shepway District Council (now FHDC) Natural England and other environmental bodies. It is not yet complete but data obtained as part of the project has established most visitors to Dungeness originate from outside FHDC. It will be necessary to consider key travel routes that will connect Otterpool Park to Dungeness and the likelihood of residents visiting the sites.

Survey data to date

Breeding and wintering bird surveys have been undertaken on the site. We believe that they confirm that the site is not functionally linked to the qualifying features of the SPA and this has been scoped out of the HRA Screening Report. We agree with NE that the results have and will feed into the overarching green infrastructure strategy for the site.

- **Breeding and Wintering Bird Survey summaries** –. Of the six breeding bird species that form qualifying features of this SPA, only one (Mediterranean gull) was recorded during breeding bird surveys (17 in early April and 1 in late June) and the site does not feature suitable breeding habitat for this species, therefore it is not considered likely that they breed within the site. For the five wintering birds for SPA qualification only golden plover was recorded, three individuals on one occasion. In terms of the wintering water fowl assemblage only gadwall and golden plover, were recorded on site and they were present in low numbers. For Ramsar Criterion 6, mute swan was only observed as one individual on one occasion during the breeding season. These data will be reported in more detail in the HRA Screening Report

We would be extremely grateful if there are any additional issues that you would like to be addressed in the HRA Screening Report or consultees we should approach, we would be very grateful if you would respond by email at your earliest convenience.

Many thanks

Yours Sincerely

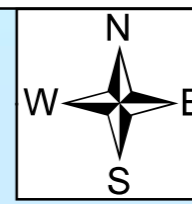
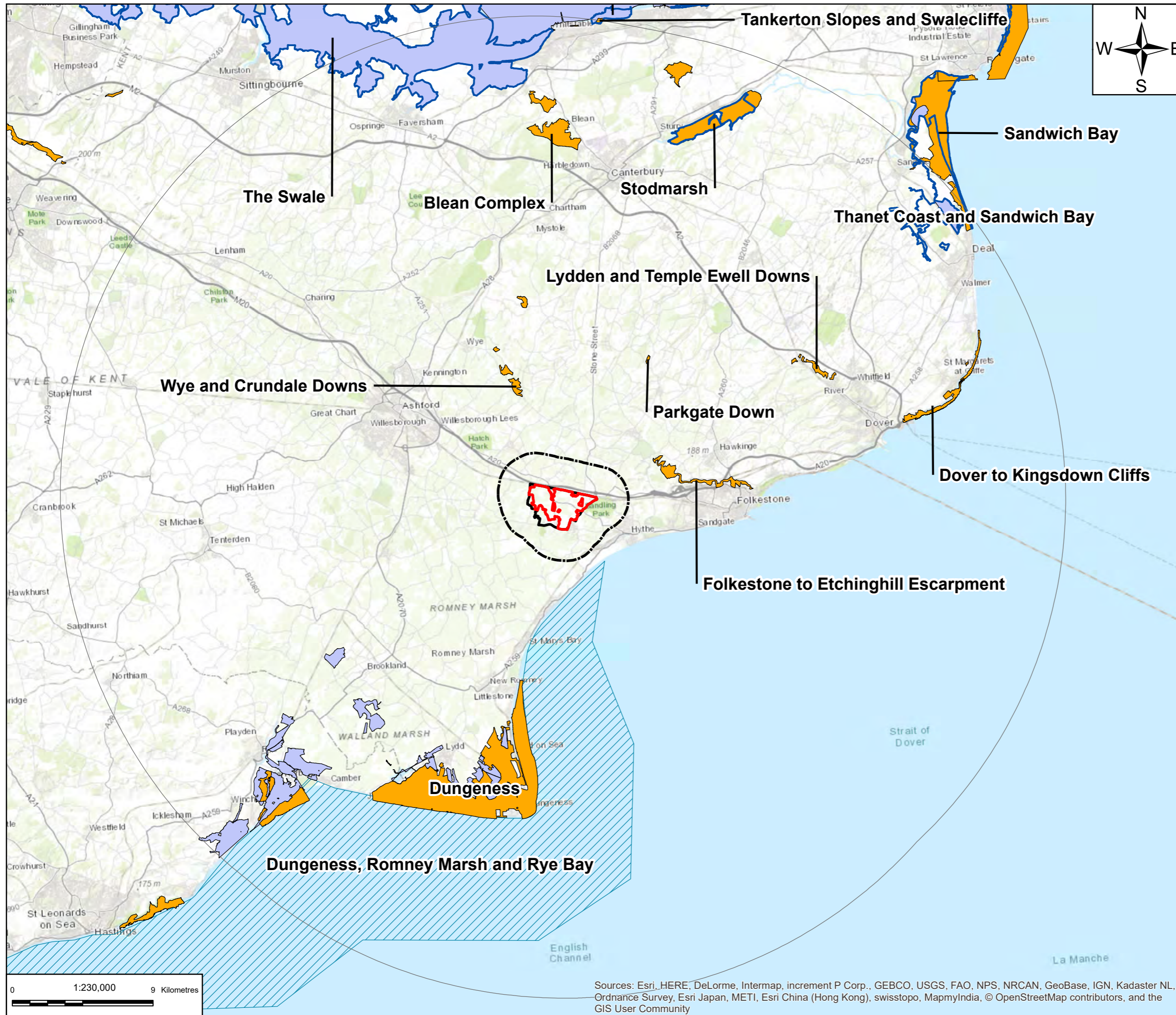


Dr Martina Girvan MSc, BSc(Hons), CEcol, MCIEEM | Technical Director – Ecology and Arboriculture

E. Martina.girvan@arcadis.com | M. +44 (0)773 8140144

Enc. Appendix A International designated sites within 30km of the site and Appendix B Dungeness, Romney Marsh and Rye Bay SPA Citation Summary
CC. Brandon Murray Principal Ecologist

Appendix A: International designated sites within 30km of the site



- Legend**
- Outline Planning Application (OPA) boundary
 - Framework Masterplan (FM) boundary
 - 2km buffer from OPA
 - 30km buffer from OPA
 - Ramsar Site
 - Special Area of Conservation
 - Special Protected Area
 - Special Protection Area (Marine Component GB)

REV	Date	Description	Drawn	Check	Approv
01	03/05/2018	FOR INFORMATION	EP	BM	MG

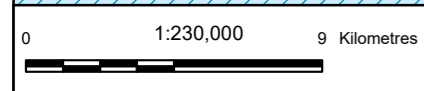
ARCADIS Design & Consultancy for natural and built assets

Arcadis House
34 York Way
London
N1 9AB



OTTERPOOL PARK

International Statutory Sites within 30km of the Study Area



Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

scale	original size	datum	grid
1: 230,000	A3	Sx	OSGB

Appendix B Dungeness, Romney Marsh and Rye Bay SPA Citation Summary

Qualifying species

The site qualifies under **article 4.1** of the Directive (2009/147/EC) as it is used regularly by 1% or more of the Great Britain populations of the following species listed in Annex I in any season:

Annex 1 species Count and season Period % GB population

- Bewick's swan *Cygnus columbianus bewickii* 155 individuals – wintering 5 year peak mean 2002/3 – 2006/7 **1.9%**
- Bittern *Botaurus stellaris* 5 individuals – wintering 5 year peak mean 2002/3 – 2006/7 **5.0%**
- Hen harrier *Circus cyaneus* 11 individuals – wintering 5 year peak mean 2002/3 – 2006/7 **1.5%**
- Golden plover *Pluvialis apricaria* 4,050 individuals – wintering 5 year peak mean 2002/3 – 2006/7 **1.6%**
- Ruff *Philomachus pugnax* 51 individuals – wintering 5 year peak mean 2000/01 – 2004/5 **7.3%**
- Aquatic warbler *Acrocephalus paludicola* 2 individuals – passage 5 year mean 2004 – 2008 **6.1%**
- Marsh harrier *Circus aeruginosus* 4 females – breeding 5 year mean 2004 – 2008 **2.0%**
- Avocet *Recurvirostra avosetta* 31 pairs – breeding 5 year mean 2004 – 2008 **3.5%**
- Mediterranean gull *Larus melanocephalus* 56 pairs – breeding 5 year mean 2004 – 2008 **52.2%**
- Sandwich tern *Sterna albifrons* 420 pairs - breeding (5 year mean 2011-2015) **3.8 %**
- Common tern *Sterna hirundo* 188 pairs – breeding (5 year mean 2011-2015) **1.9%**
- Little tern *Sterna albifrons* 35 pairs – breeding 5 year mean 1992 – 19961 **1.5%**

Migratory species

The site qualifies under **article 4.2** of the Directive (2009/147/EC) as it is used regularly by 1% or more of the biogeographical populations of the following regularly occurring migratory species (other than those listed in Annex I) in any season:

- **Migratory species Count and season Period % of population** Shoveler *Anas clypeata* 485 individuals – wintering 5 year peak mean 2002/3 – 2006/7 **1.2%** NW & C Europe (nonbreeding)

Assemblage

- The site qualifies under **article 4.2** of the Directive (2009/147/EC) as it is used regularly by over 20,000 waterbirds (waterbirds as defined by the Ramsar Convention) in any season: During the period 2002/03 – 2006/07, Dungeness, Romney Marsh and Rye Bay SPA (including proposed extensions) supported an average peak of 34,625 individual waterbirds in the non-breeding season, comprised of almost 16,000 wildfowl and over 19,000 waders. This assemblage is of both European and international importance. In the context of SPA qualification the assemblage includes the wintering and passage species of European importance described above (i.e. Bewick's swan, bittern, hen harrier, golden plover, ruff, aquatic warbler and shoveler), as well as species whose numbers exceed 1% of the GB wintering or passage populations i.e.: European white-fronted goose *Anser albifrons albifrons*, wigeon *Anas penelope*, gadwall *A. strepera*, pochard *Aythya ferina*, little grebe *Tachybaptus ruficollis*, great crested grebe *Podiceps cristatus*, cormorant *Phalacrocorax carbo*, coot *Fulica atra*, sanderling *Calidris alba*, whimbrel *Numenius phaeopus* and common sandpiper *Actitis hypoleucos*. Lapwings *Vanellus vanellus* are also present in sufficient numbers to warrant their being listed as a major component species of the assemblage, since their numbers exceed 2,000 individuals (10% of the minimum qualifying assemblage of 20,000 individuals).

Appendix D: Email conversation with Natural England to agree surveys for recreational pressure

Murray, Brandon

From: Coneybeer, Julia (NE) [REDACTED]
Sent: 31 July 2017 17:23
To: Powell, Alison
Cc: Kevin Nimoh
Subject: RE: Recreation Surveys

Dear Alison and Kevin

Broadly speaking, I agree with your proposed approach in terms of visitor survey questionnaire methodology, and that you intend to visit Folkestone to Etchinghill Escarpment Special Area of Conservation (SAC), but focus on collating existing data available on visitor pressure at Dungeness SAC/ Special Protection Area (SPA)/ Ramsar site. This makes sense for the latter given the considerable work undertaken at Dungeness in support of Shepway and Rother District Councils' Local Plans.

Having spoken with some of my colleagues who are Responsible Officers for nearby designated sites, and Katie Miller at the Kent Downs Area of Outstanding Natural Beauty (AONB), I would like to suggest the following sites which you may want to consider including in your scope:

- Wye and Crundale Downs SAC – this site is likely to be a draw for visitors particularly to the National Nature Reserve. The car park you suggest would be an ideal location capturing most visitors here.
- Dover to Kingsdown Cliffs SAC – this site already suffers from trampling from recreational pressure, which the National Trust is trying to manage. Although this site is approx 20km away from the proposed Otterpool Park site, it should be given consideration in the Habitats Regulations Assessment; I would suggest contacting the National Trust to see if they have any data available on visitor usage, eg how far visitors appear to travel to visit the site.
- Farthing Common car park – this site is not within any European site but is a prominent location along the North Downs Way National Trail on the escarpment – I am mentioning it here in case your visitor survey data may also contribute towards the Landscape and Visual Impact Assessment, in terms of assessing how well used the National Trail is; in which case you may also want to conduct surveys at this well used location on the scarp.

I hope you find this useful and I am happy to talk further. I hope the surveys go well.

With thanks,

Julia Coneybeer

Senior Advisor
Sustainable Development team
Sussex & Kent team
Natural England
[REDACTED]

I am a contractual homeworker
Post should be directed to:
Mail hub, Block B, Whittington Road, Worcester, WR5 2LQ

My normal working days are Tuesday, Wednesday and Friday.

www.gov.uk/natural-england

We are here to secure a healthy natural environment for people to enjoy, where wildlife is protected and England's traditional landscapes are safeguarded for future generations.

In an effort to reduce Natural England's carbon footprint, I will, wherever possible, avoid travelling to meetings and attend via audio, video or web conferencing.

Natural England is accredited to the Cabinet Office Customer Service Excellence Standard

From: Alison Powell [mailto: [REDACTED]]

Sent: 25 July 2017 18:57

To: Coneybeer, Julia (NE)

Cc: Kevin Nimoh

Subject: Recreation Surveys

Hi Julia

Thank you so much for your voicemail message, I think both you and I have been on leave and have kept missing each other. We decided to postpone the surveys for a couple of weeks until we had had final confirmation from you, for which I am very glad – it sounds as though your meeting with Katy Miller from the AONB next Monday could be extremely useful! If, as you suggest, you were able to discuss our proposed survey locations with her and either confirm their acceptability / identify others which may be better, then that would be great.

I note your suggestion to include the Wye and Crundale Downs SAC in the surveys, and I am sure that we can include that, given that we can approach Dungeness in a slightly different way. I note from the MAGIC website that there is a car park just to the north of the SAC and a section of the North Downs Way leading south from it through the SAC, which I think would be an opportune location to place surveyors.

I have copied Kevin in on this email as he is organising the survey team for me, and will be identifying new dates shortly for which the team are available. As I will be on leave after this week, if you could copy Kevin in on any emails including information from your discussions with Katy, that would be great and he can feed it into the survey methodology.

I'm around tomorrow if you wanted a further chat, but I think we have it covered now!

Kind regards

Alison

Alison Powell | Associate Technical Director | alison.powell@arcadis.com

Arcadis | Arcadis Cymru House | CF3 0EY | United Kingdom



Be green, leave it on the screen.

Arcadis Consulting (UK) Limited is a private limited company registered in England & Wales (registered number 02212959). Registered Office at Manning House, 22 Carlisle Place, London, SW1P 1JA, UK. Part of the Arcadis Group of Companies along with other entities in the UK.

This email and any files transmitted with it are the property of Arcadis and its affiliates. All rights, including without limitation copyright, are reserved. This email contains information that may be confidential and may also be privileged. It is for the exclusive use of the intended recipient(s). If you are not an intended

recipient, please note that any form of distribution, copying or use of this communication or the information in it is strictly prohibited and may be unlawful. If you have received this communication in error, please return it to the sender and then delete the email and destroy any copies of it. While reasonable precautions have been taken to ensure that no software or viruses are present in our emails, we cannot guarantee that this email or any attachment is virus free or has not been intercepted or changed. Any opinions or other information in this email that do not relate to the official business of Arcadis are neither given nor endorsed by it.

This email and any attachments is intended for the named recipient only. If you have received it in error you have no authority to use, disclose, store or copy any of its contents and you should destroy it and inform the sender. Whilst this email and associated attachments will have been checked for known viruses whilst within the Natural England systems, we can accept no responsibility once it has left our systems. Communications on Natural England systems may be monitored and/or recorded to secure the effective operation of the system and for other lawful purposes.

Appendix E: Natural England Feedback on the 2019 submission

Date: 28 June 2019
Our ref: 277270
Your ref: Y19/0257/FH



James Farrar
Folkestone & Hythe District Council

Customer Services
Hornbeam House
Crewe Business Park
Electra Way
Crewe
Cheshire
CW1 6GJ

0300 060 3900

BY EMAIL ONLY

Dear James Farrar

Planning consultation: Outline application, with all matters reserved, for a comprehensive residential led mixed use development

Location: Land bounded by the M20 and Channel Tunnel Railway Link (CTRL) to the north; the A20 / Stone Street and Sandling Park to the east; Harringe Lane to the west; and Aldington Road to the south

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

This is our second letter in response to the proposed application, including Natural England's advice on the following aspects:

- **Habitats Regulations Assessment (HRA)**
- **Sites of Special Scientific Interest (SSSIs)**
- **Soils and land quality**
- **Green/ blue infrastructure (GI)**
- **Biodiversity**
- **Biodiversity net gain**

Please refer to our first letter, dated 03 June 2019 with same ref, for our detailed comments in relation to the Landscape and Visual Impact Assessment (LVIA) and impacts on the Kent Downs Area of Outstanding Natural Beauty (AONB), on which we are requesting further information.

SUMMARY OF NATURAL ENGLAND'S ADVICE (not including LVIA)

FURTHER INFORMATION REQUIRED TO DETERMINE IMPACTS ON DESIGNATED SITES

As submitted, the application could have potential significant effects on:

- Folkestone to Etchinghill Escarpment Special Area of Conservation (SAC)
- Folkestone to Etchinghill Escarpment Site of Special Scientific Interest (SSSI)
- Lympne Escarpment (SSSI)

Natural England requires further information in order to determine the significance of these impacts and the scope for mitigation, as required: