

P/6/17/OUT - Land North of Hook Lane, Pagham

Habitats Regulations Assessment

Prepared on behalf of

Arun District Council

Final Report

19 September 2018

18/32-3B

P/6/17/OUT - Land North of Hook Lane, Pagham

Habitats Regulations Assessment

Report Release Sheet

Draft/Final: Final Report

Issue Number: 18/32-3B

Date: 19 September 2018

Client: Arun District Council
Maltravers Road
Littlehampton
West Sussex
BN17 5LF

Main Author(s): Robert Souter BSc (Hons) PhD MCIEEM

Contributors/Surveyors:

Report Prepared for Issue by: 
Robert Souter BSc (Hons) PhD MCIEEM

Report Approved for Issue by: 
Karen Colebourn BSc (Hons) CBiol MIBiol FCIEEM



Ecological Planning & Research Ltd

The Barn, Micheldever Station, Winchester, Hampshire SO21 3AR
Tel: 01962 794720 Fax: 01962 794721 email: info@epr.uk.com www.epr.uk.com

P/6/17/OUT - Land North of Hook Lane, Pagham

Habitats Regulations Assessment

Contents

1. INTRODUCTION	1
Commission.....	1
Brief.....	1
Response to the Brief.....	1
Structure of this Report	2
2. HABITATS REGULATIONS ASSESSMENT PROCESS	3
Legislation	3
National Planning Policy.....	3
Guidance	3
Relevant Case Law	4
Screening Likely Significant Effects	5
The Appropriate Assessment Stage.....	5
In Combination Effects	6
3. BACKGROUND INFORMATION	7
Introduction.....	7
Supporting Information	7
Arun District Local Plan	8
Consultation with Natural England	10
Consultation with other Parties.....	10
4. SCREENING OF LIKELY SIGNIFICANT EFFECTS	12
Introduction.....	12
Application Site Description.....	12
Description of Development	12
Potential for Likely Significant Effects on Pagham Harbour SPA/Ramsar	13
<i>Disturbance</i>	13
<i>Effects on Supporting Habitat</i>	14
<i>Water Pollution</i>	18
Screening Conclusion	23
5. APPROPRIATE ASSESSMENT	24
Introduction.....	24
Local Plan HRA.....	24
<i>Impact Pathways: Disturbance</i>	24
<i>Impact Pathways: Water Pollution</i>	25
<i>Local Plan HRA: Impact Assessment</i>	26

<i>Local Plan HRA: Determining Adverse Effects on Integrity</i>	28
Applicant's Impact Avoidance and Mitigation Strategy	29
HRA of Planning Application: Determining Adverse Effects on Integrity.....	31
EPR's Conclusion.....	31
 6. DELIVERY MECHANISMS	 32
Introduction.....	32
Recreational Impacts.....	32
Water Pollution	32
 7. RESIDUAL IMPACTS AND CONCLUSIONS	 33
Introduction.....	33
Assessment Summary and Residual Impacts.....	33
Conclusions.....	33
 8. REFERENCES	 34

MAPS

- Map 1** Site Location
- Map 2** Brent Geese Records

APPENDICES

- Appendix 1** Natural England Correspondence

P/6/17/OUT - Land North of Hook Lane, Pagham

Habitats Regulations Assessment

1. INTRODUCTION

Commission

- 1.1 Ecological Planning & Research Limited (EPR) was commissioned by Arun District Council (ADC) to undertake a Habitats Regulations Assessment (HRA) of a planning application identified as P/6/17/OUT Land North of Hook Lane, Pagham, the south-western part of Pagham North, a strategic housing allocation under Policy H SP2a of the adopted Arun District Local Plan 2011-2031.
- 1.2 The application site lies approximately 1.9km and 1.6km from Pagham Harbour Special Protection Area (SPA) and Ramsar site, respectively (see **Map 1**).

Brief

- 1.3 ADC provided the following brief:
- 1.4 'In the preparation of the recommendations reports for the above planning application the site had originally been screened out by virtue of the conclusions drawn in the HRA prepared in support of the emerging Local Plan and the mitigation measures proposed by the developers.
- 1.5 However, the LPA has subsequently become aware of a recent ECJ ruling (People over Wind), which stated that;

"Article 6(3) of Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora must be interpreted as meaning that, in order to determine whether it is necessary to carry out, subsequently, an appropriate assessment of the implications, for a site concerned, of a plan or project, it is not appropriate, at the screening stage, to take account of the measures intended to avoid or reduce the harmful effects of the plan or project on that site."

- 1.6 Therefore, in light of this it has been determined by the LPA that the screening of the application will need to be undertaken by a suitably qualified ecologist and appropriate assessment undertaken as necessary'.

Response to the Brief

- 1.7 In order to enable ADC (the 'competent authority') to discharge their duties under Regulation 63 of the Conservation of Habitats and Species Regulations 2017, EPR will review whether the development proposals will result in a likely significant effect on Pagham Harbour SPA/Ramsar site, either alone or in combination with other plans and projects. If so, then EPR will carry out an Appropriate Assessment to determine whether the proposals would lead to an adverse effect on the integrity of the International Site in view of its conservation objectives. This process is carried out within the framework of an HRA of the proposals, based on available information.

Structure of this Report

- 1.8 **Section 2** of this report provides a summary of the HRA process and relevant supporting guidance. **Section 3** provides background information upon which the HRA can be based. **Section 4** describes the impacts predicted to be generated by the proposed development which could result in a likely significant effect on Pagham Harbour SPA/Ramsar, concluding by screening likely significant effects. **Section 5** takes the impacts not screened out forward into the Appropriate Assessment and explores the level of mitigation proposed by the applicant to prevent an adverse effect on integrity and discusses the confidence in the success of the mitigation in the context of current knowledge. Proposed mechanisms for securing delivery of the mitigation are discussed in **Section 6**. Finally, residual impacts and conclusions are considered in **Section 7**.

2. HABITATS REGULATIONS ASSESSMENT PROCESS

Legislation

- 2.1 The primary legislative protection covering International Sites originates from European Directive 92/43/EEC (the 'Habitats Directive'), which is transposed into UK legislation by the Conservation of Habitats and Species Regulations 2017 (the 'Habitats Regulations') with the key sections of relevance to projects appearing from Regulation 63 onwards. Regulation 63 states that:

“(1) A competent authority, before deciding to undertake, or give any consent, permission or other authorisation for, a plan or project which—

(a) is likely to have a significant effect on a International Site or a European offshore marine site (either alone or in combination with other plans or projects), and

(b) is not directly connected with or necessary to the management of that site,

must make an appropriate assessment of the implications of the plan or project for that site in view of that site’s conservation objectives.

(2) A person applying for any such consent, permission or other authorisation must provide such information as the competent authority may reasonably require for the purposes of the assessment or to enable it to determine whether an appropriate assessment is required.”

National Planning Policy

- 2.2 Section 15 of the National Planning Policy Framework (NPPF) (July 2018), particularly paragraphs 170 and 175 are of particular relevance to International Sites and have been taken into account when preparing this report.
- 2.3 Paragraph 176 requires that Ramsar sites are treated as if they are fully designated International Sites for the purposes of considering development proposals that may affect them.

Guidance

- 2.4 Guidance published by the European Commission entitled 'Assessment of Plans and Projects Significantly Affecting Natura 2000 Sites' (2001) advises on carrying out the stepwise approach to HRA required by Article 6 of the Habitats Directive. This requires that the following stages are undertaken in sequence:
1. Screening the need for an Appropriate Assessment;
 2. The Appropriate Assessment;
 3. The Assessment of Alternative Solutions; and
 4. Assessment where no alternative solutions exist and where adverse impacts remain (also known as the test for “Imperative Reasons of Overriding Public Interest” or IROPI).

2.5 Other guidance that has been taken into account during the preparation of this document includes:

- The European Commission's 'Managing Natura 2000' document (2000) that provides guidance on some of the key concepts enshrined in Article 6 of the Habitats Directive;
- The 'Communication from the Commission on the Precautionary Principle' (2000) which provides guidance on the correct application of the precautionary principle, stating that it should be applied with proportionality and should not aim at zero risk;
- Circular 06/05 'Biodiversity and Geological Conservation – Statutory Obligations and Their Impact Within the Planning System';
- 'Planning for the Protection of European Sites' (DCLG, 2006); and
- PINS NOTE 05/2018 '*Consideration of avoidance and reduction measures in Habitats Regulations Assessment: People over Wind, Peter Sweetman v Coillte Teoranta*' (Planning Inspectorate 9 May 2018).

Relevant Case Law

Case C-127/02 of the European Court of Justice (ECJ) – The “Waddenzee” Case

2.6 The ECJ Waddenzee Case clarified a number of important points in relation to the correct interpretation of Article 6(3) of the Habitats Directive in particular. This clarification has been helpfully set out in Government Circular 06/05 “Biodiversity and Geological Conservation”.

2.7 In particular, one of the key messages from the ECJ was that, where a plan or project has the potential to affect a Natura 2000 site, an “Appropriate Assessment” is necessary:

“...if it cannot be excluded, on the basis of objective information, that it will have a significant effect on that site, either alone or in combination with other plans and projects” [our emphasis]

[Paragraph 13 of Circular 06/05 or paragraph 44 of the Waddenzee Judgment]

2.8 The ECJ expanded upon this by saying that:

“...where such a plan or project has an effect on that site but is not likely to undermine its conservation objectives, it cannot be considered likely to have a significant effect on the site concerned.”

[Paragraph 47 of the Waddenzee Judgement]

2.9 Further to the above the ECJ clarified that, once an Appropriate Assessment has been triggered, except in the circumstances outlined in Article 6(4) of the Directive, a plan or project can only be authorised where it will not have an adverse effect on the integrity of the Natura 2000 site, and that:

“That is the case where no reasonable scientific doubt remains as to the absence of such effects”.

[Paragraph 21 of Circular 06/05, or paragraph 59 of the Waddenzee Judgement]

The 'Dilly Lane' and 'People over Wind' Judgments

- 2.10 The High Court, in the judgment of J Sullivan in *Hart DC v Secretary of State for Communities and Local Government* (2008), has for some time formed the basis of established HRA Practice, insofar as it has determined the approach to the Screening and Appropriate Assessment stages of the HRA process.
- 2.11 Up until recently the established approach derived from the Dilly Lane Case meant that where impact avoidance and mitigation measures were put forward as integral parts of a plan or project, and where the competent authority was also satisfied that those measures would be effective, deliverable and could be secured, then there was no need for an Appropriate Assessment to be carried out.
- 2.12 This was because in such circumstances it was considered that the information pertaining to the efficacy of those impact avoidance and mitigation measures represented the 'objective information' referred to by the European Court of Justice (ECJ) in the Waddenzee case (above).
- 2.13 More recently however, in case C-323/17 of the ECJ (referred to as '*People over Wind*'), the ECJ concluded that it was not appropriate to take account of "...*measures intended to avoid or reduce the harmful effects of the plan or project...*" at the Screening stage of the HRA process. Although there appear to be some inconsistencies between this judgment and previous ECJ case law, until such time as the ECJ may provide further clarification, it will be necessary to consider the efficacy of impact avoidance and mitigation measures through the medium of an Appropriate Assessment in order to ensure compliance with the findings of the judgment.

The Grace and Sweetman Case

- 2.14 The above approach was confirmed in the July 2018 Grace and Sweetman case (C-164/17). In this case the ECJ ruled that a project resulting in the loss of land **within a European site** which could support the qualifying feature(s) cannot be **mitigated** by measures designed to improve the capacity of other areas of the European site to support those feature(s). Such a project must therefore fail the 'appropriate assessment test at Article 6(3) of Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora. If the project must proceed for imperative reasons of overriding public interest, such measures may be required to **compensate** for the loss of area within the European Site, as per Article 6(4).
- 2.15 EPR's view is that, as there is no proposal to remove land from the SPA, ECJ ruling C-164/17 is not relevant to this application (see discussion at paragraph 4.37).

Screening Likely Significant Effects

- 2.16 The purpose of the initial screening stage is to determine whether the proposals will give rise to a 'likely significant effect' (LSE). If an LSE can be ruled out, the proposals are deemed to pass the screening stage. However, if an LSE is identified, or uncertain, the competent authority must proceed to the next stage and carry out an Appropriate Assessment of the proposals, in light of the conservation objectives of the International Site(s) in question.

The Appropriate Assessment Stage

- 2.17 The purpose of the Appropriate Assessment (AA) is to further analyse likely significant effects identified during the screening stage, as well as any effects which were uncertain or not well understood and taken forward for assessment in accordance with the precautionary principle.

The AA evaluates the implications of the plan or project, either alone or in combination with other plans and projects, in light of the conservation objectives of affected International Sites.

- 2.18 The AA stage includes a test of whether the plan or project proposals will result in significant adverse effects on site integrity which can be defined as:

‘The integrity of a site is the coherence of its ecological structure and function, across its whole area, that enables it to sustain the habitat, complex of habitats and/or the levels of populations of the species for which it was classified (ODPM, 2005)’.

In Combination Effects

- 2.19 Other plans or projects being prepared or implemented in the area may have the potential to cause negative effects on the integrity of International Sites. These effects may act in combination with the effects of application P/6/17/OUT, potentially leading to a LSE becoming significant. It is therefore important to consider whether this application could contribute to effects generated by other plans and projects.

3. BACKGROUND INFORMATION

Introduction

- 3.1 This section presents background information including relevant: Local Plan policies; extracts from the HRA of the Local Plan; and consultation with Natural England and Chichester District Council's ecologist.

Supporting Information

- 3.2 Information collected to inform this HRA includes the following documents:
- 3.3 HRA of the Arun Local Plan:
- Habitat Regulations Assessment for the Arun Local Plan: Supplementary Work. Stage 1 Report: Baseline Data for Site Evaluations. April 2016. Urban Edge Environmental Consulting on behalf of Arun District Council.
 - Habitat Regulations Assessment for the Arun Local Plan: Supplementary Work. Stage 2 Report: Screening for Likely Significant Effects. June 2016. Urban Edge Environmental Consulting on behalf of Arun District Council.
 - Habitat Regulations Assessment for the Arun Local Plan: Supplementary Work. Stage 3 Report: Appropriate Assessment. February 2017. Urban Edge Environmental Consulting on behalf of Arun District Council.
 - PELP33a. Habitat Regulations Assessment for the Arun Local Plan. Analysis of new overwintering bird data and its implications for the conclusions of the HRA. September 2017. Urban Edge Environmental Consulting on behalf of Arun District Council.
 - PELP33b. Natural England Response to Inspector's Interim Findings (November 2017).
- 3.4 Ecological reports provided by the applicant, that includes information for HRA:
- Hook Lane, Pagham: Ecological Appraisal. (FPCR Environment and Design Ltd, January 2017).
 - Land West of Hook Lane, Pagham, West Sussex: Pagham Harbour SPA: Brent Goose Assessment. (FPCR Environment and Design Ltd, August 2018).
- 3.5 Some points are illustrated on **Maps 1 and 2**. Map 2 is taken from the Local Plan HRA PELP33a Technical Note.
- 3.6 **Map 1** shows the location of this planning application in relation to the Strategic Housing Allocations (Pagham North and South) and to Pagham Harbour SPA/Ramsar and the 400m buffer zone.
- 3.7 **Map 2** is included since it is relevant to the assessment of 'potential loss of important foraging areas for Dark-bellied Brent Geese'. The map shows the areas where Brent Geese have been recorded in relation to the Pagham Harbour SPA/Ramsar, its 400 buffer zone, the Strategic Housing Sites and the related planning applications, including this one. It also claims to show the '*Extent of alternative land suitable for foraging Brent Geese*'.

Arun District Local Plan

3.8 The relevant policy of the Arun District Local Plan is:

- Policy H SP2a Greater Bognor Regis Urban Area. 'To support the sustainable growth of Bognor Regis, growth will take place at three strategic allocations adjacent to the urban area onto the coastal plain'.
- SD1 – Pagham South – 400 units [P/140/16/OUT and P/25/17/OUT].
- SD2 - Pagham North – 800 units [P/6/17/OUT (this application) and P/134/16/OUT].
- SD3 – West of Bersted – 2,500 units

3.9 The locations of the applications falling under SD1 and SD2 are shown on **Map 1**.

3.10 The policy includes a requirement for the development proposals in all three locations to meet the following relevant requirements:

'Ensure no detrimental impact to Pagham Harbour SPA, through compliance with ENV DM2 (Pagham Harbour) and its supporting text'.

3.11 The policy ENV DM2 Pagham Harbour states:

- a. Within Zone A (0-400m from the boundary) as identified on the Policies Maps, development will only be permitted in exceptional circumstances where the developer is able to demonstrate there will be no detrimental effects on Pagham Harbour, including non-native species and the water environment. Regard shall also be had to tests 1-4 as set out in Policy DM1 (Designated Sites of Biodiversity or Geological Importance).*
- b. Within Zone B (0-5km) for all new residential development and development which is likely to have an impact on Pagham Harbour will be required to:*
 - i. Make developer contributions towards the agreed strategic approach to access management at Pagham Harbour.*
 - ii. create easily accessible new green spaces for recreation within or adjacent to the development site, These shall be capable of accommodating the predicted increases in demand for local walking, including dog walking. Good pedestrian links shall be provided between housing areas and new and existing green space in order to discourage car use.*
- c. Major developments (as defined in the GDPO 1995 as amended) taking place outside Zone B and close to its boundary will be considered on a case by case basis to determine any potential effects on Pagham Harbour, and the need for any avoidance or mitigation measures'.*

3.12 Policy H SP2a also states that for SD1 and SD2 that:

‘the sites lie in close proximity and are within the drainage catchment of the internationally designated Pagham Harbour site which has drainage and waste water implications’.

3.13 The supporting text in the Local Plan states:

‘the Pagham North site consists of a number of parcels of land which will be planned comprehensively with each other to ensure that a sustainable development is provided. The Pagham South allocation is in close proximity to Pagham Harbour, which is an important and sensitive natural site within the wider Bognor Regis area. Development from this allocation should reduce any impacts from the loss of supporting habitat or recreational disturbance that may arise’.

Pagham Harbour

*‘Pagham Harbour is a SPA as it supports important populations of rare birds for a large proportion of the year. The Ramsar Convention recommends designation of wetlands that regularly support 1% of the population of a species of waterbird. Pagham Harbour has regularly supported more than this percentage of the western European populations of Dark-bellied Brent Goose *Branta bernicla bernicla*, and Black-tailed Godwit *Limosa limosa islandica*. The Habitats Regulations Assessment has assessed, in detail, the various habitats at the Harbour, that support species and the main threats and opportunities for Pagham Harbour. The key recommendations were the identification of zones to protect the site from development. These zones of influence have been mapped on the Proposals Map and the implications of considering developments in each zone are outlined below (and see ENV DM2 above).*

Pagham Harbour is an estuarine site which includes intertidal mudflats, saltmarsh, lagoons, shingle, open water, reed, swamp and wet grassland. It is an important breeding and wintering ground for wildfowl. As such, to ensure no detrimental impacts through the loss of supporting habitat, development within close proximity to the boundary of Buffer Zone A for Pagham Harbour SPA, will need to prove the site is not used regularly by birds. To do this, information on the cropping regime, frequency of planting favoured by Brent Geese, sources of disturbance, openness of the site and at least one seasons wintering surveys will need to be provided. Where results show frequent use, an additional winter bird survey should be carried out and mitigation design aspects incorporated, to enable informed judgements to be made’.

‘Pagham Harbour is vulnerable to disturbance, pollution, changes in hydrology and neglect of management which could lead to changes in habitat and invasion by non-native species. In terms of human population growth in the area, key vulnerabilities are associated with recreational pressures which include disturbance to wintering and breeding birds by people and their dogs. The exact levels of disturbance are unknown, however it is assumed that with higher visitor numbers, the likelihood of disturbance and therefore impacts occurring that could have an impact on the integrity of the site and the features for which it is designated, will increase’.

‘Due to the current and future pressure on Pagham Harbour from recreational disturbance identified in the Appropriate Assessment, a strategic approach to

mitigation at the designated site to reduce impacts has been agreed between the relevant parties, with activities focussed on:

Wardening..., Access management and site protection..., Habitat improvements..., Interpretation..., Monitoring of wildlife and visitor numbers...

Although it is recognised that the special draw of the coast cannot be fully removed, this may be reduced through the addition of design aspects, such as on-site green space or dog walking areas’.

Consultation with Natural England

3.14 Natural England (NE), the Government’s statutory adviser on nature conservation in England, has been consulted on the proposals. The Courts have determined in several occasions that the views of NE should be given ‘great weight’ unless a ‘cogent explanation’ is given for not doing so. NE has advised ADC on this planning application in the following correspondence (see **Appendix 1**):

- NE consultation response dated 10 March 2017,
- NE consultation response dated 27 March 2017.

3.15 In their letter of 27 March 2017, NE confirmed the advice they had given in their letter of 10 March 2017 still applied, and they had no objection to the planning application subject to appropriate mitigation being secured.

3.16 The advice given, in summary, was as follows:

3.17 NE flagged up the proximity of the application site to Pagham Harbour SPA/Ramsar site and advised that International Site, as a competent authority under the provisions of the Habitats Regulations, ADC should have regard for any potential impacts that a plan or project may have on the International Site. Also, NE confirmed that:

- The proposals are not necessary for the management of the International Site;
- Subject to appropriate financial contributions being secured for strategic mitigation the proposals are unlikely to have a significant effect on Pagham Harbour SPA/Ramsar, and can therefore be screened out from any requirement for further assessment.

3.18 [NB. The recent ECJ ruling (People over Wind) means it is no longer possible to rule out a likely significant effect at the screening stage of the HRA where impact avoidance and mitigation measures are relied upon. Instead, the assessment must be taken through to the AA stage of the HRA to demonstrate the proposal will have no adverse effect on the integrity of the International Site (see **Section 5**)].

Consultation with other Parties

3.19 The other relevant statutory consultation responses received were as follows:

- Environment Officer, Chichester District Council (CDC) response dated 15 March 2017.

3.20 This states:

'Habitat Regulations Assessment – Due to the scale of the site and its location to Pagham Harbour SPA we require that a Habitats Regulations Assessment is undertaken for the site to establish if there is any significant effects on the SPA from the proposed development which will need to be mitigated above and beyond the contribution to the Strategic Access Management and Monitoring (SAMM) scheme for recreational disturbance detailed below.'

'Recreational Disturbance – Chichester District Council have identified that net new dwellings within a 5km zone of influence around the Pagham Harbour SPA boundary will increase the number of visitors to the SPA. Natural England have advised both Arun and Chichester DCs that increased visitor numbers in combination with all other developments in the zones of influence in the two districts will have a likely significant effect on the SPA unless there is a strategic scheme of avoidance/mitigation measures...

The two councils, together with the RSPB, have developed a joint strategic scheme of avoidance and mitigation measures along the lines of that which exists for the Solent Maritime SAC. This involves a jointly agreed uniform level of developer contribution in the two zones of influence, set at a level to fund the measures in-perpetuity.

The preferred method would be to collect a contribution towards the implementation of the joint project. The level of contribution to the interim scheme is £1,153 per unit / pitch. Such a planning obligation should be payable at commencement in order to ensure that avoidance measures are in place before first occupation'.

3.21 [NB. Once again, this advice pre-dates the recent ECJ ruling (People over Wind) which means that impact avoidance and mitigation measures should now be considered at the AA stage (see **Section 5**)].

- Report for Pagham Parish Council dated March 2017

3.22 A report by Petra Billings Woodland Consultancy Ltd. which was commissioned by Pagham Parish Council and titled 'Report on Ecological Appraisals Presented in Support of Applications for Housing Development at Pagham, West Sussex' (Petra Billings, 2017).

4. SCREENING OF LIKELY SIGNIFICANT EFFECTS

Introduction

- 4.1 This section presents Stage 1 of the HRA, Screening. It describes the application site and development proposals, and explores the potential impacts generated by the development that could give rise to a likely significant effect (LSE) on Pagham Harbour SPA/Ramsar.

Application Site Description

- 4.2 The following description of the application site is made with reference to the Applicant's ecologist's ecological appraisal report (FPCR, 2017).
- 4.3 The Site is situated on the northern fringe of Pagham, and lies approximately 1.9km west of Pagham Harbour SPA and 1.6km west of the Ramsar site boundary (see **Map 1**).
- 4.4 The Site comprises approximately 17.2ha of arable land which at the time of the survey was supporting a maize crop. Headlands of species-poor semi-improved grassland bound the fields beneath mixed species hedgerows.
- 4.5 The surrounding landscape is composed largely of agricultural land with houses and gardens to the east and the south.

Description of Development

P/6/17/OUT Land North of Hook Lane, Pagham

- 4.6 Hallam Land Management Ltd has applied for outline planning permission for a mixed use development at Land North of Hook Lane, Pagham (hereafter 'the Site'). The Site is allocated for residential development in the Arun District Local Plan under Policy H SP2a. This is one of the 'Pagham North' allocated sites (see **Map 1**).
- 4.7 The application is for:
- Outline application with some matters reserved for construction of up to 300No. new homes, Care home of up to 80No. beds, D1uses of up to 4000sqm including a 2 form entry Primary School, formation of new means of access onto Hook Lane & Pagham Road, new pedestrian & cycle links, the laying out of open space, new strategic landscaping, habitat creation, drainage features & associated ground works & infrastructure.*
- 4.8 As the proposal is 'not directly connected with or necessary to the management of the [European] site', as confirmed by Natural England, it must be subject to HRA.

Potential for Likely Significant Effects on Pagham Harbour SPA/Ramsar

- 4.9 The ALP HRA *Screening Report* (UEEC, 2016b) identifies a number of potential effects on Pagham Harbour SPA/Ramsar associated with the 'Pagham North' developments. These are:
- Disturbance;
 - Effects on supporting habitat; and
 - Water pollution.
- 4.10 Natural England agrees in their correspondence dated 10 March 2017 (see **Appendix 1**).
- 4.11 The Applicant's Ecological Appraisal report includes relevant information for a Habitats Regulations Assessment in section 4 (FPCR, 2017), which has been used to inform this HRA.
- 4.12 A summary of the relevant sections of the ALP HRA *Screening Report* is included below, with each point followed by relevant extracts from the Applicant's ecology report.
- 4.13 [NB. As the FPCR report is dated prior to the ECJ ruling (People over Wind), the information is presented as if it relates only to the screening stage. EPR has used this information to inform both the screening and AA, as appropriate.]

Disturbance

- 4.14 For disturbance impacts, the ALP HRA *Screening Report* (UEEC, 2016b) discusses how the 2013 ALP HRA concluded that '*residential allocations within 5km of Pagham Harbour SPA/Ramsar site would be the principal source of additional visitors to the International Site, and would hence result in a risk of adverse effects on site integrity*'. Also, that '*mitigation measures recommended in the 2013 HRA were subsequently incorporated into the Publication ALP (October 2014) as Policy ENV DM2*'.
- 4.15 The Local Plan HRA *Screening Report* confirmed that Pagham North is one of the potential new (residential) development allocations located within 5km of the SPA/Ramsar but concluded that the Pagham North allocation was likely to be deliverable in compliance with Policy ENV DM2.
- 4.16 This conclusion relied on the joint interim scheme of mitigation to avoid individually insignificant effects from the scheme contributing to a combined LSE.
- 4.17 The Applicant's ecologist (FPCR, 2017) states:
- 'Pagham Harbour SPA/Ramsar site is located within 2km west of the site and Natural England has advised that the proposed development has the potential to have a significant effect on a International Site through increased recreational pressure, and also has the potential to impact on the supporting habitat for SPA birds'*.
- 4.18 The ecologist went on to say that they would rely on the joint interim scheme of mitigation.

NE's response on Disturbance

- 4.19 In their consultation response on the application dated 10 March 2017, NE stated:

‘Natural England agrees with the conclusions of the Arun Local Plan HRA Stage 2, in that development at this site could have a likely significant effect on Pagham Harbour SPA/Ramsar in combination with other housing development, in respect of recreational disturbance...’.

4.20 And that,

‘Appropriate financial contributions should be made to the Pagham Harbour strategic access management and monitoring project...[so that] ‘a likely significant effect from increased recreational disturbance can be ruled out’.

EPR's Screening Conclusion

- 4.21 The recent ECJ ruling (People over Wind) means that impact avoidance and mitigation measures should now be considered at the AA stage. It is no longer possible to rule out a LSE where such measures are relied upon. Instead, taking the assessment through to the AA stage it is necessary to explore whether any contribution toward an adverse effect on the integrity of the site can be ruled out.
- 4.22 In summary, disturbance impacts arising from the proposed development will not trigger a LSE on the Pagham Harbour SPA/Ramsar alone, but there is potential for a LSE on the SPA/Ramsar in combination with other plans and projects. This is considered in detail in the AA in **Section 5**.

Effects on Supporting Habitat

- 4.23 The ALP HRA *Screening Report* (UEEC, 2016b) discussed how the policies could potentially have a negative effect on Dark-bellied Brent Geese overwintering in Pagham Harbour, caused by loss of high tide foraging habitat to allocated development in the coastal zone. However, the Local Plan HRA found that, given the largely rural nature of the district's landscape, it is likely that alternative sites would continue to be available, particularly in the context of ALP policies SD SP2 (which direct development towards the established built-up area in the majority of instances) and OSR DM1 (which protects existing open spaces in the built-up area from development).
- 4.24 The ALP HRA *Screening Report* notes counts of 17 and 150 Brent Goose at Sefter Farm in winter 2002/03, but the records are geolocated to the junction of Sefter and Pagham Roads and it is not clear to which fields the records relate. The screening conclusion is that potential impacts on Brent Goose feeding sites from the development allocation at Pagham North is unlikely to significantly affect Pagham Harbour SPA/Ramsar alone. However, effects in combination are possible and will require further survey and assessment.
- 4.25 Following the ALP HRA *Appropriate Assessment* report PELP33 (UEEC, 2017a), further information was presented to inform the Local Plan Examination in Public (EiP) of relevance to this topic area. PELP 33a (UEEC, 2017b) was a Technical Note providing analysis of new overwintering bird data and its implications for the conclusions of the HRA. It was aimed mostly at addressing issues surrounding loss of functional supporting habitat for Dark-bellied Brent Geese at Pagham South, but also clarified the situation at Pagham North.
- 4.26 In particular, it referred to new data compiled by Sussex Ornithological Society (SOS), submitted as part of its representations on a number of related planning applications at Pagham North and

Pagham South, including this one. In summary, it was SOS's view that *'this proposal is unlikely to directly affect wintering wetland birds and does not object'*. For the Pagham South allocations, further survey, impact assessment and mitigation measures were proposed.

- 4.27 The conclusion in PELP 33a was as follows:

'The new information provided by SOS is not considered to alter the conclusions of PELP33 with respect to the potential impact of Pagham South and Pagham North. Taking account of incorporated mitigation measures, it can still be concluded that there will be no adverse effect on the integrity of Pagham Harbour SPA/Ramsar as a result of impacts on supporting habitats.'

- 4.28 NE agreed in PELP33b - Natural England Response to Inspector's Interim Findings (NE, 2017), which although focussed on the Pagham South allocations, is of relevance to the Pagham North allocations too. In this, Natural England stated:

*'PELP33a is very helpful in assessing the new information and making recommendations. Figure 3 (see **Map 2** of this report) is particularly informative, as it plots the locations of brent goose sightings in the context of the SPA and suitable, available surrounding habitat.'*

'In conclusion, Natural England's view is that the use of the Pagham South allocation (SD1) by foraging brent geese does not represent a constraint to allocating the site in the Local Plan. This is because mitigation measures are available, should an assessment at the planning application stage demonstrate that they are necessary, and Policy H SP2a and supporting text incorporates the requirement for that assessment. Therefore, Natural England agrees with the conclusion of the Technical Note (PELP 33a), that given the mitigation measures incorporated into the Local Plan, there will be no adverse effect on the integrity of the Pagham Harbour SPA as a result of potential impacts on foraging brent geese from the allocation sites.'

- 4.29 The Applicant's ecologist (FPCR, 2017) includes the following commentary on this issue.

'Seven wintering/SPA bird surveys were undertaken during 2015/16 (October - March) where no SPA / Ramsar species, including dark-bellied brent geese, were recorded.'

The records of brent geese are from "Sefter Farm" and relate to low resolution records within the 1km grid square SZ8999. The geolocated position on the road junction relates only to the centre of the grid square. While it is still not possible to fully rule out that these records were from the application site, it does seem more plausible that they relate to habitat on Sefter Farm north of Pagham Road which is geographically more connected with Pagham Rife and open countryside. Other local records suggest Sefter Farm to the north is regularly bird watched adding weight to the likelihood the records were from this area.'

A 2km SBRC search of brent geese returned a total of 562 records. Few records fell outside the SPA/Ramsar itself or land immediately adjacent (see Figure 7 for record locations). Only three records fell within the Tetrad that includes the application site'

– the two Sefter Farm records already mentioned and a count of 1000 at Bognor Nyetimber in 2008.

It is reasonable to state that if brent geese were to regularly use the application site, given its accessible and viewable location, their presence would be conspicuous and it would be expected that there would have been records submitted to the local records office.

Brent geese tend not to use supporting habitat far from their favoured coast or tidal estuary / river areas. Their preferred habitat once eel grass beds have been depleted tends to be grazing marsh and winter wheat crops close to tidal estuaries in open areas with low disturbance.

Only the last three winters land use is known (including this coming winter) on the application site and no winter wheat crop has been sown. The lack of food source and distance from their main habitat closer to the harbour are likely to be the main reasons for lack of suitability.

The application site offers little potential as supporting habitat and is atypical for brent geese. It is considered extremely unlikely based on historical records, the seven wintering bird survey visits and the lack of suitable habitat on the application site that the application site is supporting habitat for dark-bellied brent geese associated with Pagham Harbour SPA/Ramsar’.

- 4.30 The Applicant’s ecologist (FPCR, 2017) concludes there will not be a LSE alone, or in combination with other plans and projects.

NE’s response on potential loss of functionally linked habitat

- 4.31 In their consultation response on the application dated 10 March 2017, NE stated:

‘Dark-bellied Brent Geese forage within, and on land near to, Pagham Harbour SPA/Ramsar site. Where the geese regularly forage on land outside the SPA/Ramsar site, this land may be considered functionally linked to the SPA/Ramsar by providing supporting habitat. Its loss should, therefore, be considered in any in combination assessment of impacts under the Habitats Regulations.

A wintering bird survey was carried out in 2015/16 to assess the use of the application site by brent geese. The survey did not record any brent geese using the application site, though the Ecological Appraisal states that the application site has been planted with maize in the last three years, which is not a favoured crop for foraging.

The Ecological Appraisal identifies two historic records of brent geese recorded in the same 1km grid square as the application (table 22: counts of 17 and 150 brent geese at Sefter Farm in 2002/03). However, Natural England agrees with the conclusion of the Ecological Appraisal, that these records are more likely to be associated with the fields to the north of the application site (Sefter Farm) than the application site.

Therefore, NE is satisfied that the application site is not likely to be regularly used functionally linked habitat for brent geese. This, and the availability of other agricultural land nearer the SPA, led NE to conclude that the proposal would not lead to a likely significant effect through loss of supporting habitat.'

The applicants further report on Brent Geese

- 4.32 The Applicant's ecologist's Brent Goose Assessment report (FPCR, 2018) responds specifically to the requirements in Policy ENV DM2 of the newly adopted Local Plan. It presents a summary of all the wintering bird survey work done on the site, including new information from vantage point surveys conducted in 2017/18, the previous 2015/16 survey, and also makes reference to the Petra Billings report (2017).
- 4.33 It states that '*No Brent Geese were recorded on site, flying over the site or near the site, during the 2015/16 or the 2017/18 surveys*'.
- 4.34 The report includes a discussion of the existing records of Brent Geese, building on the previous remarks to also counter comments from the Petra Billings report. They argue that there is not any regular use if any.
- 4.35 The report also sets out cropping regimes for the past five years and includes a site assessment. It identifies that no winter wheat crops or any other crop typically associated with Brent Geese has been planted over the last five years. The location far from the harbour and close to urban areas at Bognor and Pagham, is considered less attractive than open land to the north of the harbour.
- 4.36 The report concludes that '*there is no evidence that the Application Site is regularly used by Brent Geese either from the fourteen formal wintering bird survey visits undertaken by FPCR, the historic consultation records or from anecdotal records from local residents. The Application Site does not regularly support suitable winter wheat crops nor does the site appear to be suitable in terms of its geographical location in relation to the SPA*'.

EPR's Screening Conclusion

- 4.37 There is compelling evidence, particularly in the recent work reported in PELP 33a and **Map 2** of this report that Dark-bellied Brent Geese are unlikely to use land within or adjacent to the application site to the extent that it can be considered to be 'regularly used functionally linked habitat for Brent Geese'.
- 4.38 Natural England agreed with this view in their consultation response to the application and advised that, in view of this and the fact that other agricultural land is available nearer the SPA, the proposal would not lead to a LSE through loss of supporting habitat.
- 4.39 When considering combined impacts with other plans and projects, the proposed loss of agricultural land closer to the SPA to the allocated development at Pagham South is of relevance. However, this is considered in the relevant ALP HRA documents (PELP 33a and PELP 33b) that informed the ALP EiP. This concluded the habitat at Pagham South was not '*regularly used functionally linked habitat for Brent Geese*' either and so its loss would not result in a LSE. Given that the land North of Hook Lane appears to be unsuitable for these birds, its loss will not contribute to a LSE in combination with the loss of Pagham South.

- 4.40 In summary, habitat impacts arising from the proposed development will not have the potential for a LSE on the Pagham Harbour SPA/Ramsar, either alone or in combination with other plans and projects.

Water Pollution

- 4.41 The ALP HRA *Screening Report* (UEEC, 2016b) discussed the relevance and constraints associated with the Pagham wastewater treatment works (WWTW). The potential for foul water pollution impacts on Pagham Harbour SPA/Ramsar from the Pagham North allocation were summarised as being '*currently unclear how much headroom capacity is available at Pagham WWTW*'. The screening conclusion was '*Unlikely to significantly affect the SPA/Ramsar alone; effects in combination are possible*'.
- 4.42 With regard to water pollution impacts, the Applicant's ecologist sets out their case in their Ecology report (FPCR, 2017) as follows:

'[Surface] Water discharge levels on-site will be controlled and managed by additional drainage ditches, re-profiling and meandering of existing central ditch, and creation of attenuation including of waterbodies and a new channel along the western boundary.

The site is within the catchment of the Pagham treatment works and Southern Water has confirmed that there is sufficient capacity for this site (see WSP Drainage Assessment).

The Arun Local Plan HRA Stage 2 Screening (UE, 2016) states the Headroom Capacity of Pagham WWTW in combination with the following plans should be considered at the Appropriate Assessment stage:

- *Publication Arun Local Plan (October 2014), particularly Policy H SP1: Strategic Housing, Parish and Town Council Allocations;*
- *Chichester District Local Plan: Key Policies 2014-2029 (adopted);*
- *Chichester District Local Plan: Draft Site Allocation DPD (preferred approach); and*
- *Amended Pagham Draft Neighbourhood Plan (emerging).*

No strategic development locations within the Chichester Local Plan fall within the Pagham WWTW catchment. An application for 8 dwellings (16/01332/REM) is the only current Chichester District Council residential application within the catchment. The remaining plans are yet to be adopted and therefore not possible to consider in combination with the proposed development at present.

There would not presently be an in-combination effect on Pagham Harbour SPA / Ramsar as a result of water pollution due to the proposed development.

A Likely Significant Effect Alone: No. A Likely Significant Effect in Combination: No'

‘As Southern Water has confirmed that there is sufficient capacity for Pagham treatment works (please see WSP Drainage Assessment), and as there is presently not likely to be a significant in combination effect on Pagham Harbour SPA / Ramsar with existing adopted plans, it can be concluded there will be no significant effect on Pagham Harbour SPA / Ramsar alone or in combination as a result of the proposed development.’

NE's response on Water quality

- 4.43 In their consultation response on the application dated 10 March 2017, NE stated:

‘The Local Plan HRA Stage 3 report, identifies that development in this location has the potential to impact the water quality of Pagham Harbour SPA/Ramsar site. Pagham waste water treatment works (WWTW) serves the Pagham area, and discharges to Pagham Rife, which feeds into the SPA/Ramsar site.

The Flood Risk Assessment (January 2017) submitted with this application, states that Southern Water has indicated that there is sufficient capacity within the Pagham Waste Water Treatment Works to accommodate the site. Provided this is the case, and that there is no issue with capacity in combination with the other housing developments coming forward around Pagham, Natural England is satisfied that a likely significant effect in relation to water quality from foul sewerage can be ruled out.

The application site is hydrologically connected to Pagham Harbour SPA/Ramsar by the ditch network and Pagham Rife. Therefore, there is a risk that waterborne pollutants from the site could enter the SPA/Ramsar. The Flood Risk Assessment states that surface water drainage from the application site will be addressed by a Sustainable Drainage System (SuDS). Given the connection of the application site to the SPA/Ramsar, which is sensitive to pollution, NE would expect to see the SuDS include three treatment stages in the management train, for example, a swale, filter drain and pond.

NE recommends that a condition be included in any permission for the application, such that a detailed SuDS strategy is submitted for approval, which should include elements to address both water quality and volume of run-off.’

Memorandum of Understanding on sewerage capacity

- 4.44 A Memorandum of Understanding on sewerage capacity (and treatment), between ADC and Southern Water Services (SWS), dated September 2017, was prepared for the ALP EiP. This set out the areas of common ground in respect of the delivery of sewerage and drainage networks for foul water, relating to locations identified for allocation in the ALP area.

- 4.45 Of relevance to this planning application was the following area of agreement:

‘With respect to capacities of the waste water treatment works in the District, impacts to water quality and expected phasing and timings, the parties agree that:

1. *Environmental permits at Pagham wastewater treatment works (WWTW) are sufficient to accommodate growth proposed in Policy SD1 of the Arun Local Plan (2011-20231), whilst continuing to ensure water quality objectives in Pagham Harbour are met.'*

4.46 It was further stated that:

'As mentioned under the background section, potential capacity and water quality at Pagham Harbour was raised through work connected with the updated Appropriate Assessment. Information provided by the Environment Agency identified that the microalgae status of the Harbour is classed as borderline for the Water Framework Directive. Though the contribution from the treatment works is small, if flows were to go over that consented then it may be considered significant.'

In March 2017, SWS produced a table (SEDP4) showing the preferred drainage options for the strategic locations. On the basis, it is expected that only the 400 at Pagham South (SD1) connect to Pagham WWTW, in line with the preferred option, this would only take capacity to the existing permit level and so it would not be expected to impact water quality at Pagham Harbour.'

4.47 Further areas of agreement for other allocations were as follows:

2. *'Sufficient capacity can be delivered in the overall sewerage network in line with the intended phasing of the BEW site.'*

3. *Any requirement for an extension at the Ford treatment works would be triggered by the rate and scale of housing delivery within the catchment over the plan period.'*

There is existing capacity at the Ford WWTW and some additional capacity may be gained through less obvious actions. It is acknowledged by the statutory bodies that an extension to this treatment works may be required towards the end of the Plan period, as recognised in the IDP {PEDP5}, however this is dependent upon housing delivery rates throughout the Plan period. Currently it is expected that this could be achieved against the expected timings of the housing trajectory'.

ALP EiP Inspector's report

4.48 The ALP EiP Inspector's report (July 2018) covers the issue of foul water treatment in the consideration of the ALP and suggests modifications to address the issues surrounding in combination effects arising from the Policy SD 1, 2 and 3 developments at Bognor Regis due to lack of capacity at Pagham WWTW and the issue with diversion to other WWTW in the catchment at Lidsey and Ford.

4.49 At paragraph 137, the Inspector states:

'There is limited capacity and there are permit limitations at Pagham Waste Water Treatment Works (WWTW) so most foul drainage would need to go to Lidsey or Ford WWTW.'

4.50 And at paragraph 164, the Inspector states:

'Lidsey WWTW has limited capacity so would only be able to serve early phases of the development [at BEW]. Later stages would be served by a new connection to Ford WWTW which has spare capacity to serve development and potential to be upgraded during the lifetime of the LP.'

4.51 At Paragraph 210, the Inspector states:

'The HIS and IDP both indicate that waste water is currently a significant constraint to housing, particularly because of the limited capacity at Lidsey WWTW. However, there is capacity at Ford which could be used as an alternative to Lidsey. Moreover, capacity issues are capable of being addressed during the LP period so that proposed development can be accommodated. Upgrades to both Lidsey and Ford WWTW are shown within the IDP. Joint funding by Southern Water and developers would be likely. To be effective the LP should highlight the critical nature of such infrastructure which would be achieved by MM58 and MM65.'

ALP Policy on Water

4.52 In Section 18 - Water of the ALP, a review is included of the current situation with regard to the existing sewerage and drainage network and water resource availability in the District to understand existing pressures upon the quality of the District's water environment. In terms of the existing sewerage and drainage network, it states the following:

'Public wastewater networks and treatment facilities are the responsibility of Southern Water throughout the whole of Arun District. Southern Water have indicated that there is little spare capacity in the foul water network and pumping mains to the Waste Water Treatment Works (WWTW) serving the District at Ford, Lidsey and Pagham. Upgrading will therefore be required by developers, through existing arrangements under the Water Industry Act, in line with network modelling of site specific requirements. Local improvements are considered likely and new pumping mains to the appropriate WWTW may also be required to ensure that the sewerage network can cope with increased use.'

Southern Water Commitment

4.53 In an email from Charlotte Mayall of 16 August 2018, Southern Water sets out its proposed approach to ensure that critical infrastructure is delivered when necessary:

'Further to our conversation earlier this week, I've now spoken with Paul Kent regarding the planning applications on SD1 and SD2. He informed me that regardless of the developer's intentions, it will be Southern Water's ultimate decision as to which WTW catchment new development connects to (most likely to be Ford in the case of development within the SD2 allocation).

With regard to network capacity (ie, sewerage pipes), once contacted either by a developer or consulted on a planning application by a local authority, Southern Water will carry out an initial assessment and where a capacity constraint is identified, Developer Services will offer the following advice:

Southern Water has undertaken a desk study of the impact that the additional foul sewerage flows from the proposed development will have on the existing public sewer network. This initial study indicates that there is an increased risk of flooding unless any required network reinforcement is provided by Southern Water. Any such network reinforcement will be part funded through the New Infrastructure Charge with the remainder funded through Southern Water's Capital Works programme.

Southern Water and the Developer will need to work together in order to review if the delivery of our network reinforcement aligns with the proposed occupation of the development, as it will take time to design and deliver any such reinforcement. It may be possible for some initial dwellings to connect pending network reinforcement. Southern Water will review and advise on this following consideration of the development program and the extent of network reinforcement required.

Southern Water will carry out detailed network modelling as part of this review which may require existing flows to be monitored. This will enable us to establish the extent of works required (If any) and to design such works in the most economic manner to satisfy the needs of existing and future customers.

Our assessment of the timescales needed to deliver network reinforcement will consider an allowance for the following:

- Initial feasibility, detail modelling and preliminary estimates.*
- Flow monitoring (If required)*
- Detail design, including land negotiations.*
- Construction.*

The overall time required depends on the complexity of any scheme needed to provide network reinforcement. Southern Water will seek however to limit the timescales to a maximum of 24 months from a firm commitment by the developer to commence construction on site and provided that Planning approval has been granted.

We then request the following condition in any planning consent:

"Occupation of the development is to be phased and implemented to align with the delivery by Southern Water of any sewerage network reinforcement required to ensure that adequate waste water network capacity is available to adequately drain the development"

The aim of the above condition is to allow Southern Water sufficient time to put the necessary infrastructure in place, to a maximum of 24 months (as underlined above). Southern Water is unable to prevent developers from connecting to its sewer network prior to any essential upgrades being carried out, which could lead to foul flooding. This is why we look to local authorities to ensure through policies and conditions that development is phased to align with the delivery of the infrastructure required to serve it.'

EPR's Screening Conclusion

- 4.54 A potential issue with capacity at the Pagham WWTW was identified in the ALP HRA *Screening Report*. Although the applicant has had confirmation from the relevant water supplier (Southern Water) that there is sufficient capacity to accommodate this site and so avoid a LSE when considered alone, when other allocated residential schemes which also rely on this WWTW are taken into account in combination effects on Pagham Harbour could arise should capacity be exceeded.
- 4.55 NE advised that, subject to there being sufficient capacity in combination with other new developments, it is satisfied that there will be no LSE from water quality impacts.
- 4.56 The ALP includes a Policy to ensure wastewater treatment facilities and networks are upgraded in step with proposed development, making it clear that this responsibility falls to Southern Water and developers.
- 4.57 Southern Water has confirmed to ADC its approach to providing adequate capacity in terms of each planning application, although it requires compliance with a proposed planning condition to ensure relevant developments are delivered in phases which are in step with the upgrading programme for Pagham and Ford WWTWs.
- 4.58 Since there is a requirement for compliance with a planning condition which could be considered mitigation it is not possible to screen out a LSE at the screening stage when considering the proposed development in combination with other projects.
- 4.59 In summary, water pollution impacts arising from the proposed development will not trigger a LSE on the Pagham Harbour SPA/Ramsar alone, but there is potential for a LSE on the SPA/Ramsar in combination with other plans and projects. This is considered in detail in the AA in **Section 5**.

Screening Conclusion

- 4.60 The screening of the project is summarised in **Table 4.1** below.

Table 4.1: Summary of HRA Screening

Receptor	Unmitigated Impact	LSE alone	LSE in-combination	AA required
Pagham Harbour SPA / Ramsar (qualifying features)	Disturbance of birds	No	Yes	Yes
	Effects on supporting habitat	No	No	No
	Water pollution	No	Yes	Yes

- 4.61 As it is presently not acceptable to take mitigation and avoidance measures into account at the Screening stage, in combination with other plans or projects the proposal could result in a LSE on the internationally important features of the International Sites. As a consequence, the proposal's contribution to disturbance of the SPA must be subject to an 'Appropriate Assessment' (Stage 2 of the HRA). This is presented in **Section 5**. The other potential issues have been screened out.

5. APPROPRIATE ASSESSMENT

Introduction

- 5.1 This section presents the Appropriate Assessment. It makes reference to: the ALP HRA Stage 3 report - *Appropriate Assessment*; to the HRA information provided by the applicant's ecologist; and to consultation responses from NE. This information is reviewed to determine whether there will be an adverse effect on the integrity of the International Site.

Local Plan HRA

- 5.2 The ALP HRA *Appropriate Assessment* report (UEEC, 2017a) sets out details of the qualifying features, conservation objectives, condition status, populations trends and threats to site integrity for Pagham Harbour SPA/Ramsar.
- 5.3 For each threat it then considers the impact pathways, and impacts, mitigation and adverse effects on site integrity.
- 5.4 The information relevant to the disturbance threats being considered for this planning application are set out below.

Impact Pathways: Disturbance

Introduction

- 5.5 The ALP HRA *Appropriate Assessment* report (UE, 2017a) considers the impact pathway of 'direct' and in combination effects of disturbance on Pagham Harbour SPA/Ramsar site. A summary is included here for context behind the issue and the means of mitigating it.
- 5.6 Population growth associated with residential development brings with it the prospect of additional visitor pressure on International Sites. There is potential for adverse effects on International Sites, in particular those designated for an internationally important bird assemblage, as at Pagham Harbour.
- 5.7 Impacts associated with disturbance of birds from recreation can lead to behavioural or physiological responses, with possible effects on survival and breeding success due to reduced feeding time and additional flights. Disturbance can be caused by a variety of activities, including walkers, dogs, boats, bait diggers, and the distance and scale will influence the response.
- 5.8 Pagham Harbour SPA/Ramsar is important for supporting both overwintering birds (waders and wildfowl) and breeding birds (terns) and disturbance impacts differ for these groups. Wintering birds are vulnerable to interruption to foraging and roosting, breeding birds to predation or trampling of nests.

Visitor Surveys

- 5.9 Two visitor surveys have been carried out at Pagham Harbour (in 2006 and 2012) to obtain site baseline data on recreation behaviour. The analysis of postcode data, using a method agreed with Natural England, aimed to establish the distance travelled by visitors to Pagham Harbour SPA/Ramsar. The result was the majority of visitors travelled from within 5km to reach the site.

- 5.10 A 5km avoidance and mitigation zone around Pagham Harbour SPA/Ramsar was therefore adopted.

Proposed Residential Allocations within 5km of Pagham Harbour

- 5.11 The ALP allocates at least 4,180 dwellings within 5km of Pagham Harbour SPA/Ramsar (including 800 dwellings at Pagham North). In the absence of avoidance and /or mitigation measures, this level of residential development is likely to increase the number of regular visitors to the SPA/Ramsar. The resultant increase in disturbance from people and dogs is likely to adversely affect populations of breeding terns (by reducing breeding success) and overwintering Brent goose, black-tailed godwit, ruff and pintail (by reducing winter survival rates), thereby undermining the integrity of the SPA/Ramsar.

In Combination Effects

- 5.12 The ALP HRA identified those plans and projects which are likely to act in combination with the ALP by contributing to disturbance impacts. Each plan and project will need to avoid or mitigate its respective contribution. ALP and Chichester District Council (CDC) have agreed a Joint Interim Strategic Mitigation Policy.

Impact Avoidance and Mitigation

- 5.13 The ALP HRA describes how avoidance and mitigation measures were incorporated into Local Plan policy ENV DM2 (see **Section 3** of this report). This policy requires new development resulting in a net increase in dwellings within 5km of Pagham Harbour SPA/Ramsar to make financial contributions towards a Strategic Access Management and Monitoring (SAMM) package and provide for accessible natural greenspace on site.
- 5.14 An interim strategic framework and tariff based system for collecting contributions to the SAMM package was agreed between ADC, CDC, NE and RSPB in 2015. The tariff was set at £1,275 per additional dwelling and funds projects within the following areas:
- Wardening and visitor management;
 - Dog projects, including provision of information e.g. codes of conduct;
 - Interpretation and signage; and
 - Monitoring.
- 5.15 The Proposed Modifications to the ALP required adjustment of wardening time from 0.5 to 1.5 full-time equivalent. However, in view of the increase in house numbers the tariff reduced per net additional dwelling.

Impact Pathways: Water Pollution

Introduction

- 5.16 The ALP HRA *Appropriate Assessment* report (UEEC, 2017a) considers the impact pathway of direct and in combination effects of water pollution on Pagham Harbour SPA/Ramsar.

- 5.17 Southern Water is the water company with responsibility for waste water treatment in Arun district. The ability of Waste Water Treatment Works to receive foul water is limited both by conveyance infrastructure capacity and technological capability to treat waste water to the quality standard required for safe release into aquatic and marine environments. Nutrient enrichment and in particular nitrogen pollution can arise from wastewater treatment required in support of planned development. The Environment agency has identified the effects of nutrient enrichment in the form of dense macroalgal mats occurring in the intertidal zone, which increase biological oxygen demand and reduces dissolved oxygen content. This in turn reduces the diversity and abundance of intertidal invertebrates (wader prey) and the productivity of sea-grass beds (Brent Goose forage).

Evidence of Current or Future Impacts

- 5.18 Pagham WWTW discharges to Pagham Rife which subsequently flows into Pagham Harbour SPA/Ramsar. This is only a small part of the overall source of inputs.
- 5.19 Borderline issues with water quality are currently identified by the Environment Agency who monitor Pagham Harbour under the Water Framework Directive.
- 5.20 With planned residential developments in the Pagham WWTW catchment exceeding estimated headroom by 779 dwellings over the Local Plan period, it is not possible to rule out the risk of a significant deterioration in water quality and increased macroalgal growth. This would threaten the winter survival rates of Brent Goose, Black-tailed Godwit, Ruff and Pintail by reducing food availability, thereby undermining the integrity of Pagham Harbour SPA/Ramsar.
- 5.21 Southern Water is the statutory sewerage undertaker and has an obligation to find solutions and provide infrastructure to serve new development, and were consulted on the HRA. In the absence of plans to upgrade the treatment infrastructure at Pagham WWTW, the HRA author's recommended that ALP policies are amended to require flows from residential development which exceed the available headroom to be transferred to an alternative discharge location.

Local Plan HRA: Impact Assessment

- 5.22 The ALP HRA *Appropriate Assessment* report (UEEC, 2017a) describes the impact assessment process, using the conservation objectives and ecological data for each International Site and considering the impact pathways, in light of the ALP (Proposed Modifications) incorporated mitigation measures.

Disturbance

- 5.23 The source of the potential disturbance impact is derived from ALP policies H SP1: Spatial Development Strategy and H SP2a: Strategic Site Allocations. The assessment of impacts on the Pagham Harbour SPA/Ramsar conservation objectives are set out in a table at para 6.3.1 of the ALP HRA report. A summary follows:

The extent and distribution of the habitats of the qualifying features

The increase in disturbance triggered by the ALP is unlikely to alter the extent and distribution of the habitats of the breeding and overwintering bird populations.

The structure and function of the habitats of the qualifying features

Increased disturbance does have the potential to alter the structure and function of the habitats of the breeding and overwintering bird populations...The impact is very likely to act in combination with other plans and projects...The risk of adverse effects on integrity is high...Counteracting measures devised in consultation with Natural England have been incorporated in the ALP and are considered likely to effectively avoid and mitigate the impact.

The supporting processes on which the habitats of the qualifying features rely

Increased disturbance is unlikely to significantly undermine the supporting processes on which the habitats of the Pagham Harbour SPA/Ramsar bird populations rely.

The population of each of the qualifying features

The breeding tern population could potentially be reduced via increased predation of eggs, trampling and thermal stress, leading to reduced breeding success as a result of increased disturbance...Impact likely to be high and very likely to act in combination with other plans and projects. Overwintering bird populations could potentially be reduced due to a fall in winter survival rates as a result of increased disturbance...Magnitude likely to be significant and very likely to act in combination with other plans and projects. Counteracting measures have been incorporated in the ALP and are considered likely to effectively avoid and mitigate the impact.

The distribution of the qualifying features within the site

- 5.24 The distribution of bird populations is likely to be altered as birds are displaced in response to increased disturbance...The impact is very likely to act in combination with other plans and projects. Counteracting measures have been incorporated in the ALP and are considered likely to effectively avoid and mitigate the impact.

Water Pollution

- 5.25 In terms of the ALP, the source of the potential water pollution impact is derived from ALP policies H SP1: Spatial Development Strategy and H SP2a: Strategic Site Allocations. The ALP HRA includes the following statements.

The extent and distribution of the habitats of the qualifying features

- 5.26 The ALP is unlikely to alter the extent and distribution of the habitats of the breeding and overwintering bird populations as a result of increased disturbance.

The structure and function of the habitats of the qualifying features

- 5.27 The ALP has the potential to alter the structure and function of the habitats of the breeding and overwintering bird populations as a result of water pollution. Strategic allocations at Pagham South and Pagham North collectively exceed the available headroom in sewerage treatment capacity at Pagham WWTW by 604 dwellings, when considered in combination with other plans and projects the exceedance rises to 779 dwellings.
- 5.28 Increased demand for sewerage connections to Pagham WWTW could result in nutrient enrichment within the SPA/Ramsar leading to dense macroalgal mats in the intertidal zone; these increase biological oxygen demand, and reduce dissolved oxygen content, the diversity and abundance of intertidal invertebrates (wader prey) and the productivity of sea-grass beds (Brent goose forage).

- 5.29 The magnitude of the impact is likely to be relatively minor given that Pagham WWTW contributes around 6% of the total nitrogen load; Sidlesham STW contributes 19%, 50% is from offshore waters and the remainder from riverine diffuse sources. However, the risk of adverse effects on integrity cannot be ruled out on the basis of objective information.
- 5.30 Impacts are not predicted for the breeding tern populations of the SPA.
- 5.31 However, counteracting measures were devised in consultation with Natural England, have been incorporated into the plan, and are considered likely to effectively cancel the impact.

The supporting processes on which the habitats of the qualifying features rely

- 5.32 The ALP is unlikely to significantly undermine the supporting processes on which the habitats of the Pagham Harbour SPA/Ramsar overwintering bird populations rely, for the reasons stated above.
- 5.33 However, counteracting measures have been incorporated into the plan and are considered likely to effectively cancel the impact.

The population of each of the qualifying features

- 5.34 The Pagham Harbour SPA/Ramsar overwintering bird populations could potentially be reduced due to a fall in winter survival rates as a result of decreased food availability. Counteracting measures have been incorporated in the ALP and are considered likely to effectively avoid and mitigate the impact.

The distribution of the qualifying features within the site

- 5.35 The ALP could potentially alter the distribution of overwintering bird populations within the site as they search more widely for available food sources. Counteracting measures have been incorporated in the ALP and are considered likely to effectively avoid and mitigate the impact.

Local Plan HRA: Determining Adverse Effects on Integrity

- 5.36 The Local Plan HRA (2017) considers each aspect contributing to site integrity based on Natural England guidance from 2004.

Has the Appropriate Assessment shown:	Y/N
That the area of habitats of qualifying features will not be reduced?	Yes
That there will be no direct effect on the populations of the species for which the site was designated or classified?	Yes
That there will be no indirect effects on the populations of species for which the site was designated or classified due to loss or degradation of their habitat (quantity/quality)?	Yes
That there will be no changes to the composition of the habitats for which the site was designated (e.g. reduction in species structure, abundance or diversity that comprises the habitat over time)?	Yes
That there will be no interruption or degradation of the physical, chemical or biological processes that support habitats and species for which the site was designated or classified?	Yes

- 5.37 It concludes, having considered each aspect contributing to site integrity with respect to Pagham Harbour SPA/Ramsar that there will be no adverse effects on the integrity of Pagham Harbour SPA/Ramsar. And the Arun Local Plan can be considered compliant with the Habitats Regulations in this respect. Since the People over Wind finding, further information has been supplied by the Applicant to support this conclusion.

Applicant's Impact Avoidance and Mitigation Strategy

- 5.38 This section sets out the impact avoidance and mitigation measures proposed by the Applicant to ensure that the proposals will not give rise to an adverse effect on integrity of Pagham Harbour SPA/Ramsar. [NB. As stated in **Section 4**, the information below was originally included by the applicant's ecologist at the screening stage of the HRA but is now used here as part of the AA stage.]

Mitigation measures for recreational impacts to Pagham Harbour SPA/Ramsar birds

- 5.39 The Applicant's ecologist proposes the following avoidance and mitigation measures in their ecology report (FPCR, 2017).
- Recreation disturbance impacts – Open space provision. Payment of a strategic access management and monitoring (SAMM) tariff and provision of suitable greenspace within the development.

- 5.40 The Applicant's ecologist (FPCR, 2017) states:

'Natural England, together with Arun and Chichester District Councils have developed a joint interim scheme of mitigation for increased recreational pressure resulting from residential development in the area. The mitigation will include a package of on and off-site measures including in-perpetuity wardening, delivery of access management, education and interpretation, signage and monitoring.

Natural England have advised that this development should: "demonstrably fall within the agreed strategic approach and provide adequate contributions towards this strategy'.

Also that, '6.65ha of green infrastructure will provide two large areas of open space to the north-west of the site and one smaller area to the south, some of which will be fenced off allowing for areas of 'off lead' activities for dogs'.

- 5.41 The ecologist (FPCR, 2017) includes additional information in a table as follows:

'A financial contribution of £1,275.00 per unit is to be made. 6.65ha of suitable on-site green space provision that provides circular walking and dog exercise areas for residents. Located in the North West of the site will pull local residents away from the direction of the SPA/Ramsar.

Natural England's Response

- 5.42 Natural England agree with the policy and the mechanisms for its delivery (see consultation responses in **Appendix 1**). In summary, NE advised ADC that that when recording the HRA,

reference be made to the following information to justify the conclusions regarding the likelihood of significant effects.

- Appropriate financial contributions should be made to the Pagham Harbour strategic access and monitoring project. This will pay for strategic measure including wardening, a dog project, interpretation and monitoring.
- As long as the contributions are made to the new, scaled-up level of mitigation to account for the additional housing, a likely significant effect from increased recreational disturbance can be ruled out. [NB. This was pre-People over Wind).

5.43 NE note inclusion of 6.65 ha of greenspace with a walking route and dog exercise area, although consider green infrastructure measures on their own to be insufficient to avoid a likely significant effect from recreational disturbance to Pagham Harbour SPA/Ramsar. However, NE recognise that attractive greenspace within the development site, which allows dog owners to let their dogs off leads, may take some of the short daily dog walks away from the harbour. It would also allow the development to comply with policy ENV DM2 in the emerging ALP, which requires measures on- and off- the SPA.

EPR's View

5.44 The avoidance and mitigation strategy relied upon by the Applicant is considered to be robust to meet the tests set by consideration under Appropriate Assessment, providing any planning permission is conditional on the following requirements:

- Prior to the start of work on site Arun District Council shall agree in writing a 25 year management plan for the open space, setting out costed prescriptions for delivering appropriate public access and providing clear commitments from appropriately qualified operators to implement the prescriptions.
- Prior to the first occupation, a Arun District Council will sign a legal agreement obliging the applicant to secure appropriate ownership of the open space and to provide funds for the 25 year management plan.

5.45 The ALP Policy ENV DM2 is established policy following agreement by ADC, CDC, NE and RSPB in 2015 and was tested at the subsequent Local Plan EiP and can be delivered.

5.46 Other strategic impact avoidance and mitigation schemes which collect a financial contribution to pay for implementing mitigation and monitoring measures have been tried and tested successfully at other International Sites, for example the Thames Basin Heaths, Dorset Heaths and Solent Coast.

Water Pollution

EPR's View

5.47 Reliance on Southern Water has been tested through the EiP of the ALP and it is reasonable to rely on them to deliver effective mitigation.

5.48 In order to avoid water pollution effects, ADC will require any planning permission to be conditional on the following:

- Occupation of the development is to be phased and implemented to align with the delivery by Southern Water of any sewerage network reinforcement required to ensure that adequate waste water network capacity is available to adequately drain the development.

5.49 The detailed design of the drainage strategy will need to be agreed with the Environment Agency meaning there can be confidence in it being effective mitigation in order to avoid surface water pollution effects. ADC will require any planning permission to be conditional on submitting for approval a detailed drainage strategy, which should include elements to address both water quality and volume of run-off

HRA of Planning Application: Determining Adverse Effects on Integrity

5.50 Applying the approach in the ALP HRA AA for Pagham Harbour SPA/Ramsar:

Has the Appropriate Assessment shown:	Y/N
That the area of habitats of qualifying features will not be reduced?	Yes
That there will be no direct effect on the populations of the species for which the site was designated or classified?	Yes
That there will be no indirect effects on the populations of species for which the site was designated or classified due to loss or degradation of their habitat (quantity/quality)?	Yes
That there will be no changes to the composition of the habitats for which the site was designated (e.g. reduction in species structure, abundance or diversity that comprises the habitat over time)?	Yes
That there will be no interruption or degradation of the physical, chemical or biological processes that support habitats and species for which the site was designated or classified?	Yes

EPR's Conclusion

5.51 As a consequence, the proposed mitigation measures are considered to be suitable and ADC can be confident that they will avoid or mitigate an adverse effect on the integrity of Pagham Harbour SPA/Ramsar, alone or in-combination with other plans and projects.

6. DELIVERY MECHANISMS

Introduction

- 6.1 This section sets out the mechanisms for securing the delivery of the mitigation measures described in **Section 5**, such that ADC can be assured that the development will not give rise to an adverse effect on the integrity of Pagham Harbour SPA/Ramsar.

Recreational Impacts

- 6.2 To mitigate adverse effects through recreational pressure on Pagham Harbour SPA/Ramsar in combination with other residential proposals in the area, Natural England advised that an appropriate contribution should be made to the strategic approach to access management at Pagham Harbour, and that an appropriate planning condition or obligation is attached to any planning permission to secure this measure.
- 6.3 ADC will require *Payment of a strategic access management and monitoring (SAMM) tariff and provision of suitable greenspace within the development*, to be secured through Section 106 and planning condition.
- 6.4 ADC will also require any planning permission to be conditional on the following:
- Prior to the start of work on site Arun District Council shall agree in writing a 25 year management plan for the open space, setting out costed prescriptions for delivering appropriate public access and providing clear commitments from appropriately qualified operators to implement the prescriptions.
 - Prior to the first occupation, Arun District Council will sign a legal agreement obliging the applicant to secure appropriate ownership of the open space and to provide funds for the 25 year management plan.

Water Pollution

- 6.5 In order to ensure avoidance of any potential water pollution effects from foul water or surface water, ADC will require any planning permission to be conditional on the following:
- Occupation of the development is to be phased and implemented to align with the delivery by Southern Water of any sewerage network reinforcement required to ensure that adequate waste water network capacity is available to adequately drain the development.
 - That a detailed drainage strategy is submitted for approval, which should include elements to address both water quality and volume of run-off.

7. RESIDUAL IMPACTS AND CONCLUSIONS

Introduction

- 7.1 This section sets out a summary of the assessment presented in **Sections 4 to 5** of this document to identify any residual impacts. A conclusion is then drawn in the context of the HRA process.

Assessment Summary and Residual Impacts

- 7.2 **Table 7.1** provides a summary of this process.

Table 7.1: Summary of the Assessment and Residual Impacts

Receptor	Unmitigated Impact	Significance	Mitigation	Residual Impacts
Pagham Harbour SPA/Ramsar (qualifying features)	Disturbance of birds	LSE in combination	SAMM contribution. Onsite 'suitable greenspace' provision	None
	Effects on supporting habitat	No LSE	n/a	None
	Water pollution	No LSE	n/a	None

- 7.3 ADC can therefore be satisfied that, providing that the mitigation measures described in **Section 5** are successfully agreed, secured and implemented, the proposals will not give rise to an adverse effect on the integrity of Pagham Harbour SPA/Ramsar, and the development therefore passes the Appropriate Assessment test of the Habitats Regulations.
- 7.4 Natural England (responses dated 10 and 27 March 2017) (**Appendix 1**) advised that '*provided appropriate financial contributions are secured for strategic mitigation, a likely significant effect [on Pagham Harbour SPA/Ramsar site] can be avoided, and can therefore be screened out from any requirement for further assessment*'.
- 7.5 Whilst the ECJ ruling following the POW case came after NE's response, with a requirement for mitigation measures to be considered only as part of AA rather than at the screening stage, the information presented in **Section 5** should be regarded as being suitably robust to conclude no adverse effect on the integrity of Pagham Harbour SPA/Ramsar.

Conclusions

- 7.6 ADC can conclude that, providing the avoidance and mitigation measures described in **Section 5** and **6** are successfully agreed, secured and implemented, the proposals will accord with the impact avoidance and mitigation strategy set out in the Arun Local Plan Policy ENV DM2 and so there will be no adverse effect on the integrity of Pagham Harbour SPA/Ramsar. The development therefore passes the HRA screening and AA tests and can proceed.

8. REFERENCES

Arun District Council (2018) Arun Local Plan. Adopted 18 July 2018.

Department for Communities and Local Government (DCLG) (2012) *National Planning Policy Framework*. DCLG London.

Environment Agency (2013) Adur & Ouse Abstraction Licensing Strategy.

European Commission (2000a) *Communication from the Commission on the Precautionary Principle*.

European Commission (2000b) *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*

FPCR (2017) Hook Lane, Pagham: Ecological Appraisal. (FPCR Environment and Design Ltd, January 2017).

FPCR (2018) Land West of Hook Lane, Pagham, West Sussex: Pagham Harbour SPA: Brent Goose Assessment. (FPCR Environment and Design Ltd, August 2018).

Natural England (2017) PELP33b. Natural England Response to Inspector's Interim Findings.

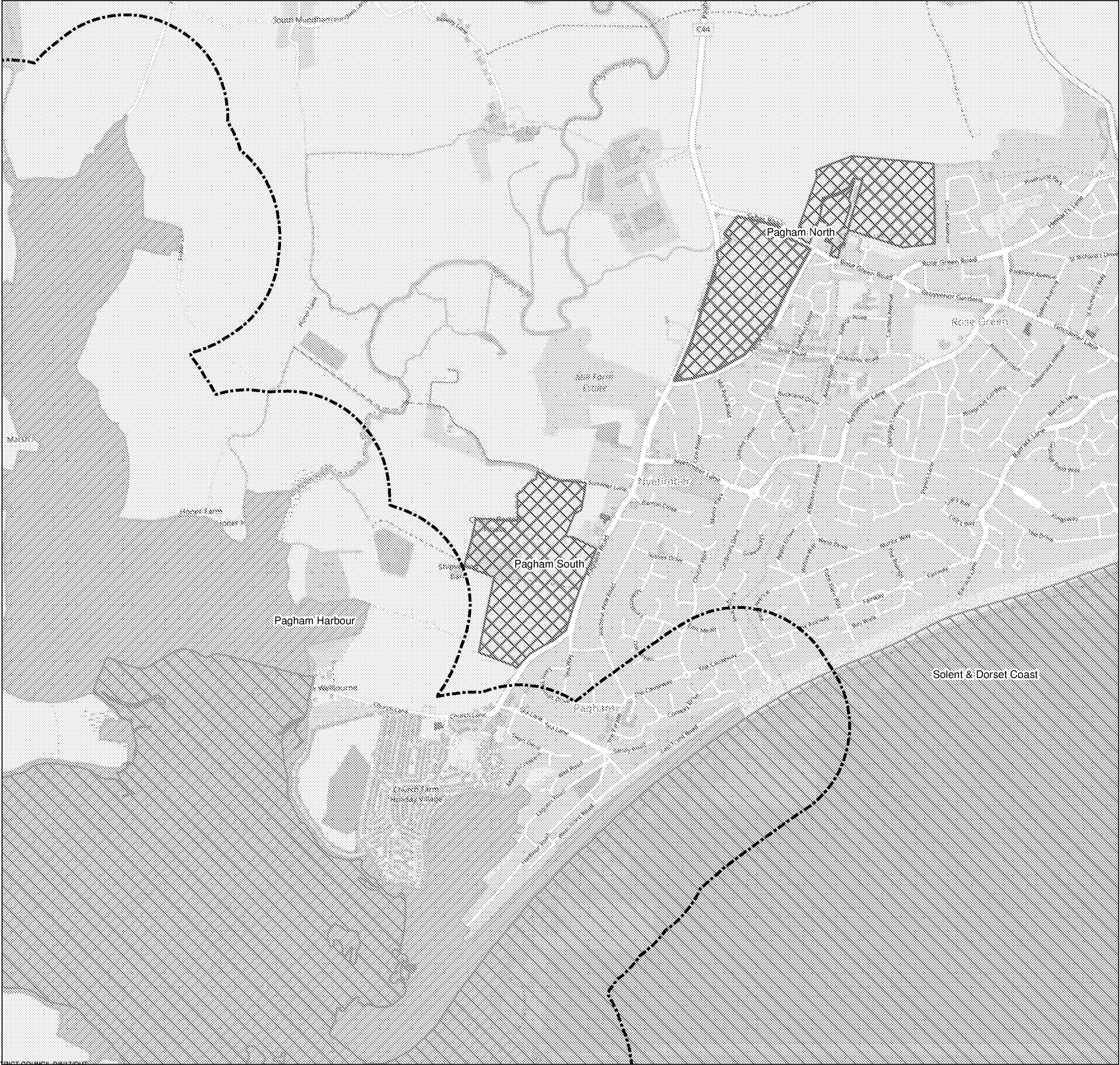
Petra Billings (2017) Report on Ecological Appraisals Presented in Support of Applications for Housing Development at Pagham, West Sussex. Petra Billings Woodland Consultancy Ltd. March 2017.

Urban Edge Environmental Consulting (2016a) Habitat Regulations Assessment for the Arun Local Plan: Supplementary Work. Stage 1 Report: Baseline Data for Site Evaluations. April 2016. PELP31.

Urban Edge Environmental Consulting (2016b) Habitat Regulations Assessment for the Arun Local Plan: Supplementary Work. Stage 2 Report: Screening for Likely Significant Effects. June 2016. PELP32.

Urban Edge Environmental Consulting (2017a) Habitat Regulations Assessment for the Arun Local Plan: Supplementary Work. Stage 3 Report: Appropriate Assessment. February 2017. PELP33.

Urban Edge Environmental Consulting (2017b) Habitat Regulations Assessment for the Arun Local Plan. Analysis of new overwintering bird data and its implications for the conclusions of the HRA. September 2017. PELP33a.



MAP 1 Site Location

KEY

- P/6/17/OUT
- Strategic Housing Sites
- Special Protection Areas
- Pagham Harbour SPA 400m Buffer
- Potential Marine SPA
- Ramsar Sites

SCALE: 1:15,000 at A3

0 100 200 300 400 Metres



Ecological Planning & Research

CLIENT: Arun District Council

PROJECT: Pagham HRAs

DATE: July 2018

Y:\Pagham_HRAs\03\Map1_P6/17/OUT_240718.mxd

Credits: © OpenStreetMap (and) contributors, CC-BY-SA

Arun Local Plan HRA

-  Special Protection Areas
 Ramsar Sites
 Pagham Harbour SPA 400m buffer

Brent Goose 1971-2015

- 0-28
- 28-90
- 90-194
- 194-385
- 385-750
- 750-1400
- 1400-3500

Black-tailed Godwit blog/birder records

- 70

Brent Goose blog/birder records

- 1600
- 2100
- 2500

Brent Goose PAGAM survey

- 1-999
- 1000+

0 0.3 0.6 Kilometers
© Contains data from Natural England 2016.
© Contains data from Sussex Biodiversity Record Centre 2016.
© Crown copyright and database right 2016.
Ordnance Survey licence number 100014387.

 Unit 5 Westergate Business Centre Brighton BN2 4QN	Scale 1:15,000	Date Sep 2017
	Created by EPR	Reviewed by EPR
	Drawing number UE-0194_APR_EPR_170917	

Figure 3: Extent of alternative land suitable for foraging Brent goose



Ecological Planning & Research

CLIENT: Arun District Council

PROJECT: Pagham HRAs

DATE: July 2018

Y:\Pagham HRAs\Map2 Brent Geese Records and Potential Habitat Extent y1802 050718.mxd

Appendix 1

Natural England Correspondence

Date: 10 March 2017
Our ref: 209911
Your ref: P/6/17/OUT



David Innes
Arun District Council
Maltravers Road
Littlehampton
West Sussex
BN17 5LF

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

BY EMAIL ONLY

Dear David

Planning consultation: Outline application with some matters reserved for construction of up to 300No. new homes, Care home of up to 80No. beds, D1uses of up to 4000sqm including a 2 form entry Primary School, formation of new means of access onto Hook Lane & Pagham Road, new pedestrian & cycle links, the laying out of open space, new strategic landscaping, habitat creation, drainage features & associated ground works & infrastructure.

Location: Land North of Hook Lane, Pagham

Thank you for allowing Natural England additional time to respond to the above application.

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.

Town and Country Planning (Development Management Procedure) (England) Order 2010
The Conservation of Habitats and Species Regulations 2010 (as amended)
The Wildlife and Countryside Act 1981 (as amended)¹

Internationally and nationally designated sites – no objection

The application site is in close proximity to the Pagham Harbour Special Protection Area (SPA) and Ramsar site, and therefore has the potential to affect their features. It is also notified at a national level as Pagham Harbour Site of Special Scientific Interest (SSSI). Please see the subsequent sections of this letter for our advice relating to SSSI features.

In considering the European site interest, Natural England advises that you, as a competent authority under the provisions of the Habitats Regulations, should have regard for any potential impacts that a plan or project may have². The Conservation objectives for each European site explain how the site should be restored and/or maintained and may be helpful in assessing what, if any, potential impacts a plan or project may have.

In advising your authority on the requirements relating to the Habitats Regulations Assessment, and to assist you in screening for the likelihood of significant effects, based upon the information provided, Natural England offers the following advice:

¹ This reply comprises our statutory consultation response under provisions of Article 20 of the Town and Country Planning (Development Management Procedure) (England) Order 2010, Regulation 61 (3) of the *Conservation of Habitats and Species Regulations 2010 (as amended)*, and Section 28(l) of the *Wildlife and Countryside Act 1981 (as amended)*.

² Requirements are set out within Regulations 61 and 62 of the Habitats Regulations, where a series of steps and tests are followed for plans or projects that could potentially affect a European site. The steps and tests set out within Regulations 61 and 62 are commonly referred to as the 'Habitats Regulations Assessment' process.

- The proposals are not necessary for the management of the European site;
- Natural England agrees with the conclusions of the Arun Local Plan HRA Stage 2³, in that development at this site could have a likely significant effect on Pagham Harbour SPA/Ramsar in combination with other housing development, in respect of recreational disturbance and water quality impacts.
- However, provided there is capacity at Pagham Waste Water Treatment Works (WwTW) and appropriate financial contributions are secured for strategic mitigation, a likely significant effect can be avoided, and can therefore be screened out from any requirement for further assessment.

When recording your Habitats Regulations Assessment, we recommend you refer to the following information to justify your conclusions regarding the likelihood of significant effects:

Mitigation measures for recreational disturbance to SPA birds

Appropriate financial contributions should be made to the Pagham Harbour strategic access management and monitoring project. This strategic approach to mitigating recreational disturbance resulting from new residential development around Pagham Harbour takes the form of a package of measures comprising wardening in perpetuity to encourage responsible use of the harbour; a dog project including website and events; contribution to signage and interpretation; and monitoring.

Additional housing to meet the district's objectively assessed need is being considered through the Local Plan process, and is assessed in the Arun Local Plan HRA Stage 3 report⁴. This report sets out (paragraph 5.2.27) the proposed scaled-up level of mitigation to address these increased housing numbers (including the housing proposed at the Hook Lane site). Therefore, Natural England is satisfied that provided contributions are made to the, scaled-up level of mitigation, a likely significant effect from increased recreational disturbance can be ruled out.

Natural England notes that 6.65ha of greenspace is provided, with a walking route and dog exercise area. Our view is that green infrastructure measures on their own are insufficient to avoid a likely significant effect from recreational disturbance to Pagham Harbour SPA/Ramsar site. However, attractive greenspace within the development site, which allows dog owners to let their dogs off leads, may take some of the short daily dog walks away from the harbour. It would also allow the development to comply with policy ENV DM2 in the emerging Arun Local Plan, which requires measures on- and off- the SPA.

Potential loss of functionally linked habitat

Dark-bellied brent geese forage within, and on land near to, Pagham Harbour SPA/Ramsar site. Where the geese regularly forage on land outside the SPA/Ramsar site, this land may be considered functionally linked to the SPA/Ramsar by providing supporting habitat. Its loss should, therefore, be considered in any in combination assessment of impacts under the Habitats Regulations.

A wintering bird survey was carried out in 2015/16 to assess the use of the application site by brent geese. This survey did not record any brent geese using the application site, though the Ecological Appraisal states that the application site has been planted with maize in the last three years, which is not a favoured crop for foraging.

The Ecological Appraisal identifies two historic records of brent geese recorded in the same 1km grid square as the application (table 22: counts of 17 and 150 brent geese at Sefter Farm in 2002/03). However, Natural England agrees with the conclusion of the Ecological Appraisal, that these records are more likely to be associated with the fields to the north of the application site (Sefter Farm) than the application site.

³ Urban Edge Environmental Consulting. June 2016. Habitats Regulations Assessment of the Arun Local Plan. Stage 2: Screening for Likely Significant Effects.

⁴ Urban Edge Environmental Consulting. February 2017. Habitats Regulations Assessment of the Arun Local Plan. Stage 3: Appropriate Assessment.

Therefore, Natural England is satisfied that the application site is not likely to be regularly used functionally linked habitat for brent geese. This, and the availability of other agricultural land nearer the SPA, lead us to conclude that the proposal would not lead to a likely significant effect through loss of supporting habitat.

Water quality

The Arun Local Plan HRA Stage 3 report, identifies that development in this location has the potential to impact the water quality of Pagham Harbour SPA/Ramsar site. Pagham waste water treatment works (WwTW) serves the Pagham area, and discharges to Pagham Rife, which feeds into the SPA/Ramsar site.

The Flood Risk Assessment (January 2017) submitted with this application, states that Southern Water has indicated that there is sufficient capacity within the Pagham Waste Water Treatment Works to accommodate the site. Provided this is the case, and that there is no issue with capacity in combination with the other housing developments coming forward around Pagham, Natural England is satisfied that a likely significant effect in relation to water quality from foul sewerage can be ruled out.

The application site is hydrologically connected to Pagham Harbour SPA/Ramsar by the ditch network and Pagham Rife. Therefore, there is a risk that waterborne pollutants from the site could enter the SPA/Ramsar. The Flood Risk Assessment states that surface water drainage from the application site will be addressed by a Sustainable Urban Drainage System (SuDS). Given the connection of the application site to the SPA/Ramsar, which is sensitive to pollution, Natural England would expect to see the SuDS include three treatment stages in the management train, for example, a swale, filter drain and pond.

Natural England recommends that a condition be included in any permission for the application, such that a detailed SuDS strategy is submitted for approval, which should include elements to address both water quality and volume of run-off.

SSSIs

Natural England is satisfied that the proposed development being carried out in strict accordance with the details of the application, and subject to the comments above, will not damage or destroy the interest features for which the Pagham Harbour SSSI has been notified. We therefore advise your authority that this SSSI does not represent a constraint in determining this application. Should the details change, Natural England draws your attention to Section 28(l) of the *Wildlife and Countryside Act 1981* (as amended), requiring your authority to re-consult Natural England

Other Advice

Protected Species

Natural England has produced standing advice⁵ to help planning authorities understand the impact of particular developments on protected species. We advise you to refer to this advice. Natural England will only provide bespoke advice on protected species where they form part of a SSSI or in exceptional circumstances..

Environmental enhancement

Development provides opportunities to contribute to and enhance biodiversity and the local environment, as outlined in paragraph 109 of the NPPF. Section 4 of the Ecological Appraisal sets out recommendations for environmental enhancements. and your authority should consider securing these measures, if it is minded to grant permission. This is in accordance with Paragraph 118 of the NPPF.

We would be happy to comment further should the need arise but if in the meantime you have any

⁵ <https://www.gov.uk/protected-species-and-sites-how-to-review-planning-proposals>

queries please do not hesitate to contact us.

For any queries relating to the specific advice in this letter only please contact Alison Giacomelli on [REDACTED] For any new consultations, or to provide further information on this consultation please send your correspondences to [REDACTED]

We really value your feedback to help us improve the service we offer. We have attached a feedback form to this letter and welcome any comments you might have about our service.

Yours sincerely

Alison Giacomelli
Sussex and Kent Area Team

[REDACTED]

From: Giacomelli, Alison (NE) [REDACTED]
Sent: 27 March 2017 12:43
To: Planning.Responses
Subject: RE: 2017-03-30 210760 Re-con. 300 homes & care home (Arun DC) P/6/17/OUT (LPA Req. 24th March)

Dear David,

Thank you for consulting Natural England on the above consultation. As the applicant has not submitted additional information for us to comment on since our letter dated 10 March 2017, we have no further comments to make.

However, for clarification regarding water quality issues and Pagham Waste Water Treatment Works (WwTW), it is for Southern Water to advise whether there is sufficient capacity to remain within permit discharge limits at the works and accommodate growth. As stated in Natural England's letter (10 March 17), if Southern Water state that the housing applications coming forward can be accepted at Pagham WwTW whilst remaining within existing discharge permits, we are satisfied that there will be no likely significant effect on the SPA/Ramsar site. However, Natural England would not accept an increase in discharge limits into Pagham Harbour.

In addition, Pagham Rife is a Water Framework Directive (WFD) waterbody, and therefore, a WFD assessment will be necessary against the requirement to avoid deterioration in the quality of the waterbody. The Environment Agency will be able to advise on the water quality objectives under the WFD.

Kind regards,
Alison

Alison Giacomelli
Lead Adviser – Sustainable Development
Sussex and Kent Area Team

From: planning.responses@arun.gov.uk [mailto:planning.responses@arun.gov.uk]
Sent: 09 March 2017 10:03
To: Consultations (NE)
Subject: Planning Consultation on: P/6/17/OUT

To: Natural England

NOTIFICATION FROM ARUN DISTRICT COUNCIL

Town & Country Planning Act 1990 (as amended)

Town & country Planning (Development Management Procedure) (England) Order 2015 -

Article 5 - Articles 16 & 18 Consultation before the grant of permission

Outline Consent

APPLICATION NO: P/6/17/OUT

Registered: 24th January
2017

Site Address: Land North of Hook Lane Pagham

Grid Reference: 489562 99199

Description of Works: Outline application with some matters reserved for construction of up to 300No. new homes, Care home of up to 80No. beds, D1uses of up to 4000sqm including a 2 form entry Primary School, formation of new means of access onto Hook Lane & Pagham Road, new pedestrian & cycle links, the laying out of open space, new strategic landscaping, habitat creation, drainage features & associated ground works & infrastructure. This application is a Departure from the development plan

The Council have received the above application. I shall be pleased to receive any observations you may wish to make.

[Click here to view the application details](#)

Should you have any comments to make, these should be sent by replying to this email by 23-FEB-17.

You can also monitor the progress of this application through the Council web site:

www.arun.gov.uk/planning

Please be aware that any comments you may make will be available on our website so please do not insert personal details or signatures on your reply.

In the absence of a reply within the period stated, I shall assume that you have no observations to make.

The officer dealing with this application is David Innes who can be contacted on telephone number [REDACTED]

Regards
Planning Officer

consultee_email

<http://www.arun.gov.uk>

NLPG UPRN 100062237016

DX 57406 Littlehampton

Important Notice This e-mail is intended exclusively for the addressee and may contain information that is confidential and/or privileged. If you are not the intended recipient (or authorised to receive it for the addressee), please notify the sender and delete the e-mail immediately; using, copying, or disclosing it to anyone else, is strictly prohibited and may be unlawful. Any views, opinions or options presented are solely those of the author and do not necessarily represent those of Arun District Council. The information in this e-mail may be subject to public disclosure under the Freedom of Information Act 2000, therefore we cannot guarantee that we will not provide the whole or part of this e-mail to a third party. The Council reserves the right to monitor e-mails in accordance with relevant legislation. Whilst outgoing e-mails are checked for viruses, we cannot guarantee this e-mail is virus-free or has not been intercepted or changed and we do not accept liability for any damage caused. Any reference to "e-mail" in this disclaimer includes any attachments.

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.