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# LAND AT BAYARDS, LEVEL MARE LANE, EASTERGATE

# INFORMATION TO INFORM A HABITATS REGULATIONS ASSESSMENT

## 27th AUGUST 2021

ARUN DISTRICT COUNCIL AL/113/21/OUT

# Information to Guide Habitats Regulations Assessment

**Land at Bayards, Level Mare Lane, Eastergate**

On behalf of Reside Developments

## Planning Issue

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**SUMMARY**

Lizard Landscape Design and Ecology has been commissioned Reside Developments Limited to provide Information to Guide a Habitat Regulations Assessment of Land at Bayards, Level Mare Lane, Eastergate (*Grid Reference: SU 94618 06268 – hereafter referred to as 'the site'*). Lizard Landscape Design and Ecology carried out a preliminary ecological appraisal at the site on 13th May 2021 to appraise the existing ecological resource within the site and surrounding area. The following phase 2 surveys were recommended and subsequently undertaken:

- *Reptile Survey (June-July 2021);*
- *Badger Monitoring Survey (June-July 2021).*

Further information was incorporated from Bat Activity Surveys undertaken at the adjacent site on Fontwell Avenue across the 2020 season (April-October 2020).

The development site is formed of common, widespread habitats of low ecological value. Floral diversity in general was very low, with the bulk of the site dominated by heavily grazed improved grassland. Boundary treeline/woodland habitats are of moderate value and shall be retained and enhanced through the development.

The habitats themselves are not generally of good condition, but are home to protected species of bats and birds. Measures for avoidance of harm to existing habitats and species are proposed alongside significant mitigation and enhancement measures, taking account of the mitigation hierarchy from BS:42020:2013.

Potential significant effects upon the *Singleton and Cocking Tunnels SAC* and Pagham Harbour SPA/Ramsar and Solent and Dorset Coast SPA were considered possible. Appropriate assessment of these effects determines that the impacts would be relatively small, non-significant and mitigated through careful design of lighting and design, and through construction protection measures within the site.



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## 1.0 INTRODUCTION

1.1 Lizard Landscape Design and Ecology has been commissioned Reside Developments Limited to provide Information to Guide a Habitat Regulations Assessment of Land at Bayards, Level Mare Lane, Eastergate (*Grid Reference: SU 94618 06268 – hereafter referred to as 'the site'*) to determine if any significant impacts upon local designated sites are likely to arise.

1.2 Lizard Landscape Design and Ecology carried out preliminary ecological appraisal at the site on 13th May 2021 to appraise the existing ecological resource within the site and surrounding area. The following phase 2 surveys were recommended and subsequently undertaken:

- *Reptile Survey (June-July 2021);*
- *Badger Monitoring Survey (June-July 2021.*

1.3 Further information was incorporated from Bat Activity Surveys undertaken at the adjacent site on Fontwell Avenue across the 2020 season.

1.4 The data collation and analysis contained within this report were undertaken and prepared by George Sayer (*MCIEEM, Senior Ecologist; Lizard Landscape Design and Ecology*) and reviewed by Catherine O'Reilly *(MCIEEM,* Senior *Ecologist; Lizard Landscape Design and Ecology).*

***Site Information***

1.5 The site consists of horse grazing paddocks, surrounded by a large treeline/wooded shaw to the east and sparse treelines / hedges to all other aspects. The red-line boundary covers a total area of approximately 2.1 hectares (*Ha*).

1.6 The site is bound by Level Mare Lane to the north; the approved Northfields/Fontwell Avenue site to the east; the Bayards stables to the north-west and a track with residential dwellings to the south-west.

***Surrounding Landscape***

1.7 The wider landscape is largely rural; the area is dominated by a matrix of arable and pastoral farmland interspersed with hedgerows and small pockets of woodland. The nearest woodland area is a 0.68Ha plot of *Deciduous Woodland* located immediately west of the proposed development site.

1.8 There is 1 no. waterbody located within 500m of the proposed development site, located 90m south at Greenfields Farm.

***Development Proposals***

1.9 The scheme proposals are for Outline permission for up to 69 dwellings with access, parking, landscaping and associated works. All matters reserved apart from access.

1.10 The following plans and documents have been referred to in production of this report:

- *Site Parameter Plan – Clague Architecture; 29662C_130E_Parameter Plan;*
- *Tree Hedgerow and Public Open Space Proposals – Fabrik; D3078-FAB-00-XX-M2-L-1001 Tree, hedgerow and POS;*
- *Tree Retention and Protection Plan – Lizard Landscape Design and Ecology; LLD2327-ARB-DWG-002;*
- *Arboricultural Impact Assessment and Method Statement – Lizard Landscape Design and Ecology; LLD2327-ARB-REP-001;*
- *Foul Drainage Impact Statement – Paul Basham Associates; 020.5672DIS;*
- *Arun District Adopted Local Plan 2011-2031 (July 2018);*
- *Habitats Regulations Assessment for the Arun District Local Plan (March 2013 - UE-0111 Arun LP HRA_5_130308; Supplementary Issue 3: Appropriate Assessment February 2017 - UE-0194 ALP HRA Report_5_170223);*
- *Sussex Bat Special Area of Conservation - Sussex Bat Special Area of Conservation Planning and Landscape Scale Enhancement Protocol; TLL-15 (Draft); South Downs National Park Authority, 2018.*



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***Preliminary Ecological Appraisal Summary***

1.11 The site was subject to PEA on 13th May 2021. The development site was found to be formed of common, widespread habitats of low ecological value. Floral diversity in general was very low, with the bulk of the site dominated by heavily grazed improved grassland. Boundary treeline/woodland habitats were considered of moderate value.

1.12 The site consisted of an arable field, surrounded by narrow field margins, scrub, hedges and ditches.

1.13 The majority of the site was considered unsuitable for reptiles, but the narrow margins were identified as potentially suitable for reptiles and subject to reptile survey during June-July 2021.

1.14 Several trees were considered to offer 'low' bat roost potential and two off-site trees offered 'moderate' bat roost potential. All of these trees are proposed for retention except for one tree offering 'low' bat roost potential, which would be section-felled under ecological supervision.

1.15 The site generally was considered to offer 'low' potential for foraging and commuting bats with the eastern treeline offering 'moderate' potential. Bat Activity Surveys were undertaken of the adjacent development site on Fontwell Avenue between April and September 2020. These encompassed this treeline and as such this data was incorporated into the assessment.

1.16 A small number of mammal holes were found within the eastern treeline/wooded shaw. These were considered as possible badger setts and subject to monitoring surveys between June-July 2021.

***Reptile Surveys June-July 2021***

1.17 The reptile survey undertaken in June-July 2021 revealed the site not to be in use by reptiles, which accords with surveys undertaken in 2019 of the adjacent Fontwell Avenue Development.

1.18 The proposals would result in negligible impacts upon reptiles during construction and habitat enhancements would result in a positive impact on reptiles in the long term.

***Bat Activity Surveys – April – October 2020***

1.19 Bat survey visits were undertaken of the adjacent site in the spring, summer and autumn, in accordance with best practice guidelines (*BCT, 2016*). Bat activity survey visits were undertaken on 20th April, 19th May, 23rd June and 5th October 2020. A total of 28 no. nights static monitoring was carried out across the site, broadly as specified in Bat Surveys for Professional Ecologists – Good Practice Guidelines (BCT 2016). An Anabat Express was utilised for static monitoring.

1.20 A maximum of 6 no. bat species were recorded during the site visits:

- *Common pipistrelle (Pipistrellus pipistrellus);*
- *Soprano pipistrelle (Pipistrellus pygmaeus);*
- *Noctule (Nyctalus noctula);*
- *Serotine* (*Eptesicus serotinus)*;
- *Myotis sp.;*
- *Barbastelle (Barbastella barbastellus).*

1.21 The adjacent site was found to be used for foraging by a low number of common bats, namely common pipistrelles and serotine bats, and rarely by less common species of soprano pipistrelle, noctule, Myotid bats and barbastelle, an Annex II species

1.22 The treeline which forms part of the current application site was used for foraging and commuting, mainly by serotine and common pipistrelle. The barbastelle calls were generally restricted to the eastern boundary of the adjacent site, along Fontwell Road. The majority of the site is likely of value to bats at the **site level** only, with the southern and western boundaries of **local value.**

1.23 In the absence of mitigation, impacts may include habitat fragmentation, loss of foraging areas on site and in the surrounds, loss of commuting routes, and increased predation of individual bats by domestic cats and wild predators. Impacts would affect small numbers of bats, mainly common pipistrelles and serotines but may also affect very low numbers of soprano pipistrelle, Myotis, noctule and very rarely barbastelle bats which use the site rarely. Impacts would be of moderate impact magnitude and likely to occur.

1.24 The only habitat affecting commuting and foraging potential is the creation of the access road running through the wooded shaw to the east. This would require removal of a narrow section of treeline. At this point the treeline thins and becomes considerably shorter and is dominated by sycamore. The new access will be planted with native, semi-mature specimens to close the gap as soon as possible. The remainder of the woodland will be subject to enhancement through removal of manure and overly-dominant ivy, seeding with woodland wildflower and infill-planting of native shrubs and trees.

1.25 All light spill onto surrounding hedge lines and woodland will be avoided, with lighting conforming to ILP Guidance Note 08/18 (BCT & ILP, 2018). Storage of fuel etc will be avoided adjacent to hedge rows, ditches and woodland. All trees, hedges and woodland are to be protected in accordance with *BS5837:2012 'Trees in Relation to Design, Demolition and Construction'*; a full arboricultural package accompanies this application. Loss of low-quality potential foraging areas will be compensated by the provision of plants of known value to bats within the planting scheme, such as night-scented flowers like *Clematis ssp.* The enhancements proposed along the boundaries of the site would more than compensate for minor impacts. The proposals would result in negligible impacts during construction and a positive impact on bats in the long term.

***Badger Monitoring Survey – June-July 2021***

1.26 Badger monitoring surveys between June-July 2021 found the site not to be in use as a badger sett with these being used by rabbits. Foxes and roe deer were also recorded. Badgers were not recorded at all during the survey which accords with surveys undertaken in 2019 of the adjacent Fontwell Avenue Development.

1.27 The site is currently considered of 'negligible' value to badgers. No mitigation for badgers is required.

## 2.0 SCOPE OF THE REPORT

2.1 Lizard Landscape Design and Ecology has been commissioned to assess the implications of the development proposals on the nearby designated sites of European / International importance, such that the local planning authority could undertake *Habitats Regulations Assessment* of the proposals.

2.2 The following report is provided in order that the competent authority *(Arun District Council)* has all of the necessary information provided *(in view of the CJEU directive)* to carry out a *Habitats Regulations (Scoping) Assessment* of the proposals, and if any significant effect on a protected site is predicted, an *Appropriate Assessment* of the impact of the development proposals and perform its duties in considering the application in line with relevant planning policy and legislation, including specifically *The Conservation of Habitats and Species Regulations 2017 (hereinafter referred to as the Habitats Regulations).*

***Legislative Background***

2.3 A recent judgement handed down by the Court of Justice of the European Union *(CJEU) (12th April 2018)* has legal implications for those applying the legal tests of *Regulation 63 (formally Regulation 61)* of *The Conservation of Habitats and Species Regulations (2017)*. This ruling has been adopted by Arun District Council which is as follows;

*"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."*

2.4 Under this new ruling from the CJEU, in addressing the test at *Regulation 63(1) of the Habitats Regulations*, it is necessary to undertake the screening assessment in the absence of any consideration of avoidance or mitigation measures. Under this new ruling it is not deemed acceptable to include consideration of any mitigation / avoidance measures at this screening stage which forms an integral part of a project, in considering the first stage of assessment and screening for likely significant effects on a European site *(or RAMSAR site).*

2.5 Irrespective of the recent changes to the assessment process brought about by this judgment, it is considered that the CJEU judgment has no effect upon the soundness and effectiveness of any development mitigation strategy or the acceptability of the proposed development scheme in view of the tests of the *Habitats Regulations* as detailed below. The implication is now that all projects which a significant effect upon the integrity of a designated site could have irrespective of the proposed scheme mitigation measures shall need to be subject to an appropriate assessment.

## 3.0 UK AND EUROPEAN LEGISLATION

3.1 The location and proximity of the proposed application site to the designated sites of European and International importance in the local area means that the *EC Directive on the Conservation of Natural Habitats and of Wild Flora and Fauna (the 'Habitats Directive')* is of importance. Combined with the EC *Directive on Wild Birds (the 'Birds Directive')* this is then transposed into UK legislation through the *Habitats Regulations (2017).*

***Habitat and Birds Directive***

3.2 Under the *EC Directive on the Conservation of Natural Habitats and of Wild Flora and Fauna,* commonly referred to as *the Habitats Directive (Council Directive 92/43/EEC)*; European Member States are committed to take special measures to maintain the distribution and abundance of certain priority habitats and species *(Listed in Annexes I and II of the Directive).* In particular each European Member State is required to designate the most suitable sites as *Special Areas of Conservation (SACs).* All such SACs will form part of the *Natura 2000 Network* under *Article 3(1) of the Habitats Directive.*

3.3 *Article 2(3)* sets out that European Member States have a duty, in exercising their obligations under the *Habitats Directive* to: *"take account of economic, social and cultural requirements and local characteristics."*

3.4 Under the *EC Directive on Wild Birds (the Birds Directive) (Council Directive 2009/147/EEC, previously 79/409/EEC)* European Member States are also required to take special measures to preserve and conserve the habitats of certain rare species of birds *(Listed in Annex I of the Directive)* and regularly occurring migratory birds. European Member States are required to designate the most suitable areas of such habitats as *Special Protection Areas (SPAs).* These designations are designed to protect wild birds, and to provide sufficient diversity of natural habitats for all bird species so as to maintain populations at an ecologically sound level. All *Bird Directive SPAs* will also be listed as part of the *Natura 2000 Network* under *Article 3(1) of the Habitats Directive*. There is an obligation under the *Habitats Directive and the Birds Directive* for European Member States to further designate sites before turning to measures for their protection and enhancement.

3.5 The protection achieved through the designation of *SACs* and *SPAs* is delivered through *Article 6 of the Habitats Directive. Article 6(2)* requires each European Member State to take appropriate steps to avoid the deterioration of natural habitats and to avoid the disturbance of protected species for which these sites have been originally designated, on the basis that the potential disturbance could be significant in relation to the objectives of the Directive. *Article 6(3)* and *Article 6(4)* require that a project proposal not associated with the ecological management or conservation objectives of the designated site which could potentially have a predicated significant effect upon the designated area; either in itself or in combination with other project proposals; should be scrutinised through an appropriate assessment of the project proposal; considering the affect / impact upon the designated area, in view of the area's established conservation objectives.

3.6 Where an appropriate assessment has been undertaken for the project proposal; the competent local authority may approve the project proposal where it has been assessed that it would not adversely impact the integrity or the conservation objectives of the designated area. Where an adverse impact has been highlighted upon the integrity and conservation objectives of the designated area *Article 6(4)* outlines the means by which a project proposal may still be permitted proceed where it can be clearly demonstrated that there are no suitable alternatives and where there are over-riding reasons of public interest for the project proposal to go forward. Where a project proposal is approved to proceed on the basis of over-riding public interest and where there is an adverse effect under the directive of *Article 6(4);* mitigation and compensatory measures must be proposed and put forward to ensure that the overall integrity and conservation objectives of the *Natura 2000* individual designated sites and network are protected.

***The Conservation of Habitats and Species Regulations 2017***

3.7 *The Conservation of Habitats and Species Regulations 2017* referred to as *The Habitats Regulations* translate the requirements of the *Habitats Directive and Birds Directive* into UK legislation. *The Habitats Regulations* aims to protect the integrity and conservation objectives of a network of sites in the UK that have rare or important priority habitats and protected species in order to protect biodiversity. *The Habitats Regulations 2017* combines all of the amendments made to *The Habitats Regulations 2010.* Under *The Habitats Regulations 2017* competent local authorities are required to ensure that they protect the integrity and the conservation objectives of these networks of designated sites from all their activities that they regulate and cause no adverse impact on any of the *Natura 2000* sites by approving project proposals. *Regulation 63* of the *Habitats Regulations* requires that:

*"63(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 European site or a European offshore marine site (either alone or in combination with other plans or projects), and is not directly connected with or necessary to the management of the 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.";*

*"63(3) The competent authority must for the purposes of the assessment consult the appropriate nature conservation body and have regard to any representations made by that body within such reasonable time as the authority specifies.";*
*"63(5) In the light of the conclusions of the assessment, and subject to Regulation 64, the competent authority may agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the European site or the European offshore marine site (as the case may be).";*
*"63(6) In considering whether a plan or project will adversely affect the integrity of the site, the competent authority must have regard to the manner in which it is proposed to be carried out or to any conditions or restrictions subject to which it proposes that the consent, permission or other authorisation should be given."*

3.8 *Regulation 63* of the *Habitats Regulations* defines an approval process in distinct stages. The initial assessment is to assess whether the project proposal is likely to have a significant effect or impact on the European site in question; the secondary assessment *(if applicable)* is to determine whether the project will affect the integrity of the European site *(Appropriate Assessment).* The specific details of the *Habitats Directive and Habitats Regulations* have been clarified through some individual case law and the following judgements have been made; *'Waddenzee'; 'Sweetman Case'; and 'People over Wind'* as additional background legislation. These individual case law judgements have been summarised briefly below;

***'Waddenzee Case'***

3.9 The *'Waddenzee'* case; the *European Court of Justice* asserted the trigger for *'Appropriate Assessment'*. It judged that an appropriate assessment would be required for a project proposal where there is a highlighted risk that it would have a significant effect on the integrity and conservation objectives of the *Special Protection Area* and the need for the appropriate assessment should be provided on a precautionary basis. The judgement asserts at *Paragraph 3(a)* that:

*"…any plan or project not directly connected with or necessary to the management of the site is to be subject to an appropriate assessment of its implications for the site in view of the site's conservation objectives if it cannot be excluded, on the basis of objective information, that it will have a significant effect on that site, either individually, or in combination with other plans or projects."*

3.10 The *'Waddenzee'* judgement asserts that the specific test of *'likely significant effect'* should be assessed in line with the European site's conservation objectives. The judgement states at *Paragraph 3(b)* that: *"where a plan or project not directly connected with or necessary to the management of a site is likely to undermine the site's conservation objectives, it must be considered likely to have a significant effect on that site."*

3.11 *Paragraph 4* of the judgement defines the necessity for the appropriate assessment to be based upon objective scientific information: *"…an appropriate assessment…implies that, prior to its approval, all the aspects of the plan or project which can, by themselves or in combination with other plans or projects, affect the site's conservation objectives, must be identified in the light of the best scientific knowledge in the field. The competent national authorities, taking account of the appropriate assessment of the implications…for the site concerned in the light of the site's conservation objectives, are to authorise such an activity only if they have made certain that it will not adversely affect the integrity of that site. That is the case where no reasonable scientific doubt remains as to the absence of such effects."*

***'Sweetman Case'***

3.12 Consideration of potential impacts surrounding *The Habitats Regulations* is defined by the *'Sweetman'* judgement. The case judgement published by the *Advocate General* assessed in detail the test of *'likely significant effect'* within *Paragraphs 50 and 51. The Court of Justice of the European Union* aligned with the *Advocate General's* assessment and assertion concluded within the following statement*:*

*"50. The test which that expert assessment must determine is whether the plan or project in question has 'an adverse effect on the integrity of the site', since that is the basis on which the competent national authorities must reach their decision. The threshold at this (the second) stage is noticeably higher than that laid down at the first stage. That is because the question (to use more simple terminology) is not 'should we bother to check' (the question at the first stage) but rather 'what will happen to the site if this plan or project goes ahead; and is that consistent with "maintaining or restoring the favourable conservation status" of the habitat or species concerned'…*

and;

*''51. It is plain, however, that the threshold laid down at this stage of Article 6(3) may not be set too high, since the assessment must be undertaken having rigorous regard to the precautionary principle. That principle applies where there is uncertainty as to the existence or extent of risks. The competent national authorities may grant authorisation to a plan or project only if they are convinced that it will not adversely affect the integrity of the site concerned. If doubt remains as to the absence of adverse effects, they must refuse authorisation."*

3.13 *The Court of Justice of the European Union* aligned with the *Advocate General's* assessment and assertion concluded within the following statement*:* *"40. Authorisation for a plan or project, as referred to in Article 6(3) of the Habitats Directive, may therefore be given only on condition that the competent authorities – once all aspects of the plan or project have been identified which can, by themselves or in combination with other plans or projects, affect the conservation objectives of the site concerned, and in the light of the best scientific knowledge in the field – are certain that the plan or project will not have lasting adverse effects on the integrity of that site. That is so where no reasonable scientific doubt remains as to the absence of such effects."*

***'People Over Wind Case'***

3.14 Guidance for consideration of the tests at *Regulation 63* is provided through the case judgment provided for the *'People Over Wind Case' (Case C-323/17);* published by the CJEU on 12 July 2018 which ruled that when considering the test at *Regulation 63(1)* the following must apply;
"*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.*"

3.15 In conclusion, any avoidance or mitigation measures which forms an integral part of a project proposal cannot be included at this first stage of the scoping test *(assessment of the 'likely significant effect')* and can only be assessed within the *Appropriate Assessment* stage. Therefore, all projects that could have a likely significant effect upon a designated site or habitat need to be assessed through appropriate assessment irrespective of the scheme mitigation measures proposed. This case judgement overrides domestic case law which has previously confirmed that it is acceptable to consider mitigation measures at the *'likely significant effect'* stage.

***Other Published Guidance***

3.16 Guidance for the use of key terminology and objectives outlined within relevant European and UK legislation to highlighted European designated sites is provided within publications by the European Commission and UK organisations; JNCC and Natural England. This guidance is described below.

***Managing Natura 2000 Sites (European Commission, 2000)***

3.17 *'Managing Natura 2000 Sites'* outlines the undertakings of *'Article 6; Habitats Directive 92/43/CEE'*; published by the European Commission in 2000 and provides guidelines to European Member States for the objectives of *Article 6; Habitats Directive*. *Section 2.3.3* asserts that the conservation objectives and mitigation measures outlined must correspond to the ecological requirements of the protected habitats and species present for which the site is designated and that these prescriptions "*involve all the ecological needs necessary to ensure their favourable conservation status*".

3.18 *Section 3.5* defines deterioration and disturbance of habitats or species and states; *"Deterioration or disturbance is assessed against the conservation status of species and habitats concerned. At a site level, the maintenance of the favourable conservation status has to be evaluated against the initial conditions provided in the Natura 2000 standard data forms when the site was proposed for selection or designation, according to the contribution of the site to the ecological coherence of the network. This notion should be interpreted in a dynamic way according to the evolution of the conservation status of the habitat or the species."*

3.19 *Section 4.4.1* defines a potential *'significant'* effect that should consider the conservation objectives of the site and more baseline information. *Section 4.4.1* states; *"In this regard, the conservation objectives of a site as well as prior or baseline information about it can be very important in more precisely identifying conservation sensitivities."*

3.20 *Section 4.5.3* defines the requirements of the European Member States to provide specific scientific information in order to include a designated site within the *Natura 2000 Network*. This information is standardised and provided in a format provide and outlined by the *European Commission (The Natura 2000 Standard Data Form).* The connection between *The Natura 2000 Standard Data Form* and the definition of the sites' conservation value and objectives are defined in *Section 4.5.3* of the guidance where it is stated: *"The information provided according to the standard data form established by the Commission forms the basis for a Member State's establishment of the site's conservation objectives."*

3.21 Where an assessment is undertaken of the likely impact of a project proposal upon a designated site, the *'integrity of the site'* is defined at *Section 4.6.3* as: *"… the coherence of the site's ecological structure and function, across the whole area, or the habitats, complex of habitats and / or populations of species for which the site is or will be classified."* It is clear that the assessment as to the implications of a project proposal upon the integrity of a site should be focused only upon an assessment which is aligned with the sites' defined conservation objectives; *"The integrity of the site involves its ecological functions. The decision as to whether it is adversely affected should focus on and be limited to the site's conservation objectives."*

3.22 *Section 5* considers *Article 6(4) of the Habitats Directive* which has been superseded now by other guidance issued by the European Commission entitled *"Guidance document on Article 6(4) of the Habitats Directive 92/43/EEC" (2007).* This document summarised below for context.

***Assessment of Plans and Projects Significantly Affecting Natura 2000 Sites - Methodological Guidance on The Provisions of Article 6(3) And (4) of The Habitats Directive 92/43/EEC (European Commission, 2001)***

3.23 This document, published by the European Commission in 2001, gives guidance on carrying out and reviewing those assessments required under *Article 6(3) and (4) of the Habitats Directive*. It is provided as supplementary guidance and does not over-ride or replace any of that set out within *Managing Natura 2000 (European Commission 2000)* which as stated at page 6 of the document, "*is the starting point for the interpretation of the key terms and phrases contained in the Habitats Directive*". The guidance provided is not mandatory and it is clearly set out that its use is "*optional and flexible*" and that it is for "*Member States to determine the procedural requirements deriving from the directive*".

3.24 The guidance sets out the key stages in following the tests contained within the Habitats Directive where stages one and two are relevant. Stage one is the screening stage assessing the likelihood of a plan / project resulting in a significant effect upon the European site. The second comprises the appropriate assessment.

3.25 *Section 3.2.4* is concerned with Appropriate Assessment and the assessment against the conservation objectives of the European Site. *Box 9* provides a list of five example conservation objectives for differing broad habitat types. One such example, that for a coastal site, taken from *Box 9* is provided below: *"to maintain the status of the European features of this coastal site in favourable condition, allowing for natural change. Features include coastal shingle vegetation and lagoons (within a candidate special area of conservation (SAC), which is also a SPA)."*

***Internal Guidance to Decisions on 'Site Integrity': A Framework for Provision of Advice to Competent Authorities (English Nature, 2004)***

3.26 Natural England *(formerly English Nature)* has produced an internal guidance document on the provision of advice to competent authorities regarding the concept of *'site integrity'* in undertaking an appropriate assessment.

3.27 This guidance sets out a definition for integrity. It states that integrity is considered at the site level and gives the following definition, as taken from *Planning Policy Guidance 9 (PPG9): "The coherence of its ecological structure and function, across its whole area, that enables it to sustain the habitat, complex of habitats and / or levels of populations of the species for which it was classified".*

3.28 Integrity is further defined within *Section 3.0* where it is stated that; *"In a dynamic context 'integrity' can be considered as a site having a sense of resilience and ability to evolve in ways that are favourable to conservation."* The need to maintain, or restore the site to, favourable conservation status is dealt with in the final paragraph of *Section 3.0*. Natural England quotes guidance issued jointly by the Environment Agency, English Nature and Countryside Council for Wales.

3.29 The guidance provides a checklist within *Section 4.1*; for assessing the likelihood of an adverse effect on integrity occurring as a result of the proposed plan / project. It is stated that if the answer to all of the questions posed within the checklist is "yes" then it is reasonable to conclude that there will be no adverse effect upon integrity. In the event that one or more of the answers is no, then the guidance suggests that a series of further site-specific factors, listed at 4.2 – 4.7 of the guidance must be considered in detail.

***Common Standards Monitoring (JNCC, 2004)***

3.30 Common Standards Monitoring is a means by which condition objectives for habitats, species, or other features of designated sites *(such as Sites of Special Scientific Interest – SSSIs, and SPAs)* are set based on key attributes of the features.

3.31 *The Joint Nature Conservation Committee (JNCC)* and *the Country Conservation Agencies (Natural England)* developed guidance on the setting and assessing of condition objectives, as required under *The Birds and Habitats Directives* and set out a framework for this in 1999. This framework is provided in the form of *Common Standards Monitoring (CSM)* guidance which comprises a suite of documents including an *"Introduction to the Guidance Manual on Common Standards Monitoring"* and several species / habitat specific documents, including those for lowland heathland, birds, reptiles and invertebrates. The Introduction to the Guidance Manual covers various relevant concepts and terms. It also provides a background to the setting of conservation objectives and sets out the desired approach to setting targets, monitoring, management and reporting on conservation measures in designated sites.

3.32 *The Guidance Manual and CSM* guidance for individual site attributes and its bird interest set out specific criteria regarding the identification of interest features, targets and methods of assessment. There is in-built flexibility and allowances for *'judgements to be made'* when assessing, for example, favourable condition.

3.33 It is understood that Natural England applies the *Common Standards Monitoring* approach to European designated sites through an assessment of the SSSI unit condition. This is undertaken on a cycle of approximately six years. The assessment does not relate to the Conservation Objectives of the European site but provides a tool for tailoring future management of the SSSI such that favourable condition of the interest features can be maintained or restored as appropriate.

3.34 This document, published by the European Commission in 2007, is intended to provide clarification on key terms / concepts as referred to within *"Managing Natura 2000 Sites"* and replaces the section on Article 6(4) within that earlier document.

***Guidance Document on Article 6(4) of the 'Habitats Directive' (European Commission, 2007)***

3.35 The above guidance document covers in particular the concepts of Alternative Solutions, Imperative Reasons of Overriding Public Interest, Compensation Measures, Overall Coherence and the Opinion of the Commission.

3.36 With regard to ensuring the quality of an appropriate assessment, and to define exactly what needs to be compensated, it is stated at Section 1.3 that: *"Assessment procedures of plans or projects likely to affect Natura 2000 sites should guarantee full consideration of all elements contributing to the site integrity and to the overall coherence of the network, both in the definition of the baseline conditions and in the stages leading to identification of potential impacts, mitigation measures, and residual impacts. These determine what has to be compensated, both in quality and quantity."*

3.37 The need to use information contained within the *Natura Standard Data Form,* in tandem with the sites conservation objectives when undertaking an appropriate assessment is specifically referred to.

3.38 This document, published by the European Commission in 2007, is intended to provide clarification on key terms / concepts as referred to within *"Managing Natura 2000 Sites"* and replaces the section on *Article 6(4)* within that earlier document.

3.39 Section 1.3.2 gives guidance on the application of Article 6(4) in respect of reasons of overriding public importance and Section 1.4.1 gives guidance on the application of Article 6(4) in respect of compensatory measures.

*Natura Standard Data Forms*

3.40 A standard reporting format has been developed for Natura 2000 sites to ensure that the relevant site selection information is reported and stored in a consistent manner which can be easily made available.

3.41 A standard reporting form for SPAs and SACs was developed by the European Commission and published in 1996. The form is used for all sites designated or proposed to be designated as SPAs and SACs under the relevant Directives, with the information to be stored on a central database.

3.42 *Article 4 of the Habitats Directive* provides the legal basis for providing the data. Article 4 states that information shall include a map of the site, its name, location, extent and the data resulting from application of the criteria specified in Annex III and that this shall be provided in a format established by the Commission. Under *Article 4 (Paragraph 3) of the Birds Directive*; Member States are required to provide the Commission with all relevant information to enable it to take any appropriate steps in order to protect relevant species in areas where the Directive applies.

3.43 Whilst it is the relevant country agency *(Natural England)* that is responsible for designating a site, it is the JNCC who are responsible for collating the lists of European and international designated sites, together with relevant supporting information. *The Nature 2000 Data Forms* for SPAs and SACs are therefore made available by the JNCC.

3.44 Within the explanatory notes for *Natura Standard Data Forms (European Commission 1996)* the following *"main objectives"* of the Natura Data Form / Database are given: *"to provide the necessary information to enable the Commission, in partnership with the Member States, to co-ordinate measures to create a coherent NATURA 2000 network and to evaluate its effectiveness for the conservation of Annex I habitats and for the habitats of species listed in Annex II of Council Directive 92/43/EEC as well as the habitats of Annex I bird species and other migratory bird species covered by Council Directive 79/409/EEC."; and;*

*"to provide information which will assist the Commission in other decision-making capacities to ensure that the NATURA 2000 network is fully considered in other policy areas and sectors of the Commission's activities in particular regional, agricultural, energy, transport and tourism policies."; and;*

*"to assist the Commission and the relevant committees in choosing actions for funding under LIFE and other financial instruments where data relevant to the conservation of sites, such as ownership and management practice, are likely to facilitate the decision-making process." and;*
*"to provide a useful forum for the exchange and sharing of information on habitats and species of Community interest to the benefit of all Member States."*

3.45 The formal European Site Conservation Objectives for SPAs and SACs are published by Natural England. The Conservation Objectives for the European designated sites of relevance to this study and assessment are summarised and assessed below.

## 4.0 SCOPE OF THE ASSESSMENT

4.1 This report provided by Lizard Landscape Design and Ecology specifically assesses the potential for any likely potential significant effects of the proposed residential development scheme of circa 69 no. new dwellings at Bayards, Level Mare Lane, Eastergate upon the designated sites of European and International importance in close proximity, including the *Singleton and Cocking Tunnels SAC, Duncton to Bignor Escarpment SAC* and the *Pagham Harbour SPA, RAMSAR Site.*

4.2 The scope of the assessment for any potential significant effect provides details for the specific test under *Regulation 63(1) of the Habitats Regulations. Regulation 63(1)* as described above in Section 3.0 of this report for consideration and assessment by the local authority.

4.3 An assessment under *Regulation 63 of the Habitats Regulations* is potentially required here on the basis of the application site's location and proximity to the designated sites. The location of the proposed residential application site to these and other European and International designated sites is described below and is shown on the attached *Figure No. 01 - European and International Designated Sites.*

4.4 Lizard Landscape Design and Ecology's team is a member of *The Institute of Ecology and Environmental Management* and *The Landscape Institute*; *Registered Practice* and its' professional ecologists and landscape architects are qualified to make such judgements where appropriate. This document assesses the likely potential significant effects of the proposed residential development scheme both alone and in combination with other residential scheme proposals in the surrounding areas of Fontwell, Eastergate and Aldingbourne.

4.5 The objective and aim of this report is to equip the Local Authority with the baseline survey information required to consider the proposals in line with the tests outlined and provided in *Regulation 63; The Habitats Regulations*. The information contained within this report provides all of the detail necessary to enable the competent authority to undertake their assessment. It is the conclusion and assertion of Lizard Landscape Design and Ecology that in consideration of all the baseline survey information available that the specific residential development proposals would not significantly adversely affect the integrity and conservation objectives of the local European and International designated sites, and that approval may be granted for the development proposals in relation to *The Habitat Regulations*.

***European Designated Site Locations***

4.6 An appropriate Zone of Influence for the proposals of 12.0 km from the site was established, with any European/International Designated Sites summarised in Table No. 04 below;

**Table No. 04 – Statutory Protected Sites**

| Site | Description | Location |
|---|---|---|
| *South Downs National Park* | *A large area of varied habitats including chalk grassland and woodland which supports varied flora and fauna.* | *1.0km N* |
| *Eartham Pit, Boxgrove SSSI.* | *The area has undergone considerable geological and archaeological investigations. Immediately to the north of the pit there is a fossil shoreline.* | *3.0km NW* |
| *Fairmile Bottom SSSI.* | *The site contains yew Taxus baccata woodland and scrub as well as unimproved chalk grassland, which are all nationally rare communities.* | *4.0km NE* |
| *Duncton to Bignor Escarpment SAC* | *an example of mature beech Fagus sylvatica woodland located on the steep scarp face of the South Downs. The site has developed over chalk which is overlain in places by a clay-with-flints capping. Beech dominates in a mosaic with ash Fraxinus excelsior woodland, scrub and grassland. Much of the beech woodland is high forest but with some old pollards. Rare plants present include white helleborine Cephalanthera damasonium, yellow bird's nest Monotropa hypopitys, green hellebore Helleborus viridis and limestone fern Gymnopcarpium robertium. The woods also have a rich mollusc fauna.* | *7.1 km N* |
| *Solent and Dorset Coast SPA* | *Designated for breeding colonies of, and open sea foraging habitat for internationally* | *7.1 km S* |

| | | |
|---|---|---|
| | *important colonies of:*<br>• *common tern*<br>• *Sandwich tern*<br>• *little tern* | |
| *Pagham Habour SPA, RAMSAR (also LNR, SSSI)* | *Areas of coastal and harbour habitat noted for its importance for over wintering birds. Designated an SPA for Common tern, Dark-bellied brent goose; Little tern and ruff.* | *9.8 km SW* |
| *Arun Valley SAC, SPA, Ramsar* | *Designated an SPA for its population of Bewick's swan. Designated a Ramsar wetland for presence of seven wetland Red Data Book species. In addition to the Red Data Book invertebrate and plant species, the ditches intersecting the site have a particularly diverse and rich flora.*<br>*Designated an SAC for Ramshorn snail Anisus vorticulus which occurs across a range of sites in southern and eastern England. The Arun valley is one of the three main population centres for this species in the UK. This proposed site includes two of its core sites in the wash lands of the Arun floodplain (Pulborough Brooks and Amberley Wild Brooks SSSIs).* | *10.5 km NE* |
| *Singleton and Cocking Tunnels SAC* | *Designated an SAC for hosting populations of Barbastelle and Bechstein's bats. Formed of two disused railways tunnels, which are home to hundreds of hibernating bats in the winter. Species recorded hibernating include barbastelles and greater horseshoe bats along with the sole remaining greater mouse-eared bat in Britain. The site is also important for bats in the autumn where large numbers congregate to swarm which includes mating.* | *10.6 km NW* |

## 5.0 ASSESSMENT OF THE IMPACT OF THE DEVELOPMENT PROPOSALS UPON THE SPA / SAC / RAMSAR SITES

5.1 Section 3.0 within this report establishes the legal, legislative, and published guidance relevant for undertaking the required assessment of a project proposal upon a designated European and International site. The legislation and supporting guidance context to the Habitat Regulations defines a two-stage process for the assessment; scoping assessment of the *'likely significant effect'* and the second stage being the *'integrity test'.*

5.2 The defined *'Conservation Objectives'* of the European site are the key consideration and should be assessed against the impact of a project proposal including any effects upon its viability and overall integrity. Some guidance suggests that it is only the *'Conservation Objectives'* against which a project proposal should be assessed and tested in accordance with the Habitat Regulations, but other additional information is also relevant such as other features of interest within the designated area and other ecological baseline information that the proposals should be assessed against.

5.3 There is a clear hierarchical approach to assessing effects on European sites in line with the Habitats Regulations. The primary test is that against the Conservation Objectives *(now updated to include specific reference to qualifying interest features)* with other considerations following these. Such other considerations would include:

- *Other features of interest associated with the site; and;*
- *Other relevant baseline information for the site;*
- *In line with the above, whilst the qualifying interest features of the sites and other baseline information have informed this assessment, the greatest weight has been placed upon the formal Conservation Objectives for the European designated sites, as set out by Natural England.*

5.4 This section includes a description of the potentially significant effects arising from the development proposals at the application site on the European designated sites. The potential effects are assessed within this section in order to address the test under *Regulation 63(1)* in the first instance.

5.5 Whilst undertaking this further assessment, consideration has been given to the best available scientific knowledge as an ecological baseline. Further consideration under the *Habitats Regulations (where an Appropriate Assessment is required)* can therefore be undertaken, consistent with the *Waddenzee* Judgement, which requires the use of the best scientific knowledge to inform a decision where no reasonable scientific doubt remains as to the presence and / or absence of effects that would adversely affect the integrity of the designated site.

5.6 Furthermore, consideration is given to the recent *'People Over Wind'* case, which confirmed the view that any avoidance or mitigation measures that form an integral part of the project can only be taken into consideration at the Appropriate Assessment stage. This supersedes the domestic Dilly Lane judgement in the High Court where previously mitigation and enhancement measures were considered as part of the original scoping exercise.

***Potential Impacts on Duncton to Bignor Escarpment SAC in the Absence of Mitigation***

5.7 The proposal site is situated 7.1 km south of the *Duncton to Bignor Escarpment SAC*. The HRA of the Arun District Plan (updated 2017) screened out any potential impacts upon this site with no impact pathways identified. Likewise, this assessment can find no direct impact pathways to the designated site. The site may experience increased recreational disturbance, but given its sloping topography and wooded nature, access is relatively limited. The site is part of a much larger suite of downs recreational areas and the increase on this small site at such a great distance would be negligible. The designated site is uphill and upstream of the proposal site and the only part of the SAC which abuts a main road is a small strip to the west abutting the relatively minor A285. As such no wastewater, air pollution, surface water pollution or lighting issues are anticipated to arise from this development, alone or in combination.

***Potential Impacts on Singleton and Cocking Tunnels SAC in the Absence of Mitigation***

5.8 The proposal site is situated 10.5 km south of the *Singleton to Cocking Tunnels SAC*. The HRA of the Arun District Plan (updated 2017) screened out any potential impacts upon this site with no impact pathways identified. At the request of the South Downs National Park Authority which manages the SAC, assessment of potential impacts have been considered in accordance with their guidance document '*Sussex Bat Special Area of Conservation Planning and Landscape Scale Enhancement Protocol' (SDNPA, 2018).*

***Significant Impacts on Bats or Severance of Bat Flightlines***

5.9 Within the 12km *Wider Conservation Area*, significant impacts or severance to flightlines must be considered. The adjacent site to the east has been recorded as used on rare occasions by Barbastelle bats, an Annex II species for which the SAC is designated. In the absence of mitigation, removal or damage of this habitat, and increased local disturbance might remove a flightline to the extreme end of the bats' range. Impacts upon local bats such as the small number of pipistrelles and serotines which forage at the site nightly may be more significant; if these bats subsequently hibernate at the SAC, this may constitute a significant effect.

***Loss of Functionally-linked Habitats***

5.10 Woodland habitats to the north of the site are more regularly used by bats for which the SAC is designated, with Slindon Woods and Woods north of Chichester noted as containing maternity colonies for Barbastelle bats. The increase in local recreation from the proposals would in part be focussed in these areas. This might result in degradation of the habitats, for example through trampling, dog fouling, noise and light disturbance, and air pollution from cars.

***Appropriate Assessment***

***Significant Impacts on Bats or Severance of Bat Flightlines***

5.11 The proposals seek to remove a very small section of the wooded shaw/treeline to the eastern boundary of the site. The small gap would likely have no impact upon the suitability of the habitat, given that to reach it, the Barbastelle bats present to the north would have to cross the A27, and numerous smaller streets and open habitats, many of them lit or containing existing built-up areas. As such this minimal removal of vegetation would be highly unlikely to impact upon the rare visiting barbastelle. There is considered to be no significant effect on bats or their flightlines

***Loss of Functionally-linked Habitats***

5.12 The proposals would remove a large area of grassland, of likely low value to bats, and replace this with residential areas, of negligible value, whilst potentially increasing disturbance of the adjacent wooded shaw, of moderate value. In the absence of mitigation, this might result in a minor negative impact upon these bats by reducing foraging area and increasing lightspill onto foraging habitats. The impact would be very minor, affecting individual bats.

5.13 The recorded average number of residents per individual household within the Arun District is published as 2.20. For 69 dwellings this would result in an approximate 152 residents, many of which might visit Slindon Woods, Eartham Woods and other areas for recreation such as dog walking.

5.14 The sites have pre-defined car parking, tracks and paths, and as such the increase in visitors would be unlikely to reduce suitability of these already disturbed areas. Measures are in place to prevent dog-fouling or other deleterious activities, and the quantum of disturbance is unlikely to significantly alter forest structure, particularly in more remote areas. Increased noise and light disturbance would be minimal as lighting of fires, camping, and similar activities are not permitted at night.

5.15 In summary, in the absence of mitigation, the proposals are considered to result in a very minor impact upon low numbers of bats. This may be considered a significant effect upon the Singleton and Cocking Tunnels SAC requiring mitigation.

***Potential Impacts on the Pagham Harbour SPA/Ramsar and Solent and Dorset Coast SPA in the Absence of Mitigation***

5.16 The proposal site is situated 9.8 km north-east of the Pagham Harbour SSSI, SPA, RAMSAR. *Pagham Harbour SPA / RAMSAR* site covers an area of 636.68 ha; the *Special Protection Area* boundary reflected with that of the RAMSAR Site. The Solent and Dorset Coast SPA is a newly designated site which covers the entirety of the coastline between approximately Lulworth and Climping. The SPA incorporates the Pagham Harbour Area and as such the potential impacts are considered similar. Given the distance to the site, this assessment considers it proportionate to combine the two.

5.17 The identified impact pathways to the Pagham Harbour site are the following:

- *Recreational disturbance effects (dog walking; recreational walking) through additional increased recreational pressure upon the SPA;*
- *Invasive non-native species;*
- *Water Pollution.*

5.18 The Habitats Regulations Assessment undertaken of the Arun District Plan (updated 2017) indicates that 50% of visitors to the site currently come from within 5.0 km of the site. As a result, Policy ENV DM2 Pagham Harbour states that:

- *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(61)) 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.*

5.19 Estuarine habitats are susceptible to nutrient enrichment; algal mats can form which smother the mud beneath, killing invertebrates and preventing wading birds from foraging within. Higher nutrient levels within water can result in eutrophication (*resulting in algal blooms and reduction in oxygen which can cause fish death)* and algal smothering of rare coastal habitats such as saltmarsh and seagrass.

5.20 The proposals are for c. 69no. units on the site. According to the estimates in the Foul Drainage Impact Assessment, the development is expected to generate approximately 31,050 litres per day of nutrient-enriched wastewater discharged to the WwTw. In the absence of mitigation this might not be fully treated and nutrient enriched discharge could cause harm to the Solent European sites.

***Appropriate Assessment***

***Recreational Disturbance***

5.21 The recorded average number of residents per individual household within the Arun District is published as 2.20. For 69 dwellings this would result in an approximate 152 residents. Whilst a proportion of these residents may visit the Pagham Harbour, to reach the harbour is a relatively circuitous drive of c.15.8 km minimum, with the distance to the RSPB carpark almost 20.0 km. It is considered that many residents would prefer to use the A29 or A259 to head to the much closer and better-resourced beaches around Bognor Regis, and that visitors to Pagham would be sufficiently uncommon for the impact to be negligible. The beaches around Bognor Regis still form part of the Solent and Dorset Coast SPA; however, the areas generally accessible for casual visitors are already too frequently used to allow regular tern breeding and as such impacts would be negligible here.

***Water Pollution***

5.22 A capacity assessment is currently underway by Southern Water and payments to upgrade capacity are proposed within the foul drainage impact assessment. In any case, the existing land use of the site is that of intensively grazed horse paddocks, with manure being retained on-site. This would result in currently very high levels of nitrate leaching into the surface water and groundwater, within nitrate vulnerable zones for both surface water (Aldingbourne Rife) and Groundwater (Sussex Chalk). The loss of this continued enrichment would likely be significant to the local groundwater and surface water environments. The site foul drainage would likely discharge to the Tangmere WwTW which would discharge to the east of Pagham Habour, with nutrients being highly dispersed before reaching the harbour area. This is within the Solent and Dorset Coast SPA area, but as this is designated for open sea and tern populations, there would be no significant effect.

5.23 Aside from nutrient enrichment, pollutants from vehicles, car washing, de-icing and other land uses can cause deterioration of water courses and harm to species using them. The site is a considerable distance from Aldingbourne Rife, and as such these minor inputs are considered insignificant. The conclusion of the assessment is that the loss of the existing habitats on-site and conversion to residential would likely result in a reduction in nitrate pollution of the protected sites, and as such no significant effect is predicted, and no mitigation is required for nitrates.

5.24 As a ‘major development’ it is considered possible that recreational increases might result in a significant effect, both alone and in-combination. It is considered highly unlikely that invasive species impacts would have any effect due to the intervening distances and habitats.

5.25 The site is much closer to many other natural areas for recreation such as Eartham Woods and Slindon Woods, both popular dog walking locations. It is much faster and more direct to reach these areas and they are particularly more sheltered for walking during the winter, when many of the birds for which Pagham Harbour is significant would be using the harbour.

5.26 At a strategic level it has been agreed that any development within 5.0km of the Pagham Harbour site can address the effects of increased recreational pressure upon the European designated sites via financial contributions per dwelling towards the Solent Recreation Mitigation Scheme and/ or by providing measures associated with development designated to avoid or mitigate any adverse effect.

5.27 A bespoke assessment has been provided above for the site, and given it is well outside the 5.0 km zone, impacts alone are considered to be ‘negligible’.

## 6.0 MITIGATION / AVOIDANCE MEASURES AND THE IN-COMBINATION TEST

***Relevant Proposals***

6.1 The potential for impacts and mitigation has been assessed in combination with other local proposals of relevance. Those which are known include:

- *BN/50/20/PL: Demolition of existing structures on-site & erection of 42 No. dwellings with access, parking, landscaping & associated works. This application is a Departure from the Development Plan. Approved, currently under construction (not within Arun Housing Allocation);*
- *WA/22/15/OUT: Outline application with some matters reserved to provide up to 400 No. new dwellings, up to 500 sqm of non-residential floorspace (A1, A2. A3, D1 and/or D2), 5000 sqm of light industrial floorspace (B1 (b)/(c)) & associated works including access, internal road network, highway works, landscaping, selected tree removal, informal & formal open space & play areas, pedestrian & cyclist infrastructure utilities, drainage infrastructure, car & cycle parking & waste storage. This application is a departure from the Development Plan & also lies within the parish of Eastergate. Approved on appeal; currently under construction (within Arun Housing Allocation);*
- *Barnham/Eastergate/Westergate Allocation (BEW): a large allocated area of 3000 proposed dwellings; not yet commenced (within Arun Housing Allocation);*
- *Aldingbourne and Eastergate – a further 130 dwellings allocated through several smaller developments;*
- *West of Bersted Allocation - 2500 dwellings proposed to the south-west of the district.*

***In-combination effects of Loss of Functionally-Linked Habitat on the Singleton and Cocking Tunnels SAC***

6.2 The recorded average number of residents per individual household within the Arun District is published as 2.20. For the further 442 allocated dwellings this would result in an approximate 972 residents. The sites are in very close proximity and the same argument applies in that whilst many of these residents would visit the nearby sites, the impacts this would have would be relatively dispersed and unlikely to reduce the suitability for bats.

6.3 The BEW Allocation is over 12.0 km from the SAC and as such any impacts would be highly dispersed and not significant.

***Mitigation***

6.4 All lighting proposals at the site shall be designed in accordance with the BCT/ILP Guidance Note 08/18, with any lighting in the vicinity of the boundary vegetation being low-level bollards or downlighters. No lighting is proposed in the vicinity of the wooded shaw.

6.5 The boundary habitats are proposed to be enhanced and reinforced, which would result in a demonstrable Biodiversity Net Gain and would increase foraging and commuting potential on the site boundaries, above the existing baseline. The gap in the wooded shaw shall have semi-mature large trees planted to each side to minimise the gap created.

6.6 This mitigation would result in the minor loss of habitat at the site being mitigated and resulting in a net gain with regards foraging and commuting bats.

***In-combination effects of Recreational Disturbance on the Pagham Harbour SPA/Ramsar and Solent and Dorset Coast SPA***

6.7 The recorded average number of residents per individual household within the Arun District is published as 2.20. For the further 442 dwellings this would result in an approximate 972 residents. The sites are in very close proximity and the same argument applies in that whilst a proportion of these residents may visit the Pagham Harbour, in that to reach the harbour is a relatively indirect route, and that the nearer accessible semi-natural areas would likely receive many more visitors. The BEW and west of Bersted Allocations might result in significant impacts upon the site, being much closer to the harbour and coast. These impacts have been considered as part of the Local Plan HRA and mitigation is likely to be required. Providing this is the case, the in-combination impacts of this relatively small site would stand a ‘negligible’ risk of a significant effect.

***In-combination Effects of Water Pollution***
***on the Pagham Harbour SPA/Ramsar and Solent and Dorset Coast SPA***

6.8 In combination, the quantum of local development may exceed the capacity for the local WwTW to process wastewater and may result in nutrient-enriched water reaching the coast. As these sites would all discharge outside of Pagham Harbour and would not affect the Solent and Dorset Coast SPA, no significant effect is anticipated. Payments are required for every development to upgrade the local WwTW capacity which shall address this issue in the longer term.

6.9 The BEW and west of Bersted Allocations would likely discharge to the same site in which case no significant effect is predicted. Capacity studies shall determine the need for infrastructure improvements for each allocation.

***Summary Conclusion***

6.10 Lizard Landscape Design and Ecology has considered all of the potential significant effects that could arise from the development scheme in view of the European sites Conservation Objectives. In light of the assessment undertaken and with due regard had to relevant case law, the avoidance and mitigation measures proposed, Lizard Landscape Design and Ecology conclude that the proposals would not adversely affect the integrity of the protected sites when the development scheme proposals are considered either alone or in combination with other plans or projects.

6.11 Lizard Landscape Design and Ecology has undertaken an initial screening assessment of the implications of the development scheme on relevant Designated Sites in view of the European sites' conservation objectives. Further detailed assessment has then been undertaken, including the proposal of specific avoidance and mitigation measures.

6.12 The conclusions of this assessment work are set out within this information to enable a Habitats Regulations Assessment document, such that the competent authority, in exercising its duties under the Habitats Regulations, has all the necessary information to consider the application.

6.13 It is considered that this Habitat Regulations Assessment contains all the information required for the local authority to undertake an appropriate assessment for the development scheme. It is considered that there would not be an adverse effect on the integrity of any *European Designated Sites* when the development scheme proposals are considered either alone or in combination with the extended development area with reference to the test at *Regulation 63(1) of the Habitats Regulations*.

6.14 As the project alone or in combination would not contribute to an adverse impact on the integrity of the SPA / SAC / RAMSAR sites in view of the SPA conservation objectives, the development scheme would be considered acceptable subject to securing the mitigation and avoidance measures proposed.

reside.

Report Presented by:

Lizard Landscape Design and Ecology

LIZARD

Landscape Design and Ecology

Reside Developments Ltd