



# Land at Newgate Lane, North and Land at Newgate Lane, South

## Report to Inform Habitats Regulations Assessment Stage 1 and Stage 2

### Fareham Land LP and Bargate Homes

**February 2021**

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## Glossary

AADT	Annual Average Daily Traffic
ALSE	Assessment of Likely Significant Effects
CEnv	Chartered Environmentalist
CIEEM	Chartered Institute of Ecology & Environmental Management
CJEU	Court of Justice of the European Union
EFT	Emission Factor Toolkit
GradCIEEM	Graduate Member of Chartered Institute of Ecology & Environmental Management
Habitats Regulations	Conservation of Habitats and Species Regulations 2017
HDV	Heavy Duty Vehicles
HRA	Habitats Regulations Assessment
IAQM	Institute for Air Quality Management
IROPI	Imperative Reasons of Over-riding Public Interest
LSE	Likely Significant Effect
MCIEEM	Member of Chartered Institute of Ecology & Environmental Management
Natura 2000 site	A European site designated for its nature conservation value
NO <sub>x</sub>	Nitrogen Oxides
PC	Process Contribution
PEC	Predicted Environmental Concentration
PUSH	Partnership for Urban South Hampshire
SAC	Special Area of Conservation
SANG	Suitable Alternative Natural Greenspace
SPA	Special Protection Area
SWBGS	Solent Waders and Brent Goose Strategy
TEMPro	Trip End Model Presentation Program
TN	Total Nitrogen
WwTW	Wastewater Treatment Works



## Executive Summary

Contents	Summary
<b>Site location and description</b>	<p>The site is located to the west of the Newgate Lane East in Fareham, Hampshire and is centred at OS Grid Reference SU 57163 03124. The site currently comprises of grazed paddocks, arable fields and outbuildings associated with a residential property. The fields form part of farmland surrounded by the built-up areas of Fareham to the north, Gosport to the east and south and Stubbington to the west. The newly constructed Newgate Lane East bypass is to the east of the site.</p> <p>The proposed development comprises two Outline applications: P/18/1118/OA Land at Newgate Lane, North (Fareham Land LP) for up to 75 dwellings and P/19/0460/OA Land at Newgate Lane, South (Bargate Homes) for up to 115 dwellings, with associated infrastructure, parking and landscaping.</p>
<b>Scope of this Assessment</b>	<p>This report assesses the pathways to LSE (HRA Stage 1) of each development upon relevant designated Natura 2000 sites and subsequently assesses the significance of effects upon the integrity of such designated Natura 2000 sites (HRA Stage 2).</p> <p>This is a submission to inform the Competent Authority's (Planning Inspector) HRA.</p>
<b>Results of Stage 1: Screening</b>	<p>The results from the Stage 1 Screening Assessment found four pathways to LSE that required Stage 2: Appropriate Assessment. These were:</p> <ul style="list-style-type: none"> <li>• Loss of functionally linked habitat: Alone and in-combination;</li> <li>• Nutrient outputs during occupation: Alone and in-combination;</li> <li>• Recreational use during occupation: Alone and in-combination; and</li> <li>• Air quality changes during occupation: In-combination.</li> </ul> <p>Air quality changes during construction was also identified as a potential pathway to LSE at Stage 1, but was screened out.</p>
<b>Results of Stage 2: Appropriate Assessment</b>	<p>The results from the Stage 2 Appropriate Assessment found that, for both Land at Newgate Lane, North and Land at Newgate Lane, South, with mitigation (in the form of financial contributions to existing regional strategies and the delivery of a proposed winter bird mitigation area), loss of functionally linked habitat and recreational use during occupation do not have the potential to affect the integrity of any European designated site for nature conservation.</p> <p>The detailed analysis of the potential for changes in air quality to act in-combination, and nutrient outputs during occupation found that there was no potential for the integrity of any Natura 2000 site to be affected and no mitigation was required.</p>
<b>Conclusion</b>	<p>The 'Competent Authority', is therefore considered not to require further assessment under the Habitats Regulations, and both proposed developments can proceed without Stage 3 and Stage 4 being completed.</p>



## **1.0 Introduction**

### **1.1 Background**

WYG was commissioned by Fareham Land LP and Bargate Homes in April 2020, to prepare a report to inform Stage 1: Screening and Stage 2: Appropriate Assessment of a Habitats Regulations Assessment (HRA). The report was required in relation to the development proposals which comprise the construction of up to 190 residential units across two development parcels. This report is intended to support appeals against non-determination of the two Outline planning applications for the site, as described in Section 1.3.

This report has been prepared by WYG Senior Ecologist Kevin Wood. The conditions pertinent to the report are provided in Appendix A.

### **1.2 Site Location**

The site is located to the west of the Newgate Lane east in Fareham, Hampshire and is centred at Ordnance Survey (OS) National Grid Reference SU 57163 03124. The site is shown on Figure 1 and comprises of grazed paddocks, arable fields and outbuildings associated with a residential property. The property forms part of farmland surrounded by the built-up areas of Fareham to the north, Gosport to the east and south and Stubbington to the west. The newly constructed Newgate Lane East bypass is to the east of the site

### **1.3 Development Proposals**

The proposed development comprises two Outline applications: P/18/1118/OA Land at Newgate Lane, North (Fareham Land LP) for up to 75 dwellings and P/19/0460/OA Land at Newgate Lane, South (Bargate Homes) for up to 115 dwellings, with associated infrastructure, parking and landscaping. The illustrative masterplan showing the development proposals is provided in Appendix B.

### **1.4 Requirements for the HRA**

The requirement for an HRA is established through Council Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora, hereby referred to as the 'Habitats Directive', in Articles 6(3) and 6(4). The Habitats Directive is transposed into national legislation by the Conservation of Habitats and Species Regulations 2017. These are hereafter referred to as the 'Habitats Regulations'.

Under Regulation 63, any project which is likely to have a significant effect on a European site (either alone or in-combination with other projects) and is not directly connected with, or necessary for the management of the site, must be subject to an HRA to determine the implications for the site in view of its conservation objectives. This is determined during the Stage 1: Screening Assessment of an HRA (see below).

A Stage 2: Appropriate Assessment then needs to be carried out in respect of any plan or project which:



- either alone or in combination with other plans or projects would be likely to have a significant effect on a site designated within the European network; and
- is not directly connected with the management of the site for nature conservation.

The term European site is defined fully in Regulation 8 of the Habitats Regulations and includes:

- Special Areas of Conservation (SACs);
- candidate and proposed SACs;
- Special Protection Areas (SPAs);
- potential SPAs;
- proposed Wetlands of International Importance designated or proposed for their wetland features under the auspices of the Convention of Wetlands of International Importance (commonly referred to as 'Ramsar sites'); and
- sites identified for Natura 2000 compensatory measures.

The final two categories are afforded the same level of protection as SACs and SPAs as a matter of Government policy, and the assessment provisions of the Habitats Regulations are applied to them (Natural England, 2017).



## 2.0 Assessment Methodology

### 2.1 Assessment Guidance

The Habitats Directive and Regulations do not specify how assessment should be undertaken. In undertaking this HRA, the process we have adopted is that recommended in official EC guidance (EC, 2001). In this report, our Stage 1: Screening found that LSE were possible and so a Stage 2: Appropriate Assessment was required. These two stages form the first of four HRA stages, as described below:

- **Stage 1: Screening** – the process which identifies the likely impacts upon a Natura 2000 site of a project or plan, either alone or in combination with other projects or plans and considers whether these impacts are likely to be significant. This is also known as an ‘assessment of likely significant affects (ALSE)’;
- **Stage 2: Appropriate assessment** – the consideration of the impact on the integrity of the Natura 2000 site of the project or plan, either alone or in-combination with other projects or plans, with respect to the site’s structure and function and its conservation objectives. Additionally, where there are adverse impacts, an assessment of the potential mitigation of those impacts (in accordance with guidance following the recent decision by the CJEU; People Over Wind and Sweetman v Coillte Teoranta (C-323/17) regarding application of embedded mitigation at Stage 1 or Stage 2 of an HRA (Freeths, 2018));
- **Stage 3: Assessment of alternative solutions** – the process which examines alternative ways of achieving the objectives of the project or plan that avoid adverse impacts on the integrity of the Natura 2000 site; and
- **Stage 4: Assessment where no alternative solutions exist and where adverse impacts remain** – an assessment of compensatory measures where, in the light of an assessment of Imperative Reasons of Over-riding Public Interest (IROPI), it is deemed that the project or plan should proceed (it is important to note that this guidance does not deal with the assessment of IROPI).

The Stage 1 Screening Assessment comprises four steps, as described below:

- **Step 1.** Determining whether the project or plan is directly connected with or necessary to the management of the Natura 2000 site(s);
- **Step 2.** Describing the project or plan and the description and characterisation of other projects or plans that in-combination have the potential for having significant effects on the Natura 2000 site(s);
- **Step 3.** Identifying the potential effects on the Natura 2000 site(s); and
- **Step 4.** Assessing the significance of any effects on the Natura 2000 site(s).

The Stage 2: Appropriate Assessment should identify the effects of those plans or projects on qualifying features of the European sites in relation to the Conservation Objectives of those sites and determine whether these effects will result in an adverse effect on the integrity of the designated site. Only where the decision maker (the Competent Authority – in this case the Planning Inspector), is satisfied that there will be no adverse effect on integrity, or where there are imperative reasons of overriding public interest (IROPI), can the plan or project be approved.





### 3.0 Stage 1: Screening

Projects may have spatial implications which can have further reaching effects than those predicted to fall within the development footprint. Specifically, it is recognised that the distance between a proposed development and a designated site is not a definitive determinant as to the likelihood or severity of an impact occurring. Site variables such as prevailing wind conditions, surface and groundwater flow direction will all have an influence on the relative distance at which an impact can occur.

Additionally, the mobile nature of qualifying interest bird species must also be considered, since an adverse effect on the qualifying species of a site, even if they are not present within the site for which they are a qualifying feature, may still result in a significant adverse impact upon a site.

#### 3.1 Step 1 – Determining whether the development proposals are directly connected with or necessary to the management of the internationally designated site(s)

The development proposals are not connected with and are not necessary for the management of any internationally designated sites, although they do have the potential to affect them.

#### 3.2 Step 2 – Description of the development proposals, Internationally Designated Sites that may be Affected and Approach taken to identifying Other Plans or Projects that could lead to In-combination Effects

##### 3.2.1 Description of the Development Proposals

The planning applications comprise the construction of up to 190 dwellings with associated gardens, roads and open space as shown in Appendix B. Although the development comprises two separate applications (and subsequently two appeals), the proposals have always been conceived as a cohesive development, with the project team responsible for the applications and the two developers working collaboratively. Therefore they have been assessed together within this report.

##### 3.2.2 List of the Internationally Designated Sites that may be Affected by the Development Proposals

The *Habitats Regulations Assessment for the Fareham Borough Local Plan* (Urban Edge Environmental Consulting, 2017) was the primary source used to identify internationally designated sites that may be affected by the proposals. This report screened the following sites, as shown in Figure 2 (the qualifying features of these sites are provided in Appendix C). These comprise:

- Butser Hill SAC;
- Solent and Isle of Wight Lagoons SAC;
- The New Forest Ramsar;
- The New Forest SAC;
- The New Forest SPA;
- Portsmouth Harbour SPA;



- Portsmouth Harbour Ramsar;
- Solent and Southampton Water SPA;
- Solent and Southampton Water Ramsar;
- Chichester and Langstone Harbours SPA;
- Chichester and Langstone Harbours Ramsar;
- River Itchen SAC;
- Solent Maritime SAC; and
- Solent and Dorset Coast SPA.

### **3.2.3 Approach taken to identifying Other Plans or Projects that could lead to In-combination Effects**

In Step 3, four potential pathways to LSE were identified. To identify other plans and projects that could be relevant and act in-combination, it was first established whether effects could be mitigated by measures that also apply in-combination. For instance, the nutrient outputs mitigation would mitigate all effects leading to a zero net increase in nitrogen. Therefore, no search of other projects is necessary. Where this approach was taken, it is explained fully in the text.

For the assessment of air quality impacts, the methodology used for the in-combination assessment involves the use of TEMPro modelling. This predicts growth in traffic numbers based on several factors, including population growth as it was not possible to establish traffic data for all other applications that could result in increases in traffic levels on roads affected by the development proposals by any other means. This is explained fully in Section 3.2.4 and in the *Newgate Lane, Fareham: Air Quality Ecological Impacts Statement* (REC Delivering Solutions, 2019).

## **Step 3 – Identifying the Potential Effects on Internationally Designated site(s)**

The potential pathways to LSE were identified following a review of the following:

- The *Habitats Regulations Assessment for the Fareham Borough Local Plan* (Urban Edge Environmental Consulting, 2017);
- The designation citation of part of the site as a Low Use Site (F15) identified in the Solent Waders and Brent Goose Strategy (SWBGS, 2019);
- The qualifying features of SACs and SPAs (see Appendix C);
- The conservation objectives for SACs and SPAs;
- The threats to SPAs;
- The Ramsar criteria; and
- Site Improvement Plans for SACs and SPAs.

Following this review the following potential pathways to LSE were considered to be relevant to the development proposals based on the activities during construction and operation activities:

- Loss of functionally linked habitat for SPA qualifying bird species;
- Air quality changes during occupation primarily from exhaust emissions caused by increases in traffic arising from the development proposals;
- Increased recreational use during occupation use of Solent European designated sites identified in the SWBGS; and



- Increases in nutrient outputs from changing the occupied use of the site from agricultural use to residential use.

These are discussed in the following section, where the differentiation is made with respect to the potential for pathways to act alone or in-combination.

This report does not discuss those pathways where there is no potential for them to result in LSE. Therefore, only those where there is a tangible risk of the effect occurring are discussed.

### **3.2.4 Loss of functionally linked habitat: Alone and in-combination**

Part of both sites lie within a Low Use Site (F15) identified in the Solent Wader and Brent Goose Strategy (SWBGS) (Solent WBGS, 2019), as shown in Figure 3. This being the case, a potential pathway to LSE therefore exists as the site may support qualifying species of bird from SWBGS European sites.

**Loss of functionally linked habitat: Alone and In-combination has therefore been taken forward to Stage 2: Appropriate Assessment.**

### **3.2.5 Air quality changes during construction: Alone and in-combination**

An *Air Quality Ecological Impacts Statement* was completed by REC Delivering Solutions (2019). The salient points from the report have been provided below and are discussed as necessary.

The report does not make any reference to the potential for the development proposals to affect any Natura 2000 site during construction. This is considered appropriate as there are no Natura 2000 sites within the typical zone of influence of air quality changes caused by construction i.e. releases of fugitive dust. This is identified by the Institute of Air Quality Management (IAQM) (2014) as being up to 50 m from sources. As shown in Figure 2, none of the sites screened into this assessment are within this zone.

The report also does not make reference to the potential for construction traffic to result in a potential pathway to LSE. However, as shown in Section 3.2.6, predicted Annual Average Daily Traffic (AADT) movements for the occupied site (which are always higher than during construction) are not predicted to be higher than the threshold for requiring detailed assessment set out in the Natural England guidance document *Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations* (Natural England, 2018). These are based on 1000 AADT for cars and 200 AADT for heavy duty vehicles (HDV) not being exceeded.

**It is therefore considered that Air Quality Changes During Construction: Alone and In-Combination can be screened out and are not taken further in this assessment.**

### **3.2.6 Air quality changes during occupation: Alone and in-combination**

An *Air Quality Ecological Impacts Statement* was completed by REC Delivering Solutions (2019). The salient points from the report have been provided below and are discussed as necessary.



- The report found that there were two sites within 200 m of roads potentially affected by increases in traffic levels caused by the development proposals. These were the Portsmouth Harbour Ramsar and SPA. This distance is consistent with *Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations* (Natural England, 2018).
- The report uses Natural England guidance to establish that the development proposals do not have the potential to act alone. This is based on the development proposals generating 100 AADT for cars and no AADT for HDV:

*"The development is predicted to generate 100 AADT with no HDVs. As such, roads which are predicted to experience increases in traffic flows associated with the development are not expected to experience changes of over 1,000 AADT or 200 HDVs."*

(REC Delivering Solutions, 2019: Page 14)

The 1000 AADT movements of cars or 200 AADT of HDV thresholds are therefore not predicted to be exceeded. It is therefore considered that changes in air quality as a result of increases in traffic movements during operation alone can be screened out at Stage 1 and Stage 2: Appropriate Assessment is not required.

- The report found that it was not possible to establish that the level of traffic on roads affected by the development proposals in-combination with other plans and projects would be below 1000 AADT movements of cars and / or 200 AADT of HDV. Changes in air quality as a result of increases in traffic movements during operation in-combination has therefore been taken forward to Stage 2: Appropriate Assessment.

**Air Quality Changes During Occupation: Alone can be screened out and has not been taken forward to Stage 2: Appropriate Assessment.**

**Air Quality Changes During Occupation: In-combination has therefore been taken forward to Stage 2: Appropriate Assessment.**

### **3.2.7 Recreational use during occupation: Alone and in-combination**

The site is within 5.6 km of the Solent and Southampton Water SPA and Ramsar and the Portsmouth Harbour SPA and Ramsar. This means that the impacts arising from the development proposals due to recreational pressure must be mitigated for in accordance with the Solent Recreation Mitigation Strategy (Bird Aware Solent, 2017). This strategy determined that all residential developments within 5.6 km had the potential to result in increased visitor pressure with subsequent disturbance impacts on qualifying bird species.

This is considered to apply both alone and in-combination. However, due to the proposed mitigation, it is not necessary to specifically identify all projects that could result in an increase in recreational pressure on Solent European designated sites included within the strategy (i.e. those within 5.6 km).

**Recreational Use During Occupation: Alone and In-combination therefore been taken forward to Stage 2: Appropriate Assessment.**



### **3.2.8 Nutrient outputs during occupation: Alone and in-combination**

In June 2018, an Integrated Water Management Study for South Hampshire was published by the Partnership for Urban South Hampshire (PUSH) (2018) has identified that there is uncertainty in some locations as to whether there will be sufficient capacity to accommodate new housing growth, and the potential for adverse effects upon coastal SPAs (including the Solent and Southampton Water SPA) as a result of nitrogen discharge.

Natural England have identified that there is the potential for nutrients arising from increased wastewater from residential development to affect the qualifying features of European designated sites in the Solent (Natural England, 2020).

This effect has been identified as having the potential to promote algae growth that can affect aquatic vegetation and increase turbidity thereby affecting foraging efficacy of fish-eating birds, and the availability of suitable vegetation for species such as dark-bellied brent geese. These effects could ultimately impact all aspects of the functioning of European designated sites in an interconnected manner.

Included within this guidance, Natural England have provided a calculator for establishing the change in nutrient (nitrogen) levels in water arising from the site pre- and post-development. This includes calculating the change in surface water as a result of a change in land use, and from wastewater that is discharged into the Solent with consent from Peel Common Wastewater Treatment Works (WwTW) (and eventually reaches the Solent).

Wastewater from the development proposals will be treated at the Southern Water WwTW at Peel Common, but ultimately water will discharge to the sea and may contribute to background nitrogen levels within the Solent. The development therefore has the potential to result in LSE on Solent SACs, SPAs and Ramsars due to direct and indirect effects of water pollution and therefore this pathway cannot be screened out at Stage 1 and Stage 2 Appropriate Assessment is required.

This is considered to apply both alone and in-combination, but due to the proposed mitigation, it is not necessary to specifically identify all projects within the Solent catchment that could result in an increase in nutrient discharge into the Solent.

**Nutrient Outputs During Occupation: Alone and In-combination therefore been taken forward to Stage 2: Appropriate Assessment.**

## **3.3 Step 4 – Assessing the significance of any effects on the Natura 2000 site(s)**

The Stage 1: Screening Assessment found that there were four pathways to LSE that require appropriate assessment at Stage 2. These are summarised in Table 1. These LSE apply to both Land North of Newgate Lane and Land South of Newgate Lane.



**Table 1 Summary of Stage 1 Screening**

Pathway	Site	Relevant Conservation Objectives	Stage 2 required
Loss of functionally linked habitat: Alone and in-combination	Portsmouth Harbour SPA and Ramsar	Maintain or restore the population of each of the qualifying species.	Yes
	Solent and Southampton Water SPA and Ramsar	Maintain or restore the population of each of the qualifying species.	
Air quality changes during construction: Alone	None within (50 m) zone of influence of the site.	N/A	No
Air quality changes during construction: In-combination	None within (50 m) zone of influence of the site.	N/A	No
Air quality changes during occupation: Alone	Portsmouth Harbour SPA and Ramsar	N/A	No
Air quality changes during occupation: In-combination	Portsmouth Harbour SPA and Ramsar	Maintain or restore the extent and distribution of the habitats of the qualifying features. Maintain or restore the structure and function of the habitats of the qualifying species.	Yes
Nutrient outputs during occupation: Alone	Portsmouth Harbour SPA and Ramsar	Maintain or restore the supporting processes on which the habitats of the qualifying features rely.	Yes
	Solent and Southampton Water SPA and Ramsar	Maintain or restore the supporting processes on which the habitats of the qualifying features rely.	



Pathway	Site	Relevant Conservation Objectives	Stage 2 required
	Solent Maritime SAC	Maintain or restore the supporting processes on which qualifying natural habitats and the habitats of qualifying species rely.	
	Solent and Isle of Wight Lagoons SAC	Maintain or restore the supporting processes on which qualifying natural habitats and the habitats of qualifying species rely.	
	Solent and Dorset Coast SPA	Maintain or restore the supporting processes on which the habitats of the qualifying features rely.	
Nutrient outputs during occupation: In-combination	Portsmouth Harbour SPA and Ramsar	Maintain or restore the supporting processes on which the habitats of the qualifying features rely.	Yes
	Solent and Southampton Water SPA and Ramsar	Maintain or restore the supporting processes on which the habitats of the qualifying features rely.	
	Solent Maritime SAC	Maintain or restore the supporting processes on which qualifying natural habitats and the habitats of qualifying species rely.	
	Solent and Isle of Wight Lagoons SAC	Maintain or restore the supporting processes on which qualifying natural habitats and the habitats of qualifying species rely.	

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Pathway	Site	Relevant Conservation Objectives	Stage 2 required
	Solent and Dorset Coast SPA	Maintain or restore the supporting processes on which the habitats of the qualifying features rely.	
Recreational use during occupation Alone	Portsmouth Harbour SPA and Ramsar  Solent and Southampton Water SPA and Ramsar	Maintain or restore the population of each of the qualifying species. Maintain or restore the distribution of the qualifying features within the site.  Maintain or restore the population of each of the qualifying species. Maintain or restore the distribution of the qualifying features within the site.	Yes
Recreational use during occupation: In-combination	Portsmouth Harbour SPA and Ramsar  Solent and Southampton Water SPA and Ramsar	Maintain or restore the population of each of the qualifying species. Maintain or restore the distribution of the qualifying features within the site.  Maintain or restore the population of each of the qualifying species. Maintain or restore the distribution of the qualifying features within the site.	Yes





It is therefore concluded that there are no pathways for LSE on the following European designated sites and they are not taken further in the HRA process:

- Butser Hill SAC;
- River Itchen SAC;
- The New Forest Ramsar;
- The New Forest SAC; and
- The New Forest SPA.



## 4.0 Stage 2: Appropriate Assessment

The following sections discuss the potential pathways to LSE that could result in impacts on the integrity of the European sites identified during Stage 1: Screening, summarised in Table 1.

### 4.1 Loss of Functionally Linked Habitat: Alone and In-combination

The site was surveyed from November 2013 to March 2014 and October 2014 to March 2015 to inform the application to construct the new Newgate Lane East and Stubbington Bypass (WSP, 2015). During the surveys, it was found that it did not support significant numbers of SPA qualifying species and the bypass was subsequently approved and constructed. The bypass now bisects site F15 and it is considered that this has further reduced the suitability of that habitats to support SWBGS species. Surveys were also carried out on 6<sup>th</sup> and 17<sup>th</sup> March 2018 (Ethos Environmental Planning, 2019) and no geese or waders were recorded, with the only SPA-listed species being a single black-headed gull *Chroicocephalus ridibundus* recorded on the 17<sup>th</sup> March 2018. However, there is not sufficient evidence to determine with certainty that the loss of Low Use Site F15 would not result in adverse effects on the qualifying SPA bird population.

The proposed development at Land at Newgate Lane, North will result in the loss of 3.14 ha of Low Use Site F15 and Land at Newgate Lane, South will result in the loss of 4.67 ha of Low Use Site F15, a total loss of 7.81 ha.

Typically, mitigation for the loss of Low Use Sites is through the payment of a financial contribution of £35,610 which is secured via Section 106 agreement to enhance, manage and monitor the wider Solent Wader and Brent Goose Network. This funding is to be managed by the respective local authority and used to support schemes across the network, including in neighbouring authorities. Due to the lack of an established strategy within Fareham Borough, Natural England have requested further information to demonstrate a clear link between impact and mitigation, i.e. detail of how the financial contribution would be used to enhance the wider network.

It is proposed that a Winter Bird Mitigation Area measuring 5.0 ha is created at Old Street, Stubbington which will enhance the wader and Brent Goose network. A Winter Bird Mitigation Strategy setting out the background, rationale and proposed management of the Mitigation Area is included at Appendix F and correspondence with Natural England agreeing the principles of the mitigation at Appendix G. This mitigation strategy has been prepared in consultation with and agreed by Natural England and Nicholas Sibbett CEcol CMLI CEnv MCIEEM (appointed to act as expert witness on behalf of Fareham Borough Council).

**It is therefore considered that, taking into account mitigation, loss of functionally linked habitat at Land at Newgate Lane, North and Land at Newgate Lane, South will not affect the integrity of the Solent and Southampton Water SPA and Ramsar or Portsmouth Harbour SPA and Ramsar.**

### 4.2 Air Quality Changes during Occupation: In-combination

The data and assessment from the *Air Quality Ecological Impacts Statement* (REC Delivering Solutions, 2020) has been used to inform this Stage 2: Appropriate Assessment. These data have



been used to follow the guidance provided in *Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations* (Natural England, 2018) to make the assessment. The *Air Quality Ecological Impacts Statement* did not assess the two applications individually, but in-combination. Therefore this assessment takes the same approach.

The data in the *Air Quality Ecological Impacts Statement* uses the following information:

- 2017 Verification of Traffic Data (see Appendix II of the *Air Quality Ecological Impacts Statement*) which uses the Department for Transport (DfT) Matrix web tool<sup>1</sup> and Trip End Model Presentation Program (TEMPRO) software package to allow for conversion from the obtained 2017 traffic flow year to 2024 to represent the development opening year.
- Process contribution (PC) – This is the predicted emissions as a result of the traffic generated from the development proposal including those in-combination effects i.e. emissions from traffic generated by other plans or projects on the same roads affected by these development proposals. The report included four projects as having the potential to act in-combination which were therefore included in the PC value, these were:
  - Stubbington Bypass;
  - Land at Old Street, Stubbington (P/17/1451/OA);
  - Newlands Farm, Fareham (P15/1279/OA); and
  - Daedalus Development.

These data were used to assess whether the PC exceeded 1% of the critical load / level of nitrogen / acid for the habitats of the Portsmouth Harbour Ramsar and SPA within 200 m of roads affected by traffic from the development proposals. These levels are referred to jointly as the environmental standards (Page 13) and environmental quality standards (EQS) (all tables) in the *Air Quality Ecological Impacts Statement*. These were determined for all 10 parcels of land within the Portsmouth Harbour Ramsar and SPA using the Air Pollution Information System (APIS) website.

The 1% level is used as a threshold for significance in the report and is consistent with *Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations* (Natural England, 2018). Where this is not exceeded therefore, the PC for emissions is no considered to be significant.

The findings from the *Air Quality Ecological Impacts Statement* are summarised in Table 2, these apply to 10 parcels of land within the Portsmouth Harbour Ramsar and SPA that are within 200 m of roads affected by traffic generated by the development proposals.

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<sup>1</sup> It should be noted that the DfT matrix is referenced in DEFRA guidance LAQM (TG16) (DEFRA, 2018) as being a suitable source of data for air quality assessments and is therefore considered to provide a good representation of traffic flows in the vicinity of the site.



**Table 2 Summary of the Quantification of PC Screening**

Emission	Range of Proportion of EQS at the 10 parcels within Portsmouth Harbour Ramsar and SPA (%)	1% of EQS Exceeded
Predicted Annual Mean NOx Concentration ( $\mu\text{g}/\text{m}^3$ )	0 – 1	No
Predicted 24-hour Mean NOx Concentration ( $\mu\text{g}/\text{m}^3$ )	0 – 1	No
Predicted Annual Mean NH3 Concentrations	0	No
Predicted Annual Mean Nitrogen Deposition Rate ( $\text{kgN}/\text{ha}/\text{yr}$ )	0	No
Predicted Annual Mean Acid Deposition Rate ( $\text{kq}/\text{ha}/\text{yr}$ )	0	No

These results show that 1% of the EQS of any pollutant would not be exceeded at any of the 10 locations within the Portsmouth Harbour Ramsar and SPA that are within 200 m of roads affected by traffic generated by the development proposals.

**It is therefore considered that changes in air quality during operation as a result of traffic generated by Land at Newgate Lane, North or Land at Newgate Lane, South will not affect the integrity of Portsmouth Harbour Ramsar or SPA.**

### 4.3 Recreational use during Occupation: Alone and In-combination

#### 4.3.1 Land at Newgate Lane, North

Land at Newgate Lane, North will comprise a development of up to 75 dwellings. As discussed in Section 3.2.7, a per-unit financial contribution will be made in accordance with the latest charging schedule for the Solent Recreation Mitigation Strategy (Bird Aware Solent, 2017) in order to mitigate for potential alone and in-combination recreational impacts upon the Solent SPAs and Ramsars.

This financial contribution will be secured within a Section 106 Agreement.

**With the application of this mitigation, recreation as a result of Land at Newgate Lane, North is predicted to have no impact on the integrity of the Solent SPAs and Ramsars.**

#### 4.3.2 Land at Newgate Lane, South

Land at Newgate Lane, South will comprise a development of up to 115 dwellings. As discussed in Section 3.2.7, a per-unit financial contribution will be made in accordance with the latest charging schedule for the Solent Recreation Mitigation Strategy (Bird Aware Solent, 2017) in order to mitigate for potential alone and in-combination recreational impacts upon the Solent SPAs and Ramsars.

This financial contribution will be secured within a Section 106 Agreement.



**With the application of this mitigation, recreation as a result of Land at Newgate Lane, South is predicted to have no impact on the integrity of the Solent SPAs and Ramsars.**

#### 4.4 Nutrient Outputs during Occupation: Alone and In-combination

Due to the uncertainty over whether new development can be accommodated by existing wastewater treatment infrastructure without causing harm to coastal European sites, Natural England advise that all residential development should achieve nitrogen neutrality.

##### 4.4.1 Land at Newgate Lane, North

A Nitrate Budget Calculation was completed by CEP (CEP, 2020a) which concluded that the development would result in a decrease of -28.1 Kg/yr TN.

As part of this assessment, a further calculation has been undertaken which takes a more precautionary approach to the assessment of existing land uses. This uses Version 4 of Natural England's *Advice on Achieving Nutrient Neutrality for New Development in the Solent Region* (Natural England, 2020) for calculating nitrogen budgets. The assumptions used in this assessment are as follows:

- 110 litres of waste water will be generated per person per day;
- Wastewater will be treated at Peel Common WwTW;
- Peel Common has a discharge consent limit of 9 mg/l TN;
- The scheme comprises a maximum of 75 dwellings;
- The post-development site will comprise 3.37 ha of urban land and 0.55 ha of open space;
- An occupancy rate of 2.4 people per dwelling as per Natural England guidance; and
- The pre-development site comprises 3.4 ha of cereals (31.20 Kg/TN/ha/yr) and 0.55 ha of land not in agricultural use (5.00 Kg/TN/ha/yr).

The full calculations are provided in Appendix D (Land at Newgate Lane, North) and are summarised in Table 3.

**Table 3 Summary of nutrient input calculations (Land at Newgate Lane, North)**

Option	Current Land Use TN Load (A)	Waste water from Future Land Use TN Load (B)	Future Land Use TN Load (C)	Change (B+C-A)
75 units	108.830 Kg/TN/yr	44.085 Kg/TN/yr	51.091 Kg/TN/yr	-13.654 Kg/TN/yr

The calculations show that taking a more precautionary approach, the development proposals would still result in a decrease in nitrogen load of -13.654 Kg/yr TN.



A planning condition should be attached to any permission requiring a landscape management plan setting out how the open space on site will be managed in the long-term to prevent any additional nutrient inputs (for example through inclusion of dog waste bins).

**As the combined changes in land use for Land at Newgate Lane, North will result in a net decrease in nutrient inputs into the Solent, there is no potential for an adverse effect on the integrity of the Solent European sites for nature conservation alone or in-combination.**

#### 4.4.2 Land at Newgate Lane, South

A Nitrate Budget Calculation was completed by CEP (CEP, 2020b) which concluded that the development would result in a decrease of -21.6 Kg/yr TN.

As part of this assessment, a further calculation has been undertaken which takes a more precautionary approach to the assessment of existing land uses. This uses Version 4 of Natural England’s *Advice on Achieving Nutrient Neutrality for New Development in the Solent Region* (Natural England, 2020) for calculating nitrogen budgets. The assumptions used in this assessment are as follows:

- 110 litres of waste water will be generated per person per day;
- Wastewater will be treated at Peel Common WwTW;
- Peel Common has a discharge consent limit of 9 mg/l TN;
- The scheme comprises a maximum of 115 dwellings;
- The post-development site will comprise 4.73 ha of urban land and 1.27 ha of open space;
- An occupancy rate of 2.4 people per dwelling as per Natural England guidance; and
- The pre-development site comprises 4.6 ha of cereals (31.20 Kg/TN/ha/yr) and 1.4 ha of lowland grazing (13.00 Kg/TN/ha/yr).

The full calculations are provided in Appendix E (Land at Newgate Lane, South) and are summarised in Table 4.

**Table 4 Summary of nutrient input calculations (Land at Newgate Lane, South)**

Option	Current Land Use TN Load (A)	Waste water from Future Land Use TN Load (B)	Future Land Use TN Load (C)	Change (B+C-A)
115 units	161.720 Kg/TN/yr	67.597 Kg/TN/yr	73.989 Kg/TN/yr	-20.134 Kg/TN/yr

The calculations show that taking a more precautionary approach, the development proposals would still result in a decrease in nitrogen load of -20.134 Kg/yr TN.

A planning condition should be attached to any permission requiring a landscape management plan setting out how the open space on site will be managed in the long-term to prevent any additional nutrient inputs (for example through inclusion of dog waste bins).



**As the combined changes in land use for Land at Newgate Lane, South will result in a net decrease in nutrient inputs into the Solent, there is no potential for an adverse effect on the integrity of the Solent European sites for nature conservation alone or in-combination.**

## 5.0 Summary

The Stage 2: Appropriate Assessment found that for all potential pathways to LSE taken forward to Stage 2: Appropriate Assessment, with the application of mitigation, there would be no impact on the integrity of any European site as a result of either Land at Newgate Lane, North or Land at Newgate Lane, South.

As such, it is considered that the 'Competent Authority' can permit each development and does not require Stage 3 or Stage 4 assessments to be undertaken, as described in Section 2.1.



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# Figures

**Figure 1: Site Location Plan**

**Figure 2: European Designated Sites within 10 km of the  
Boundary of the Site**

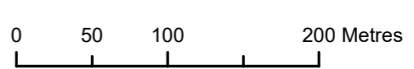
**Figure 3: Site Location in Relation to Low Use Site F15**



Rev	Date	Notes
A	30/04/20	Initial map production

Legend

Site boundary



Site Location Plan

**Newgate Lane North and South, Fareham  
Fareham Land LP and Bargate Homes**






Scale at A3: 1:5,000	Project No: A117387	Drawing No: Figure 1	Revision: A
Drawn by: Ben Blowers		Drawn date: 30/04/2020	Approved by: Kevin Wood

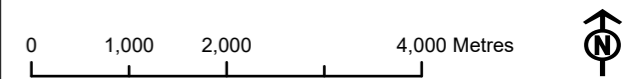
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Rev	Date	Notes
A	18/02/21	Initial map production

Legend

-  Site boundary
-  Site boundary 10km buffer
-  Special Protection Areas (SPA)
-  Special Areas of Conservation (SAC)
-  Ramsar



**European Designated Sites within 10 km of the Boundary of the Site**

**Newgate Lane North and South, Fareham Land LP and Bargate Homes**

Scale at A3: 1:77,500	Project No: A117387	Drawing No: Figure 2	Revision: A
Drawn by: Ben Blowers		Drawn date: 18/02/2021	Approved by: Kevin Wood

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Rev	Date	Notes
A	30/04/20	Initial map production

Legend

- Site boundary
- F15 site boundary

0 25 50 100 Metres



**Site Location in Relation to Low Use Site F15**

**Newgate Lane North and South, Fareham  
Fareham Land LP and Bargate Homes**

Scale at A3: 1:3,000	Project No: A117387	Drawing No: Figure 3	Revision: A
Drawn by: Ben Blowers	Drawn date: 30/04/2020	Approved by: Kevin Wood	

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# Appendix A – Report Conditions



### **REPORT CONDITIONS**

This Report has been prepared using reasonable skill and care for the sole benefit of Fareham Land LP and Bargate Homes ("the Client") for the proposed uses stated in the report by WYG Environment Planning Transport Limited ("WYG"). WYG exclude all liability for any other uses and to any other party. The report must not be relied on or reproduced in whole or in part by any other party without the copyright holder's permission.

No liability is accepted or warranty given for; unconfirmed data, third party documents and information supplied to WYG or for the performance, reliability, standing etc of any products, services, organisations or companies referred to in this report. WYG does not purport to provide specialist legal, tax or accounting advice.

The report refers, within the limitations stated, to the environment of the site in the context of the surrounding area at the time of the inspections'. Environmental conditions can vary and no warranty is given as to the possibility of changes in the environment of the site and surrounding area at differing times. No investigative method can eliminate the possibility of obtaining partially imprecise, incomplete or not fully representative information. Any monitoring or survey work undertaken as part of the commission will have been subject to limitations, including for example timescale, seasonal and weather-related conditions. Actual environmental conditions are typically more complex and variable than the investigative, predictive and modelling approaches indicate in practice, and the output of such approaches cannot be relied upon as a comprehensive or accurate indicator of future conditions. The "shelf life" of the Report will be determined by a number of factors including; its original purpose, the Client's instructions, passage of time, advances in technology and techniques, changes in legislation etc. and therefore may require future re-assessment.

The whole of the report must be read as other sections of the report may contain information which puts into context the findings in any executive summary.

The performance of environmental protection measures and of buildings and other structures in relation to acoustics, vibration, noise mitigation and other environmental issues is influenced to a large extent by the degree to which the relevant environmental considerations are incorporated into the final design and specifications and the quality of workmanship and compliance with the specifications on site during construction. WYG accept no liability for issues with performance arising from such factors.



# Appendix B – Illustrative Masterplan





- KEY**
-  Site boundary
  -  Existing trees/vegetation to be retained
  -  Existing drainage
  -  Existing public rights of way
  -  Newgate Lane relief road Southern Section (Currently under construction)
  -  Proposed development cells and units
  -  Proposed key frontages
  -  Proposed secondary frontages
  -  Proposed buffer planting to eastern and southern boundaries
  -  Proposed tree planting
  -  Proposed feature tree planting
  -  Proposed hedgerows
  -  Proposed footpaths
  -  Proposed attenuation area
  -  Proposed play areas

C - [03/04/2019] Update in accordance with BRS.4989\_20F  
 B - [05/09/2018 LD] Update in accordance with BRS.4989\_20E  
 A - [07/06/2018 LG] Update in accordance with BRS.4989\_20C

Revisions:  
 Land at Newgate Lane,  
 North, Fareham,

Fareham Land LP

**Fig. 8: Illustrative Landscape Masterplan**

Drawing Ref: BRS.4989\_30C

Date : 24/05/2018 **Pegasus**  
 Drawn by : LG **Group**  
 Checked by : JWA  
 Scale : 1 : 1250 @ A1





- KEY**
-  Site boundary
  -  Existing trees/vegetation to be retained
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  -  Proposed secondary frontages
  -  Proposed buffer planting to eastern and southern boundaries
  -  Proposed tree planting
  -  Proposed feature tree planting
  -  Proposed hedgerows
  -  Proposed footpaths
  -  Proposed attenuation area
  -  Proposed play areas
  -  Proposed pedestrian link to Woodcote Lane

D - (04/09/2018) Update in accordance with BRS.4989\_70B  
 C - (17/04/2019) Update in accordance with BRS.4989\_20F  
 B - (05/09/2018 LG) Update in accordance with BRS.4989\_20E  
 A - (07/04/2018 LG) Update in accordance with BRS.4989\_20C  
 Revisions:

Land at Newgate Lane,  
 South, Fareham,

Bargate Homes Ltd

**Fig. 8: Illustrative  
 Landscape Masterplan**

Drawing Ref: BRS.4989\_30D

Date : 24/05/2018 **Pegasus**  
 Drawn by : LG **Group**  
 Checked by : JWA  
 Scale : 1 : 1250 @ A1



# **Appendix C – Qualifying Features of European Sites Screened into this Assessment**



### Butser Hill SAC (JNCC, 2015a)

#### Annex I habitats that are a primary reason for selection of this site

- Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia)
- *Taxus baccata* woods of the British Isles

### Solent and Isle of Wight Lagoons SAC (JNCC, 2015b)

#### Annex I habitats that are a primary reason for selection of this site

##### **1150 Coastal lagoons \* Priority feature**

The Solent on the south coast of England encompasses a series of **Coastal lagoons**, including percolation, isolated and sluiced lagoons. The site includes a number of lagoons in the marshes in the Keyhaven – Pennington area, at Farlington Marshes in Chichester Harbour, behind the sea-wall at Bembridge Harbour and at Gilkicker, near Gosport. The lagoons show a range of salinities and substrates, ranging from soft mud to muddy sand with a high proportion of shingle, which support a diverse fauna including large populations of three notable species: the nationally rare foxtail stonewort *Lamprothamnium papulosum*, the nationally scarce lagoon sand shrimp *Gammarus insensibilis*, and the nationally scarce starlet sea anemone *Nematostella vectensis*. The lagoons in Keyhaven – Pennington Marshes are part of a network of ditches and ponds within the saltmarsh behind a sea-wall. Farlington Marshes is an isolated lagoon in marsh pasture that, although separated from the sea by a sea-wall, receives sea water during spring tides. The lagoon holds a well-developed low-medium salinity insect-dominated fauna. Gilkicker Lagoon is a sluiced lagoon with marked seasonal salinity fluctuation and supports a high species diversity. The lagoons at Bembridge Harbour have formed in a depression behind the sea-wall and sea water enters by percolation. Species diversity in these lagoons is high and the fauna includes very high densities of *N. vectensis*.

### The New Forest Ramsar (JNCC, 1993)

There are three Ramsar criteria for which the Dorset Heathlands Ramsar is designated.

#### **Ramsar criterion 1**

Valley mires and wet heaths are found throughout the site and are of outstanding scientific interest. The mires and heaths are within catchments whose uncultivated and undeveloped state buffer the mires against adverse ecological change. This is the largest concentration of intact valley mires of their type in Britain.

#### **Ramsar criterion 2**

The site supports a diverse assemblage of wetland plants and animals including several nationally rare species. Seven species of nationally rare plant are found on the site, as are at least 65 British Red Data Book species of invertebrate.

#### **Ramsar criterion 3**

The mire habitats are of high ecological quality and diversity and have undisturbed transition zones. The invertebrate fauna of the site is important due to the concentration of rare and scarce wetland species. The whole site complex, with its examples of semi-natural habitats is essential to the genetic and ecological diversity of southern England.



### The New Forest SAC (JNCC, 2015c)

There are 11 Annex I habitats present that are a primary reason for selection of this site:

- **3110** Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae);
- **3130** Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoëto-Nanojuncetea;
- **4010** Northern Atlantic wet heaths with *Erica tetralix*;
- **4030** European dry heaths;
- **6410** Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae);
- **7150** Depressions on peat substrates of the Rhynchosporion;
- **9120** Atlantic acidophilous beech forests with *Ilex* and sometimes also *Taxus* in the shrublayer (Quercion robori-petraeae or Ilici-Fagenion);
- **9130** Asperulo-Fagetum beech forests;
- **9190** Old acidophilous oak woods with *Quercus robur* on sandy plains;
- **91D0** Bog woodland; and
- **91E0** Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (Alno-Padion, Alnion incanae, Salicion albae).

There are two Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site:

- **7140** Transition mires and quaking bogs
- **7230** Alkaline fens

There are two Annex II species that are primary reasons for selection of this site (JNCC, 2015):

- **1044** Southern damselfly (*Coenagrion mercurial*); and
- **1083** Stag beetle (*Lucanus cervus*).

There is one Annex II species present as a qualifying feature, but not a primary reason for site selection:

- **1166** Great crested newt (GCN) (*Triturus cristatus*)

### The New Forest SPA (JNCC, 2001a)

There are four Annex I species present during the breeding season that are qualifying species for selection of this site:

- Dartford warbler, 538 pairs representing at least 33.6% of the breeding population in Great Britain;
- Honey buzzard (*Pernis apivorus*), two pairs representing at least 10.0% of the breeding population in Great Britain;
- Nightjar, 300 pairs representing at least 8.8% of the breeding population in Great Britain; and
- Woodlark, 184 pairs representing at least 12.3% of the breeding population in Great Britain (Count as at 1997).



There is one Annex I species present during the over-wintering season that is a qualifying species for selection of this site:

- Hen harrier, 15 individuals representing at least 2.0% of the wintering population in Great Britain.

### **Portsmouth Harbour SPA (JNCC, 2001b)**

#### **Over winter**

Dark-bellied Brent Goose *Branta bernicla bernicla*, 2,847 individuals representing at least 0.9% of the wintering Western Siberia/Western Europe population (5-year peak mean 1991/2 - 1995/6).

### **Portsmouth Harbour Ramsar (JNCC, 1995)**

#### **Ramsar criterion 3**

The intertidal mudflat areas possess extensive beds of eelgrass *Zostera angustifolia* and *Zostera noltei* which support the grazing dark-bellied brent geese populations. The mud-snail *Hydrobia ulvae* is found at extremely high densities, which helps to support the wading bird interest of the site. Common cord-grass *Spartina anglica* dominates large areas of the saltmarsh and there are also extensive areas of green algae *Enteromorpha* spp. and sea lettuce *Ulva lactuca*. More locally the saltmarsh is dominated by sea purslane *Halimione portulacoides* which gradates to more varied communities at the higher shore levels. The site also includes a number of saline lagoons hosting nationally important species.

#### **Ramsar criterion 6**

Dark-bellied brent goose, *Branta bernicla bernicla*, 2105 individuals, representing an average of 2.1% of the GB population (5-year peak mean 1998/9-2002/3).

### **Solent and Southampton Water SPA (JNCC, 2001c)**

This site qualifies under Article 4.1 of the Directive (79/409/EEC) by supporting populations of European importance of the following species listed on Annex I of the Directive:

- During the breeding season;
  - Common tern (*Sterna hirundo*), 267 pairs representing at least 2.2% of the breeding population in Great Britain (5-year peak mean, 1993-1997);
  - Little tern (*Sterna albifrons*), 49 pairs representing at least 2.0% of the breeding population in Great Britain (5-year peak mean, 1993-1997);
  - Mediterranean gull (*Larus melanocephalus*), 2 pairs representing at least 20.0% of the breeding population in Great Britain (5-year peak mean, 1994-1998);
  - Roseate tern (*Sterna dougallii*), 2 pairs representing at least 3.3% of the breeding population in Great Britain (5-year peak mean, 1993-1997); and
  - Sandwich tern (*Sterna sandvicensis*), 231 pairs representing at least 1.7% of the breeding population in Great Britain (5-year peak mean, 1993-1997).

This site also qualifies under Article 4.2 of the Directive (79/409/EEC) by supporting populations of European importance of the following migratory species:



- Over winter;
  - Black-tailed godwit (*Limosa limosa islandica*), 1,125 individuals representing at least 1.6% of the wintering Iceland - breeding population (5-year peak mean, 1992/3-1996/7);
  - Dark-bellied brent goose (*Branta bernicla bernicla*), 7,506 individuals representing at least 2.5% of the wintering Western Siberia/Western Europe population (5-year peak mean, 1992/3-1996/7);
  - Ringed plover (*Charadrius hiaticula*), 552 individuals representing at least 1.1% of the wintering Europe/Northern Africa - wintering population (5-year peak mean, 1992/3-1996/7); and
  - Teal (*Anas crecca*), 4,400 individuals representing at least 1.1% of the wintering Northwestern Europe population (5-year peak mean, 1992/3-1996/7).

The area also qualifies under Article 4.2 of the Directive (79/409/EEC) by regularly supporting at least 20,000 waterfowl:

Over winter, the area regularly supports 53,948 individual waterfowl (5 year peak mean 1991/2 - 1995/6) including: gadwall (*Anas strepera*), teal, ringed plover, black-tailed godwit, little grebe (*Tachybaptus ruficollis*), great crested grebe (*Podiceps cristatus*), cormorant (*Phalacrocorax carbo*), dark-bellied brent goose, wigeon (*Anas penelope*), redshank (*Tringa tetanus*), pintail (*Anas acuta*), shoveler (*Anas clypeata*), red-breasted merganser (*Mergus serrator*), grey plover (*Pluvialis squatarola*), lapwing (*Vanellus vanellus*), dunlin (*Calidris alpina alpina*), curlew (*Numenius arquata*) and shelduck (*Tadorna tadorna*).

## **Solent and Southampton Water Ramsar (JNCC, 1998)**

### **Ramsar Criterion 1**

The site is one of the few major sheltered channels between a substantial island and mainland in European waters, exhibiting an unusual strong double tidal flow and has long periods of slack water at high and low tide. It includes many wetland habitats characteristic of the biogeographic region: saline lagoons, saltmarshes, estuaries, intertidal flats, shallow coastal waters, grazing marshes, reedbeds, coastal woodland and rocky boulder reefs.

### **Ramsar Criterion 2**

The site supports an important assemblage of rare plants and invertebrates. At least 33 British Red Data Book invertebrates and at least eight British Red Data Book plants are represented on site.

### **Ramsar Criterion 5**

Assemblages of international importance:

- Species with peak counts in winter: 51343 waterfowl (5-year peak mean 1998/99-2002/2003).

### **Ramsar Criterion 6**

Species/populations occurring at levels of international importance.

Qualifying Species/populations (as identified at designation):

- Species with peak counts in spring/autumn:



- Ringed plover, Europe/Northwest Africa, 397 individuals, representing an average of 1.2% of the GB population (5-year peak mean 1998/9-2002/3).
- Species with peak counts in winter:
  - Dark-bellied brent goose, 6456 individuals, representing an average of 3% of the population (5-year peak mean 1998/9-2002/3);
  - Eurasian teal, NW Europe, 5514 individuals, representing an average of 1.3% of the population (5-year peak mean 1998/9-2002/3); and
  - Black-tailed godwit, Iceland/W Europe, 1240 individuals, representing an average of 3.5% of the population (5-year peak)

### Chichester and Langstone Harbours SPA (JNCC, 2001d)

#### During the breeding season;

Little Tern *Sterna albifrons*, 100 pairs representing up to 4.2% of the breeding population in Great Britain (5-year mean, 1992-1996)

Sandwich Tern *Sterna sandvicensis*, 158 pairs representing up to 1.1% of the breeding population in Great Britain (1998)

#### On passage;

Little Egret *Egretta garzetta*, 137 individuals representing up to 17.1% of the population in Great Britain (Count as at 1998)

#### Over winter;

Bar-tailed Godwit *Limosa lapponica*, 1,692 individuals representing up to 3.2% of the wintering population in Great Britain (5-year peak mean 1991/2 - 1995/6)

Little Egret *Egretta garzetta*, 100 individuals representing up to 20.0% of the wintering population in Great Britain (Count as at 1998).

This site also qualifies under **Article 4.2** of the Directive (79/409/EEC) by supporting populations of European importance of the following migratory species:

#### On passage;

Ringed Plover *Charadrius hiaticula*, 2,471 individuals representing up to 4.9% of the Europe/Northern Africa - wintering population (5-year peak mean 1991/2 - 1995/6)

#### Over winter;

Black-tailed Godwit *Limosa limosa islandica*, 1,003 individuals representing up to 1.4% of the wintering Iceland - breeding population (5-year peak mean 1991/2 - 1995/6)

Dark-bellied Brent Goose *Branta bernicla bernicla*, 17,119 individuals representing up to 5.7% of the wintering Western Siberia/Western Europe population (5-year peak mean 1991/2 - 1995/6)

Dunlin *Calidris alpina alpina*, 44,294 individuals representing up to 3.2% of the wintering Northern Siberia/Europe/Western Africa population (5-year peak mean 1991/2 - 1995/6)

Grey Plover *Pluvialis squatarola*, 3,825 individuals representing up to 2.5% of the wintering Eastern Atlantic - wintering population (5-year peak mean 1991/2 - 1995/6)





Redshank *Tringa totanus*, 1,788 individuals representing up to 1.2% of the wintering Eastern Atlantic - wintering population (5-year peak mean 1991/2 - 1995/6)

Ringed Plover *Charadrius hiaticula*, 846 individuals representing up to 1.7% of the wintering Europe/Northern Africa - wintering population (5-year peak mean 1991/2 - 1995/6)

**Assemblage qualification: A wetland of international importance.**

The area qualifies under **Article 4.2** of the Directive (79/409/EEC) by regularly supporting at least 20,000 waterfowl

Over winter, the area regularly supports 93,142 individual waterfowl (5 year peak mean 1991/2 - 1995/6) including: Wigeon *Anas penelope*, Bar-tailed Godwit *Limosa lapponica*, Dark-bellied Brent Goose *Branta bernicla bernicla*, Ringed Plover *Charadrius hiaticula*, Grey Plover *Pluvialis squatarola*, Dunlin *Calidris alpina alpina*, Black-tailed Godwit *Limosa limosa islandica*, Redshank *Tringa totanus*, Little Grebe *Tachybaptus ruficollis*, Little Egret *Egretta garzetta*, Shelduck *Tadorna tadorna*, Curlew *Numenius arquata*, Teal *Anas crecca*, Pintail *Anas acuta*, Shoveler *Anas clypeata*, Red-breasted Merganser *Mergus serrator*, Oystercatcher *Haematopus ostralegus*, Lapwing *Vanellus vanellus*, Knot *Calidris canutus*, Sanderling *Calidris alba*, Cormorant *Phalacrocorax carbo*, Whimbrel *Numenius phaeopus*.  
ak mean 1998/9-2002/3).

**Chichester and Langstone Harbours Ramsar (JNCC, 1987)**

**Ramsar criterion 5**

Assemblages of international importance: Species with peak counts in winter: 76480 waterfowl (5-year peak mean 1998/99-2002/2003)

**Ramsar criterion 6** – Species/populations occurring at levels of international importance.

Qualifying Species/populations (as identified at designation):

Species with peak counts in spring/autumn:

- Ringed plover *Charadrius hiaticula*, Europe / Northwest Africa 853 individuals, representing an average of 1.1% of the population (5-year peak mean 1998/9- 2002/3)
- Black-tailed godwit *Limosa limosa islandica*, Iceland/W Europe 906 individuals, representing an average of 2.5% of the population (5-year peak mean 1998/9- 2002/3)
- Common redshank *Tringa totanus totanus*, 2577 individuals, representing an average of 1% of the population (5-year peak mean 1998/9- 2002/3)

Species with peak counts in winter:

- Dark-bellied brent goose *Branta bernicla bernicla*, 12987 individuals, representing an average of 6% of the population (5-year peak mean 1998/9- 2002/3)
- Common shelduck *Tadorna tadorna*, NW Europe 1468 individuals, representing an average of 1.8% of the GB population (5-year peak mean 1998/9-2002/3)
- Grey plover, E Atlantic/W Africa -wintering 3043 individuals, representing an average of 1.2% of *Pluvialis squatarola* the population (5-year peak mean 1998/9-2002/3)



- Dunlin *Calidris alpina alpina*, W Siberia/W Europe 33436 individuals, representing an average of 2.5% of the population (5-year peak mean 1998/9-2002/3)

Species/populations identified subsequent to designation for possible future consideration under criterion 6. Species regularly supported during the breeding season:

Little tern *Sterna albifrons albifrons*, W Europe 130 apparently occupied nests, representing an average of 1.1% of the breeding population (Seabird 2000 Census).

### River Itchen SAC (JNCC, 2015d)

There is one Annex I habitats present that are a primary reason for selection of this site:

- **3260** Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation.

There are two Annex II species that are primary reasons for selection of this site:

- **1044** Southern damselfly (*Coenagrion mercuriale*); and
- **1163** Bullhead (*Cottus gobio*).

There are four Annex II species present as a qualifying feature, but not a primary reason for site selection:

- **1092** White-clawed (or Atlantic stream) crayfish *Austropotamobius pallipes*;
- **1096** Brook lamprey *Lampetra planeri*;
- **1106** Atlantic salmon *Salmo salar*; and
- **1355** Otter *Lutra lutra*.

### Solent Maritime SAC (JNCC, 2015e)

#### Annex I habitats that are a primary reason for selection of this site

##### **1130 Estuaries**

The Solent encompasses a major estuarine system on the south coast of England with four coastal plain **estuaries** (Yar, Medina, King's Quay Shore, Hamble) and four bar-built **estuaries** (Newtown Harbour, Beaulieu, Langstone Harbour, Chichester Harbour). The site is the only one in the series to contain more than one physiographic sub-type of estuary and is the only cluster site. The Solent and its inlets are unique in Britain and Europe for their hydrographic regime of four tides each day, and for the complexity of the marine and estuarine habitats present within the area. Sediment habitats within the estuaries include extensive estuarine flats, often with intertidal areas supporting eelgrass *Zostera* spp. and green algae, sand and shingle spits, and natural shoreline transitions. The mudflats range from low and variable salinity in the upper reaches of the estuaries to very sheltered almost fully marine muds in Chichester and Langstone Harbours. Unusual features include the presence of very rare sponges in the Yar estuary and a sandy 'reef' of the polychaete *Sabellaria spinulosa* on the steep eastern side of the entrance to Chichester Harbour.

##### **1320 Spartina swards (Spartinion maritimae)**

Solent Maritime is the only site for smooth cord-grass *Spartina alterniflora* in the UK and is one of only two sites where significant amounts of small cord-grass *S. maritima* are found. It is also one of the few remaining sites for Townsend's cord-grass *S. x townsendii* and holds extensive areas of common cord-grass *Spartina anglica*, all four taxa thus occurring here in close proximity. It has



additional historical and scientific interest as the site where *S. alterniflora* was first recorded in the UK (1829) and where *S. x townsendii* and, later, *S. anglica* first occurred.

### **1330 Atlantic salt meadows (Glauco-Puccinellietalia maritimae)**

The Solent contains the second-largest aggregation of **Atlantic salt meadows** in south and south-west England. Solent Maritime is a composite site composed of a large number of separate areas of saltmarsh. In contrast to the Severn estuary, the salt meadows at this site are notable as being representative of the ungrazed type and support a different range of communities dominated by sea-purslane *Atriplex portulacoides*, common sea-lavender *Limonium vulgare* and thrift *Armeria maritima*. As a whole the site is less truncated by man-made features than other parts of the south coast and shows rare and unusual transitions to freshwater reedswamp and alluvial woodland as well as coastal grassland. Typical **Atlantic salt meadow** is still widespread in this site, despite a long history of colonisation by cord-grass *Spartina* spp.

### **Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site**

- 1110 Sandbanks which are slightly covered by sea water all the time
- 1140 Mudflats and sandflats not covered by seawater at low tide
- 1150 Coastal lagoons \* Priority feature
- 1210 Annual vegetation of drift lines
- 1220 Perennial vegetation of stony banks
- 1310 Salicornia and other annuals colonizing mud and sand
- 2120 "Shifting dunes along the shoreline with *Ammophila arenaria* ("white dunes")"

### **Annex II species present as a qualifying feature, but not a primary reason for site selection**

- 1016 Desmoulin's whorl snail *Vertigo moulinsiana*

### **Solent and Dorset Coast pSPA (Natural England, 2016)**

The proposal for Solent and Dorset Coast is to create a new SPA for internationally important populations of:

- Common tern *Sterna hirundo*
- Sandwich tern *Thalasseus sandvicensis*
- Little tern *Sternula albifrons*



# Appendix D – Land at Newgate Lane, North Nutrient Balancing Calculations



**Table 3: Calculating Total Nitrogen (TN) Load From Development Wastewater (Stage 1)**

Step	Measurement	Value	Unit	Explanation
Development proposal.	Development types that would increase the population served by a wastewater system.	75.000	Residential dwellings	Number of dwellings.
1	Additional population.	180.000	Persons	Uses an average household size of 2.4 x number of dwellings.
2	Wastewater volume generated by development.	19800.000	L/day	Persons x 110 litres/day. Where relevant, deduct wastewater volume of population displaced by the proposed development.
3	Waste Water Treatment Works (WWTW) environmental limit for TN.	9.000	mg/l TN	Peel Common WwTW limit.
4	Deduct acceptable TN loading (@ 2 mg/l TN).	6.100	mg/l TN	90% of environmental limit. – 2 mg/l in accordance with NE guidance
5	TN discharged after WWTW.	120780.000	mg/TN/day	Step 2 x Step 4
6	Convert mg/TN to kg/TN per day.	0.121	Kg/TN/day	Divide by 1,000,000.
7	Convert kg/TN per day to kg/TN per year.	44.085	Kg/TN/yr	x365 days.
<b>TN Load Wastewater 44.085 Kg/TN/yr</b>				



**Table 4: Calculating TN Load From Current Land use (Stage 2)**

Step	Measurement	Farm type	Value	Unit	Explanation
1	Total area of existing land	Cereals No use	3.400 0.550	ha	Area of land lost to development
2	Nitrate loss.	Cereals No use	31.200 5.000	Kg/ha/yr	The existing land uses
3	Multiply total area by farm type nitrate loss	Cereals No use	106.080 2.750	Kg/TN/yr	Area x nitrate loss
<b>TN Load – Current land use 108.830 Kg/TN/yr</b>					

**Table 5: Calculating TN Load From Future Land Uses (Stage 3)**

Step	Measurement	Value	Unit	Explanation
1	Future urban land	3.370	ha	Area of development that will change from agricultural land to urban land use
2	Total nitrogen load from future urban area	48.191	Kg/TN/yr	area (ha) x 14.3 Kg/TN/yr (nitrogen leaching from urban land each year)
3	New SANG / open space	0.580	ha	Area of development that will change from agricultural land to SANG / open space
4	TN load from SANG / open space	2.900	Kg/TN/yr	area (ha) x 5 (nitrogen leaching from SANG / open space each year)
5	Combine TN load from future land uses	51.091	Kg/TN/yr	-
<b>TN Load – Future land use 51.091 Kg/TN/yr</b>				



**Table 6: Calculating Net Change in TN from The Development (Stage 4)**

Step	Measurement	Value	Unit	Explanation
1	Identify TN loads from wastewater	44.085	Kg/TN/yr	(Stage 1)
2	Calculate TN from land use - subtract TN load from future land uses (Stage 3) from existing land uses (Stage 2)	57.739	Kg/TN/yr	(Stage 2 - Stage 3)
3	Determine nitrogen budget - the difference between the TN load for the proposed development and the existing uses	-13.654	Kg/TN/yr	(Step 1 - Step 2)
4	Calculate and include 20% buffer (does not apply to neutral projects)	N/A	N/A	N/A
<b>TN Budget -13.654 Kg/TN/yr</b>				



# Appendix E – Land at Newgate Lane, South Nutrient Balancing Calculations





**Table 3: Calculating Total Nitrogen (TN) Load From Development Wastewater (Stage 1)**

Step	Measurement	Value	Unit	Explanation
Development proposal.	Development types that would increase the population served by a wastewater system.	115.000	Residential dwellings	Number of dwellings.
1	Additional population.	276.000	Persons	Uses an average household size of 2.4 x number of dwellings.
2	Wastewater volume generated by development.	30360.000	L/day	Persons x 110 litres/day. Where relevant, deduct wastewater volume of population displaced by the proposed development.
3	Waste Water Treatment Works (WWTW) environmental limit for TN.	9.000	mg/l TN	Peel Common WwTW limit.
4	Deduct acceptable TN loading (@ 2 mg/l TN).	6.100	mg/l TN	90% of environmental limit. – 2 mg/l in accordance with NE guidance
5	TN discharged after WWTW.	166676.400	mg/TN/day	Step 2 x Step 4
6	Convert mg/TN to kg/TN per day.	0.185	Kg/TN/day	Divide by 1,000,000.
7	Convert kg/TN per day to kg/TN per year.	67.597	Kg/TN/yr	x365 days.
<b>TN Load Wastewater 67.597 Kg/TN/yr</b>				



**Table 4: Calculating TN Load From Current Land use (Stage 2)**

Step	Measurement	Farm type	Value	Unit	Explanation
1	Total area of existing land	Cereals	4.600	ha	Area of land lost to development
		Lowland Grazing	1.400		
2	Nitrate loss.	Cereals	31.200	Kg/ha/yr	The existing land uses
		Lowland Grazing	13.000		
3	Multiply total area by farm type nitrate loss	Cereals	143.520	Kg/TN/yr	Area x nitrate loss
		Lowland Grazing	18.200		
<b>TN Load – Current land use 161.720 Kg/TN/yr</b>					

**Table 5: Calculating TN Load From Future Land Uses (Stage 3)**

Step	Measurement	Value	Unit	Explanation
1	Future urban land	4.730	ha	Area of development that will change from agricultural land to urban land use
2	Total nitrogen load from future urban area	67.639	Kg/TN/yr	area (ha) x 14.3 Kg/TN/yr (nitrogen leaching from urban land each year)
3	New SANG / open space	1.270	ha	Area of development that will change from agricultural land to SANG / open space
4	TN load from SANG / open space	6.350	Kg/TN/yr	area (ha) x 5 (nitrogen leaching from SANG / open space each year)
5	Combine TN load from future land uses	73.989	Kg/TN/yr	-
<b>TN Load – Future land use 73.989 Kg/TN/yr</b>				



**Table 6: Calculating Net Change in TN from The Development (Stage 4)**

Step	Measurement	Value	Unit	Explanation
1	Identify TN loads from wastewater	67.597	Kg/TN/yr	(Stage 1)
2	Calculate TN from land use - subtract TN load from future land uses (Stage 3) from existing land uses (Stage 2)	87.731	Kg/TN/yr	(Stage 2 - Stage 3)
3	Determine nitrogen budget - the difference between the TN load for the proposed development and the existing uses	-20.134	Kg/TN/yr	(Step 1 - Step 2)
4	Calculate and include 20% buffer (does not apply to neutral projects)	N/A	N/A	N/A
<b>TN Budget -20.134 Kg/TN/yr</b>				



# Appendix F – Winter Bird Mitigation Strategy

<b>Site:</b>	Old Street, Stubbington
<b>Client:</b>	Fareham Land LLP and Bargate Homes
<b>Job Number:</b>	A117387
<b>Survey Type(s):</b>	Winter Bird Mitigation Strategy
<b>File Location:</b>	I:\Projects\Projects A117000 on\A117387 Land West of Newgate Lane\Reports

## 1.0 Introduction

WYG were commissioned by Fareham Land LLP and Bargate Homes to prepare a Winter Bird Mitigation Strategy, covering the proposed creation of a Winter Bird Mitigation area at Old Street, Stubbington. The purpose of this is to provide compensation for the partial loss of F15, a Low Use site within the Solent Wader and Brent Goose strategy which has been used historically by lapwing *Vanellus*.

The ownership and long-term management and monitoring of the Winter Bird Mitigation Area as shown in Figure 1, will be secured via legal agreement in perpetuity (defined as 125 years) or the lifetime of the associated developments (whichever is longer).

### 1.1 Site Location

The site is located on land to the west of Old Street in the village Stubbington, Hampshire and is centred at Ordnance Survey National Grid Reference: SU 54133 02880. The survey area, hereafter referred to as 'the site', is shown on Figure 1 and comprises of two fields; the northern field is horse-grazed with semi-improved grassland, and the southern field is an abandoned arable field with tall ruderal vegetation and grassland, also grazed. Both fields have borders that are partially lined with trees and hedgerows.

### 1.2 Development Proposals

The proposals are to create a Winter Bird Mitigation Area measuring 5.0 ha maintained in perpetuity, to compensate for the loss of 11.84 ha of F15 across the proposed developments at Newgate Lane East, Land at Newgate Lane (South) and Land at Newgate Lane (North). Following these three developments, there would be 13.26 ha of F15 remaining.

## 2.0 Baseline

The site was subject to a series of ecological surveys and assessments as part of a proposed planning application (and subsequent appeal which was dismissed) in 2018 (ref: P/17/1451/OA). These were undertaken by Hampshire Ecological Services (HES) and WYG and comprise:

- Land west of Old Street, Stubbington: Ecological Appraisal Report (HES, 2017)
- Land west of Old Street, Stubbington: Wintering Bird Survey Report (HES, 2017)
- Land west of Old Street, Stubbington: Breeding Bird Survey Report (HES, 2017)
- Old Street, Stubbington: Bat Activity Report (WYG, 2017)
- Old Street, Stubbington: Bat Tree Assessment Report (WYG, 2017)
- Old Street, Stubbington: Dormouse Presence / Likely Absence Report (WYG, 2017)

# Winter Bird Mitigation Strategy



- Old Street, Stubbington: Reptile Presence / Likely Absence Report (WYG, 2017)

A summary of the ecological baseline is given in Table 1.

**Table 1:** Survey completed and month conducted

Survey Type	Month Survey Conducted	Summary of Results
Ecological Appraisal	13 <sup>th</sup> April 2016	<p>The site consisted of two agricultural fields separated by hedgerows and a track (Marsh Lane). The northern field comprised horse-grazed semi-improved grassland while the southern field was arable land. The northern boundary of the site were agricultural fields; the eastern and southern boundaries were residential housing; and the western boundary was Titchfield Haven National Nature Reserve (NNR).</p> <p>The Ecological Appraisal also identified an active badger sett consisting of 9 holes at the western site boundary of the southern field.</p>
Wintering Bird Survey	Ten wintering bird survey visits were carried out between the 22 <sup>nd</sup> December 2015 and 30 <sup>th</sup> March 2016.	<p>A total of 34 bird species were recorded during the surveys within the site. Six amber list Birds of Conservation Concern, one of which (bullfinch) is also a UK BAP species were noted. The remaining amber list species are black-headed gull, common gull, dunnock, great black-backed gull and stock dove. eight red listed species were noted, of which five were UK BAP species (herring gull, house sparrow, lapwing, song thrush and starling). Other red list species include fieldfare, mistle thrush and redwing.</p> <p>The majority of the species recorded at the site were typical of farmland and improved grassland habitat. No significant numbers of wintering birds were recorded during the surveys and all species occurring on site are either common or fairly common within Hampshire and the surrounding area.</p>
Breeding Bird Survey	Five breeding bird survey visits were carried out between 26 <sup>th</sup> April and 24 <sup>th</sup> June 2016.	<p>A total of 37 bird species were recorded during the surveys within the site. Three amber list species (Dunnock, Reed Bunting and Stock Dove) and seven red list species (Cuckoo, House Sparrow, Lapwing, Linnet, Mistle Thrush, Skylark and Starling) were thought to likely be breeding on site. However, no birds were confirmed to be breeding on site during the surveys.</p>



		<p>One Schedule 1 species was recorded (Cetti's Warbler) during the surveys. The species was noted along the western boundary hedgerow.</p> <p>The majority of the species present are typical of semi-improved grassland and farmland habitat.</p> <p>No significant numbers of notable species were recorded during the surveys.</p>
Bat Activity Surveys	Activity surveys were conducted on the following days - 12 <sup>th</sup> July, 31 <sup>st</sup> August 4 <sup>th</sup> October 2017.	At least six, but up to 7 species of bat were recorded using the habitats across the site during the surveys. The site was considered to be of importance of up to <i>District, local or parish level</i> for foraging and commuting bats.
Bat Tree Assessment	11 <sup>th</sup> September 2017	All trees present within the site boundaries were assessed as providing negligible or low suitability to support roosting bats.
Dormouse Presence / Likely Absence	27 <sup>th</sup> July, 16 <sup>th</sup> August, 8 <sup>th</sup> September and 6 <sup>th</sup> October 2017.	During the survey conducted on 6 <sup>th</sup> October, a dormouse and dormouse nest was recorded within a nest tube located within the northern hedgerow boundary of the northern field.
Reptile Presence/ Likely Absence Survey	8 <sup>h</sup> September – 26 <sup>th</sup> September 2017	A low population of slow worms, grass snake and common lizard were recorded on-site, distributed around the boundaries of the southern field.

An updated site visit on 28<sup>th</sup> October 2020 confirmed that there had been no significant change in the site conditions since the surveys undertaken in 2017. The northern field remains horse grazed. The southern field remains a partially overgrown arable field which is not subject to grazing by horses. Therefore it is considered that there will be no significant change to the populations of notable and protected species identified on site and, taking into account the proposals for the site, these conclusions remain valid for the purposes of assessing potential impacts.

## 3.0 Proposed Mitigation

The purpose of the mitigation is to compensate for the loss of loss of 11.84 ha of Low Use Site (F15) identified in the Solent Wader and Brent Goose Strategy (SWBGS) (Solent WBGS, 2019). The SWBGS identifies a network of sites which lie outside the coastal European sites but which support the functionality and integrity of these sites (for example through providing high-tide foraging habitat). F15 is identified as a Low Use Site for supporting at least 13 lapwing during winter of 2014-15. It is part of the network of functionally linked habitat for the Solent and Southampton Water Special Protection Area (SPA) and Ramsar Site which is designated for supporting populations of European importance of breeding terns and overwintering waterfowl. As detailed in the SWBGS, Low Use Sites are those with the potential to be used by waders or brent geese and provide alternative options and resilience for the network.



As per the strategy, while Low Use sites have records of birds the numbers involved are low enough to ensure there is only a negligible risk of not successfully offsetting the loss of a Low Use site through enhancements of the wider network. Nevertheless, all Low Use sites have the potential to be used by waders and brent geese and the unmitigated loss of these sites would in combination negatively affect the long term resilience of the network.

Typically, mitigation for the loss of Low Use Sites is through the payment of a financial contribution of £35,610 which is secured via Section 106 agreement to enhance, manage and monitor the wider Solent Wader and Brent Goose Network. This funding is to be managed by the respective local authority and used to support schemes across the network, including in neighbouring authorities. Due to the lack of an established strategy within Fareham Borough, Natural England have requested further information to demonstrate a clear link between impact and mitigation, i.e. detail of how the financial contribution would be used to enhance the wider network.

This strategy sets out the creation and management of a Winter Bird Mitigation Area which will enhance the wader and brent goose network, and provide a buffer to Titchfield Haven NNR (part of the Solent and Southampton Water SPA).

## 3.1 Objectives

Based on the findings of the previously undertaken bird surveys, and the impact of the associated developments, objectives are:

- To create suitable foraging habitat for overwintering waders (in particular) lapwing; and
- To provide secondary biodiversity benefits such as for breeding farmland birds including lapwing.

## 3.2 Site Selection

Following the surveys in 2016 and 2017, it was concluded that the site had negligible importance for wintering birds (substantiated by the fact it is not currently included within the wader and brent goose network), therefore the provision of habitat in this location would constitute enhancement of the wader and brent goose network.

The proposed mitigation area will measure 5.0 ha and is larger than many existing Low Use sites within the wader and brent goose network in Fareham Borough. For example, F06, F12, F17J, F23, F29, F32, F48J, F79, F80 and F81 all measure less than 5.0 ha and are similarly bounded by mature tree and hedgerow margins.

The location of the mitigation area is appropriate, lying immediately adjacent to the SPA. Furthermore, two lapwing were recorded on site in March 2016 within the proposed mitigation area during surveys in support of application P/17/1451/OA (Hampshire Ecological Services, 2017). This gives high confidence that with the provision of suitable habitat the mitigation area will be used.





## 3.3 Management Principles

According to Sheldon *et al.* (2004)<sup>1</sup> a study of lapwing found 50% of birds and flocks during winter were found on crops, stubble and bare tillage, compared to 25% on pasture. Primarily foraging takes place at night for earthworms, with a resulting need for clear foraging areas. However, according to Edwards and Bohlen (1996)<sup>2</sup>, on average permanent pasture supports the highest earthworm density, with lower densities in winter cereals. It is theorised by Gillings (2003)<sup>3</sup> that foraging density may therefore be higher in arable cropped fields because a greater foraging effort is required. Taking this together with other potential environmental effects (in particular the need to minimise impacts from nitrogen outputs from the land), is proposed that the mitigation area is managed primarily as permanent pasture.

Lapwing require areas of bare ground or short vegetation from mid-March to June and will nest in grassland. There is also the potential for the grassland area to be used by other SPA qualifying species such as dark-bellied brent geese *Branta bernicla bernicla*.

Therefore, the mitigation area will be established with a grass mix of hard-wearing grasses suitable for grazing geese (including perennial rye grass *Lolium perenne*) with a high proportion of white clover *Trifolium repens*. The addition of clover into the mix will remove any need for artificial fertiliser as clover acts to fix nitrogen within the soil, and also helps to support a rich invertebrate biomass. Grassland will be managed through twice-yearly cuts with the final cut in September to make sure of a suitably short sward for winter foraging.

A 6m uncultivated margin will be maintained around the periphery of the arable areas. This will provide potential nesting and foraging habitat for birds during summer, and provide habitat for invertebrates and reptiles (recorded on site). The provision of this margin will also avoid potential damage or disturbance of boundary woodland and hedgerow habitats which are known to support reptiles, hazel dormice, bats and badgers.

## 3.4 Impacts to On-Site Biodiversity

As set out in Section 2, the site predominately supports semi-improved grassland and arable habitats with non-significant populations of wintering and breeding birds, foraging and commuting activity by up to six species of bat, presence of hazel dormice within site boundary hedgerows and a low population of reptiles. It is predicted that the proposed management will result in a qualitative gain for on-site biodiversity as discussed in Table 2.

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<sup>1</sup> Sheldon, R., Bolton, M., Gillings, S. and Wilson, A. (2004), Conservation management of Lapwing *Vanellus* on lowland arable farmland in the UK. *Ibis*, **146**: 41-49.

<sup>2</sup> Edwards, C.A. & Bohlen, P.J. (1996). *Biology and Ecology of Earthworms*, 3rd edn. London: Chapman & Hall.

<sup>3</sup> Gillings, S. (2003). Diurnal and nocturnal ecology of Golden Plovers *Pluvialis apricaria* and Lapwings *Vanellus vanellus* wintering on arable farmland. PhD Thesis, University of East Anglia, Norwich.

# Winter Bird Mitigation Strategy



**Table 2:** Impacts to On-site Biodiversity

Feature	Impact	Rationale
Wintering Birds	Beneficial	The primary aim of the proposals is to create overwintering foraging habitat for wading birds (in particular lapwing). In addition to waders, the provision of short pasture, scrapes and uncultivated margins will provide foraging opportunities for other farmland birds.
Breeding Birds	Beneficial	The majority of the potential breeding birds identified were associated with boundary features which will be unaffected by the proposals. In addition the proposed grassland will provide potential habitat for ground nesting birds, although it is acknowledged that the mature tree boundaries may limit uptake. The uncultivated margins will provide foraging habitat for a wide range of farmland species in the form of seeds and invertebrates.
Bats	Beneficial	It is anticipated that the proposals, in particular the provision of uncultivated (but managed) field margins will increase the availability of invertebrate prey for bats.
Badger	Neutral	A badger sett is present at the western boundary of the site. The provision of a 6m uncultivated margin will avoid damage to the sett during management operations. Badgers currently forage within the southern field and the provision of uncultivated margins will maintain suitable foraging habitat (in addition to the managed fields).
Hazel dormice	Neutral	The provision of a 6m uncultivated margin will protect hazel dormouse habitat from damage or disturbance during management operations.
Reptiles	Beneficial	The provision of a 6m uncultivated field margin (which will be managed) will increase habitat suitability for reptiles by providing habitat variation for refuge, basking and foraging.

Consideration has also been given to quantitative biodiversity gain using the Biodiversity Metric 2.0. Pre and post-development habitats have been quantified in accordance with the Biodiversity Metric 2.0 Calculation Tool and Technical Supplement<sup>4</sup>.

<sup>4</sup> Natural England, (2019). The Biodiversity Metric 2.0 auditing and accounting for biodiversity Technical Supplement Beta Edition



The proposals will result in the loss of 1.39 ha of grassland (modified grassland) from the northern field and 3.14 ha of cropland (cereal crops other) from the southern field. Modified grassland is the UKHab equivalent to poor semi-improved grassland (as assessed in the Ecological Appraisal). Cereal crops other has been selected to represent the southern field which is former arable land which has not been recently cultivated (and is now grazed). This is considered appropriate as all cropland habitats (with the exception of those managed specifically for wildlife such as under a stewardship scheme, or traditional orchards) are assigned low distinctiveness. Alternatively, the field could be assessed as sparsely vegetated land (ruderal/ephemeral), however this too is of low distinctiveness.

In accordance with the Technical Supplement, both habitats are assigned a condition score of 1 (poor) with no condition assessment required. Both also score 1 for connectivity (due to low distinctiveness) and 1 for strategic significance.

These habitats therefore have a value of 9.06 biodiversity units, all of which will be lost.

The proposals will result in the creation of 3.82 ha of grassland (modified grassland) and 0.71 ha of cropland (arable field margins tussocky). Modified grassland is low and the margins medium distinctiveness and in accordance with the Technical Supplement, both habitats are assigned a condition score of 1 (poor) with no condition assessment required. Both also score 1 for connectivity (due to low distinctiveness), 1 for strategic significance, 0.965 for time to target condition (1 year) and 1 for difficulty of creation.

This results in a post-development value of 10.11 biodiversity units, a gain of 1.05 units or 11.62%.

## 4.0 Management Actions

There will be three sets of management actions, covering the central grassland, wader scrapes and management of uncultivated margins. It should be noted that specific timings for operations such as sowing and cutting will be subject to weather and growing conditions. These areas are shown in Figure 1.

It is important that the management regime is adaptive to account for future changes in the feature bird populations, climate change etc. Therefore, either in response to external data or monitoring results, the management body is permitted to make alterations to the management actions if agreed by the LPA and Natural England.

### 4.1 Grassland

The fields within the mitigation area will be flailed to ground-level to remove existing vegetation and dead growth. This will be using a tractor-mounted flail. These areas will then be prepared for seeding using a disc harrow to a maximum of 150 mm depth to prevent fertile soil being moved below root depth. If necessary, a chain harrow will be used to remove arisings from flailing and prevent smothering of seedlings (this will also help seed-to-soil contact).

The seed mix to be sown will be a suitable grazing mix dominated by hard-wearing grasses (e.g. perennial rye grass *Lolium perenne*) and a minimum of 10% white clover *Trifolium repens*. Seeding will take place by broadcast at a density of approximately 18 kg/ha. Seed should be sown within 10 mm of the soil surface. Due to the inclusion of a high density of white clover in the seed mix, it is not considered necessary to include artificial fertiliser application.



Following sowing, the seed bed will be rolled. This will improve seed-to-soil contact, moisture retention and will minimise establishment of pest species.

Every 10 years, the grassland will be supplemented if necessary by additional overseeding using the same seed mix. Overseeding will be preceded by a light harrow, or chain harrow, to prepare the seedbed without causing significant damage to the established grassland. This will refresh the seed bank and make sure that perennial rye grass and white clover remain the dominant species within the sward.

Management will predominately be through cutting for hay or silage. This will comprise a first cut in late July / August (following majority of breeding bird activity) and a second cut in late September (to achieve a winter sward height of 50-60mm). Alternatively, low-intensity grazing could be conducted.

## 4.2 Wader Scrapes

To improve the habitat suitability for other wading birds (either qualifying species for the SPA or part of the qualifying assemblage) three wader scrapes will be created within the mitigation area. These will be of irregular shape with an average area of 50m<sup>2</sup>. To create a range of conditions and support different species the scrapes will be of variable depth with shallow margins and a deeper centre of 0.5m depth. Water supply for the scrapes will come from rainfall and surface water runoff.

The primary objective is to hold perched water during the winter, but it is anticipated that deeper areas will also hold water for part of the summer and provide an enhancement for breeding birds. The deeper central section of the scrape will occupy approximately 50% of the total area to maximise the likelihood of water retention. Scrapes will be created using an excavator with arisings piled adjacent to the margins to improve water retention and provide bare ground areas suitable for invertebrates.

Locations of scrapes will be chosen by the developers ecologist by observing ground conditions during winter monitoring surveys, but will be located close to the north western boundary of the site where levels are lower. The developers ecologist will then supervise the scrape construction. If necessary following observations of water perching, the scrapes will be constructed with a compacted clay liner to aid water retention.

Scrape banks will be strimmed to ground level every three years in late September / early October to prevent scrub or ruderal species from becoming established.

During this clearance period scrapes will also be inspected for silt build-up and to make sure they still hold water. If necessary, additional excavation will be undertaken to remove material. Additional lining material will be added if necessary to aid water retention.

## 4.3 Margins

Margins of 6m width will be maintained around the periphery of the cropped areas. These will be maintained in accordance with RSPB stewardship guidance for rough grass margins.

After Year 1, margins will be cut no more than once every five years in autumn. To maintain habitat variation, cuts of the margins in the northern and southern fields will be separated by one year.

# Winter Bird Mitigation Strategy



The 3m of the margin adjacent to the cropped areas will be cut annually in autumn to maintain diversity within each area for invertebrates and reptiles.

Spraying or fertilising must be avoided within the margins to avoid dominance of undesirable species such as thistles and docks.

## 4.4 Monitoring

Long-term monitoring is proposed which is proportionate to the impact (partial loss of a Low Use site) and takes into account the negligible risk of not successfully offsetting the loss of a Low Use site through enhancements of the wider network (per the Solent Wader and Brent Goose Strategy).

It is proposed that long-term monitoring is undertaken using remote camera surveys. These will take place annually for Years 1 – 5 followed by every 10 years from Years 10 to 120. Two cameras will be deployed for a period of five days each month from October to March, one in the north of the mitigation area and one in the south. Cameras will be set to take photographs at 30 minute intervals. These will subsequently be checked by an ornithologist to confirm the presence or absence of SPA qualifying bird species. Results will be reported to the Owner and LPA.

This will be supplemented by monitoring of the implementation of the above management operations. This will comprise annual site visits during winter in Years 1-10 followed by visits every 5 years from Years 10 – 120 to monitor compliance.

Results will be reported to the Owner and LPA. Should remote camera monitoring determine that corrective action is required, this will be undertaken and a further period of manual monitoring may be required to monitor its effectiveness. This will be agreed with the LPA.

## Timing of Actions

Table 4 sets out the timing of on-site management and monitoring operations.

**Table 4:** Timing of operations

Timing	Operation	Year
Mid-February / Mid-March	Prepare seedbed (plough or harrow to 120-200mm).	Annually
	Broadcast sow ryegrass and clover ley (c. 18kg/ha).	Year 1
	Overseed ryegrass and clover ley (c. 18kg/ha) if necessary.	Years 10, 20 etc.
	Consolidate seed bed via rolling if required.	Year 1 then years 10, 20 etc.
	Create wader scrapes	Year 1
Late July / August	Cut grassland to 150 mm in height.	Annually
	Introduce grazing at low density if required.	

# Winter Bird Mitigation Strategy



Late September	Cut grassland to 60 mm in height.	Annually.
Late September	Cut 3m of margin adjacent to crops to 150 mm in height.	Annually
Late September	Cut entire northern field margin to 150 mm in height.	Years 5, 10, 15 etc.
Late September	Cut entire southern field margin to 150 mm in height.	Years 6, 11, 16 etc.
Late September / Early October	Strim banks of wader scrapes for scrub encroachment. Inspect sediment build-up and remove if necessary.	Years 3, 6, 9 etc.
October to March	Site visit to monitor compliance.	Years 1-10 then 15, 20, 25 etc.
October to March	Remote camera monitoring (5 days per month).	Years 1-5 then 10, 20, 30 etc.

## Quality Control

Version:

1

FINAL

Prepared by:

John Simper MCIEEM

**Senior Ecologist**

Checked and Verified By:

David West CEnv MCIEEM

**Associate Ecologist**

Version:	Date:	Updated by:	Verified by:	Description of changes:
2	November 20	J. Simper	D. West	Altered long-term management from arable to grassland following discussions with Natural England.
3	November 20	J. Simper	D. West	Extended monitoring period to be consistent with legal agreement.
4	February 21	J. Simper	D. West	Updated maintenance frequency.

*WYG Environment Planning Transport Ltd. accept no responsibility or liability for the use which is made of this document other than by the Client for the purpose for which it was originally commissioned and prepared.*








## **Figure 1: Winter Bird Mitigation Plan**



Rev	Date	Notes
A	17/11/20	Initial map production

Legend

-  Mitigation area
-  Grassland managed for waders
-  Broadleaved woodland boundary
-  Uncultivated margin
-  Wader scrape

0 20 40 80 Metres



**Winter Bird Mitigation Area**

**Newgate Lane North and South, Fareham  
Fareham Land LP and Bargate Homes**

Scale at A3: 1:1,600	Project No: A117387	Drawing No: Figure 1	Revision: A
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Drawn by: Ben Blowers	Drawn date: 17/11/2020	Approved by: David West
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# **Appendix G – Natural England Correspondence**

## West, David

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**From:** Jones, Rachel <Rachel.Jones2@naturalengland.org.uk>  
**Sent:** 23 October 2020 16:18  
**To:** david.west  
**Subject:** RE: Winter Bird Mitigation for F15

**⚠ CAUTION:** This email originated from an external sender. Verify the source before opening links or attachments.



Hi David

Thank you for your email and details provided on this mitigation scheme.

It is noted that 13.26 ha of F15 will remain. However, to offset the loss of F15 that is coming forward as a result of the proposed development, a mitigation scheme is proposed on land immediately adjacent to Titchfield Haven NNR, which is designated Solent and Southampton SPA and Ramsar site. This land will be managed to enhance the continued ecological function of the wader network and support the adjacent NNR.

We advise that a detailed costed management and monitoring plan is agreed with Natural England and the competent authority in due course. The mitigation land should be delivered in advance of any loss and managed by a suitable third party (such as LPA or NGO partner (or similar stable management body such as Land Trust)) in perpetuity. These details should be included within the Appropriate Assessment and secured with any planning permission. Provided this is the case, it is Natural England's view that this would be a suitable offsetting project for the partial loss of F15.

Please let me know if you need any further information at this stage.

Kind regards  
Rachel

Rachel Jones  
Senior Advisor Sustainable Development  
Thames Solent team  
Natural England  
07717 808691

During the current coronavirus situation, Natural England staff are working remotely to provide our services and support our customers and stakeholders. All offices and our Mail Hub are closed, so please send any documents by email or contact us by phone or email to let us know how we can help you. See the latest news on the coronavirus at <http://www.gov.uk/coronavirus> and Natural England's regularly updated operational update at <https://www.gov.uk/government/news/operational-update-covid-19>.

[www.gov.uk/natural-england](http://www.gov.uk/natural-england)



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**From:** david.west <david.west@wyg.com>  
**Sent:** 20 October 2020 12:06  
**To:** Jones, Rachel <Rachel.Jones2@naturalengland.org.uk>  
**Subject:** Winter Bird Mitigation for F15

Hi Rachel

As discussed, please see attached proposed mitigation area at Old Street, Stubbington. This comprises 5.0 ha, intended to compensate for the loss of 11.84 ha of F15 across the proposed developments at Newgate Lane East, Land at Newgate Lane (South) and Land at Newgate Lane (North). Following these three developments, there would be 13.26 ha of F15 remaining.

As you know, this site was subject to detailed ecological surveys as part of a planning application P/17/1451/OA, and subsequent appeal in 2018. It was concluded that the site had negligible importance for wintering birds, therefore the provision of habitat in this location would constitute enhancement of the wader and brent goose network. The location of the mitigation area is appropriate, lying immediately adjacent to the SPA. Furthermore, two lapwing were recorded on site in March 2016 within the proposed mitigation area during surveys in support of application P/17/1451/OA (Hampshire Ecological Services, 2017). This gives high confidence that with the provision of suitable habitat the mitigation area will be used.

According to Sheldon et al. (2004) a study of lapwing found 50% of birds and flocks during winter were found on crops, stubble and bare tillage, compared to 25% on pasture. Therefore it is proposed that the mitigation area is managed primarily for crops. This also provides variation from the predominant grassland habitat within the SPA. It has also been found that timing of tillage is an important factor in site selection by lapwing, with a preference for spring tillage (autumn tillage typically results in earlier crop growth which reduces predator visibility). Therefore, management will consist of overwintered stubble, followed by spring barley as the primary crop. This has the added benefit of providing suitable nesting habitat during spring and summer. It is proposed that management comprises a four-year rotation, with a break crop comprising a species-rich grassland ley every fourth year. This will avoid build-up of crop parasites and allow the soil biomass to recover.

Legal details are being drawn up at the moment but for the time-being would you mind confirming that this would be an appropriate form of compensation for the partial loss of the functionally linked land at F15? I can then forward this information to the case officer at Fareham Borough Council to inform them of our proposals.

Kind regards

**David West**  
Associate Ecologist

**WYG will be rebranding as Tetra Tech at the start of 2021**

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# **Appendix H – Conservation Objectives**

# European Site Conservation Objectives for Portsmouth Harbour Special Protection Area Site Code: UK9011051



With regard to the SPA and the individual species and/or assemblage of species for which the site has been classified (the 'Qualifying Features' listed below), and subject to natural change;

**Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;**

- **The extent and distribution of the habitats of the qualifying features**
- **The structure and function of the habitats of the qualifying features**
- **The supporting processes on which the habitats of the qualifying features rely**
- **The population of each of the qualifying features, and,**
- **The distribution of the qualifying features within the site.**

This document should be read in conjunction with the accompanying *Supplementary Advice* document, which provides more detailed advice and information to enable the application and achievement of the Objectives set out above.

## **Qualifying Features:**

A046a *Branta bernicla bernicla*; Dark-bellied brent goose (Non-breeding)

A069 *Mergus serrator*; Red-breasted merganser (Non-breeding)

A149 *Calidris alpina alpina*; Dunlin (Non-breeding)

A156 *Limosa limosa islandica*; Black-tailed godwit (Non-breeding)

## **This is a European Marine Site**

This SPA is a part of the Solent Maritime European Marine Site (EMS). These Conservation Objectives should be used in conjunction with the Conservation Advice document for the EMS. Natural England's formal Conservation Advice for European Marine Sites can be found via [GOV.UK](https://www.gov.uk).

## **Explanatory Notes: European Site Conservation Objectives**

These Conservation Objectives are those referred to in the Conservation of Habitats and Species Regulations 2017 (as amended) ('the Habitats Regulations'). They must be considered when a competent authority is required to make a 'Habitats Regulations Assessment' including an Appropriate Assessment, under the relevant parts of this legislation.

These Conservation Objectives, and the accompanying Supplementary Advice (where this is available), will also provide a framework to inform the management of the European Site and the prevention of deterioration of habitats and significant disturbance of its qualifying features

These Conservation Objectives are set for each bird feature for a [Special Protection Area \(SPA\)](#).

Where these objectives are being met, the site will be considered to exhibit a high degree of integrity and to be contributing to achieving the aims of the Wild Birds Directive.

**Publication date:** 21 February 2019 (version 3). This document updates and replaces an earlier version dated 30 June 2014 to reflect the consolidation of the Habitats Regulations in 2017.

# European Site Conservation Objectives for Solent and Southampton Water Special Protection Area Site Code: UK9011061



With regard to the SPA and the individual species and/or assemblage of species for which the site has been classified (the 'Qualifying Features' listed below), and subject to natural change;

**Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;**

- **The extent and distribution of the habitats of the qualifying features**
- **The structure and function of the habitats of the qualifying features**
- **The supporting processes on which the habitats of the qualifying features rely**
- **The population of each of the qualifying features, and,**
- **The distribution of the qualifying features within the site.**

This document should be read in conjunction with the accompanying *Supplementary Advice* document, which provides more detailed advice and information to enable the application and achievement of the Objectives set out above.

## **Qualifying Features:**

A046a *Branta bernicla bernicla*; Dark-bellied brent goose (Non-breeding)

A052 *Anas crecca*; Eurasian teal (Non-breeding)

A137 *Charadrius hiaticula*; Ringed plover (Non-breeding)

A156 *Limosa limosa islandica*; Black-tailed godwit (Non-breeding)

A176 *Larus melanocephalus*; Mediterranean gull (Breeding)

A191 *Sterna sandvicensis*; Sandwich tern (Breeding)

A192 *Sterna dougallii*; Roseate tern (Breeding)

A193 *Sterna hirundo*; Common tern (Breeding)

A195 *Sterna albifrons*; Little tern (Breeding)

Waterbird assemblage



## **This is a European Marine Site**

This SPA is a part of the the Solent Maritime European Marine Site (EMS). These Conservation Objectives should be used in conjunction with the Conservation Advice document for the EMS. Natural England's formal Conservation Advice for European Marine Sites can be found via [GOV.UK](https://www.gov.uk).

### **Explanatory Notes: European Site Conservation Objectives**

These Conservation Objectives are those referred to in the Conservation of Habitats and Species Regulations 2017 (as amended) ('the Habitats Regulations'). They must be considered when a competent authority is required to make a 'Habitats Regulations Assessment' including an Appropriate Assessment, under the relevant parts of this legislation.

These Conservation Objectives, and the accompanying Supplementary Advice (where this is available), will also provide a framework to inform the management of the European Site and the prevention of deterioration of habitats and significant disturbance of its qualifying features

These Conservation Objectives are set for each bird feature for a [Special Protection Area \(SPA\)](#).

Where these objectives are being met, the site will be considered to exhibit a high degree of integrity and to be contributing to achieving the aims of the Wild Birds Directive.

**Publication date:** 21 February 2019 (version 3). This document updates and replaces an earlier version dated 30 June 2014 to reflect the consolidation of the Habitats Regulations in 2017.

# European Site Conservation Objectives for Solent Maritime Special Area of Conservation

## Site Code: UK0030059



With regard to the SAC and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features' listed below), and subject to natural change;

**Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;**

- **The extent and distribution of qualifying natural habitats and habitats of qualifying species**
- **The structure and function (including typical species) of qualifying natural habitats**
- **The structure and function of the habitats of qualifying species**
- **The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely**
- **The populations of qualifying species, and,**
- **The distribution of qualifying species within the site.**

This document should be read in conjunction with the accompanying *Supplementary Advice* document, which provides more detailed advice and information to enable the application and achievement of the Objectives set out above.

### **Qualifying Features:**

H1110. Sandbanks which are slightly covered by sea water all the time

H1130. Estuaries

H1140. Mudflats and sandflats not covered by seawater at low tide; Intertidal mudflats and sandflats

H1150. Coastal lagoons\*

H1210. Annual vegetation of drift lines

H1220. Perennial vegetation of stony banks; Coastal shingle vegetation outside the reach of waves

H1310. *Salicornia* and other annuals colonising mud and sand; Glasswort and other annuals colonising mud and sand

H1320. *Spartina* swards (*Spartinion maritimae*); Cord-grass swards

H1330. Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)

H2120. Shifting dunes along the shoreline with *Ammophila arenaria* ("white dunes"); Shifting dunes with marram

S1016. *Vertigo moulinsiana*; Desmoulin's whorl snail

\* denotes a priority natural habitat or species (supporting explanatory text on following page)

## **This is a European Marine Site**

This site is a part of the Solent Maritime European Marine Site. These Conservation Objectives should be used in conjunction with the Conservation Advice document for the EMS. Natural England's formal Conservation Advice for European Marine Sites can be found via [GOV.UK](https://www.gov.uk).

### **\* Priority natural habitats or species**

Some of the natural habitats and species for which UK SACs have been selected are considered to be particular priorities for conservation at a European scale and are subject to special provisions in the Habitats Regulations. These priority natural habitats and species are denoted by an asterisk (\*) in Annex I and II of the Habitats Directive. The term 'priority' is also used in other contexts, for example with reference to particular habitats or species that are prioritised in UK Biodiversity Action Plans. It is important to note however that these are not necessarily the priority natural habitats or species within the meaning of the Habitats Regulations.

### **Explanatory Notes: European Site Conservation Objectives**

These Conservation Objectives are those referred to in the Conservation of Habitats and Species Regulations 2017 as amended from time to time (the "Habitats Regulations"). They must be considered when a competent authority is required to make a 'Habitats Regulations Assessment', including an Appropriate Assessment, under the relevant parts of this legislation.

These Conservation Objectives and the accompanying Supplementary Advice (where available) will also provide a framework to inform the measures needed to conserve or restore the European Site and the prevention of deterioration or significant disturbance of its qualifying features.

These Conservation Objectives are set for each habitat or species of a [Special Area of Conservation \(SAC\)](#). Where the objectives are met, the site will be considered to exhibit a high degree of integrity and to be contributing to achieving Favourable Conservation Status for that species or habitat type at a UK level. The term 'favourable conservation status' is defined in regulation 3 of the Habitats Regulations.

**Publication date:** 27 November 2018 (version 3). This document updates and replaces an earlier version dated 30 June 2014 to reflect the consolidation of the Habitats Regulations in 2017.

# European Site Conservation Objectives for Solent and Isle of Wight Lagoons Special Area of Conservation Site Code: UK0017073



With regard to the SAC and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features' listed below), and subject to natural change;

**Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;**

- **The extent and distribution of qualifying natural habitats**
- **The structure and function (including typical species) of qualifying natural habitats, and**
- **The supporting processes on which qualifying natural habitats rely**

This document should be read in conjunction with the accompanying *Supplementary Advice* document, which provides more detailed advice and information to enable the application and achievement of the Objectives set out above.

## **Qualifying Features:**

H1150. Coastal lagoons\*

\* denotes a priority natural habitat or species (supporting explanatory text on following page)

## This is a European Marine Site

This site is a part of the Solent and Isle of Wight Lagoons European Marine Site. These Conservation Objectives should be used in conjunction with the Conservation Advice document for the EMS. Natural England's formal Conservation Advice for European Marine Sites can be found via [GOV.UK](https://www.gov.uk).

### \* Priority natural habitats or species

Some of the natural habitats and species for which UK SACs have been selected are considered to be particular priorities for conservation at a European scale and are subject to special provisions in the Habitats Regulations. These priority natural habitats and species are denoted by an asterisk (\*) in Annex I and II of the Habitats Directive. The term 'priority' is also used in other contexts, for example with reference to particular habitats or species that are prioritised in UK Biodiversity Action Plans. It is important to note however that these are not necessarily the priority natural habitats or species within the meaning of the Habitats Regulations.

### Explanatory Notes: European Site Conservation Objectives

These Conservation Objectives are those referred to in the Conservation of Habitats and Species Regulations 2017 as amended from time to time (the "Habitats Regulations"). They must be considered when a competent authority is required to make a 'Habitats Regulations Assessment', including an Appropriate Assessment, under the relevant parts of this legislation.

These Conservation Objectives and the accompanying Supplementary Advice (where available) will also provide a framework to inform the measures needed to conserve or restore the European Site and the prevention of deterioration or significant disturbance of its qualifying features.

These Conservation Objectives are set for each habitat or species of a [Special Area of Conservation \(SAC\)](#). Where the objectives are met, the site will be considered to exhibit a high degree of integrity and to be contributing to achieving Favourable Conservation Status for that species or habitat type at a UK level. The term 'favourable conservation status' is defined in regulation 3 of the Habitats Regulations.

**Publication date:** 27 November 2018 (version 3). This document updates and replaces an earlier version dated 30 June 2014 to reflect the consolidation of the Habitats Regulations in 2017.

# European Site Conservation Objectives for Solent & Dorset Coast Special Protection Area



With regard to the SPA and the individual species and/or assemblage of species for which the site has been classified (the 'Qualifying Features' listed below), and subject to natural change;

**Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;**

- **The extent and distribution of the habitats of the qualifying features**
- **The structure and function of the habitats of the qualifying features**
- **The supporting processes on which the habitats of the qualifying features rely**
- **The population of each of the qualifying features, and,**
- **The distribution of the qualifying features within the site.**

## Qualifying Features

A191 *Sterna sandvicensis*; Sandwich tern (Breeding)

A193 *Sterna hirundo*; Common tern (Breeding)

A195 *Sternula albifrons*; Little tern (Breeding)

## Explanatory Notes: European Site Conservation Objectives

These Conservation Objectives are those referred to in the Conservation of Habitats and Species Regulations 2017 (as amended) ('the Habitats Regulations'). They must be considered when a competent authority is required to make a 'Habitats Regulations Assessment' including an Appropriate Assessment, under the relevant parts of this legislation.

These Conservation Objectives, and the accompanying Supplementary Advice (where this is available), will also provide a framework to inform the management of the European Site and the prevention of deterioration of habitats and significant disturbance of its qualifying features

These Conservation Objectives are set for each bird feature for a [Special Protection Area \(SPA\)](#).

Where these objectives are being met, the site will be considered to exhibit a high degree of integrity and to be contributing to achieving the aims of the Wild Birds Directive.

### This is a European Marine Site

This site is a part of the Solent & Dorset Coast European Marine Site (EMS). These conservation objectives should be used in conjunction with the Conservation Advice which would be subsequently provided for the EMS.

In the interim, Natural England's conservation advice for this potential European Marine Site, if requested, will be based on these Objectives.

**Publication date:** 27 February 2020 (version 3). This document updates and replaces an earlier version dated 27 February 2019 following the classification of the SPA by Government on 16 January 2020.



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