



Land at Satchell Lane, Hamble-
le-Rice

Information to inform Habitats Regulations Assessment

Prepared by
CSA Environmental

on behalf of
Foreman Homes

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1.0 INTRODUCTION

- 1.1 This document has been prepared by CSA Environmental on behalf of Foreman Homes (hereafter referred to as 'the Appellant'), in relation to land at Satchell Lane, Hamble-le-Rice (hereafter referred to as 'the Appeal Site') where detailed planning permission is sought for a residential development (hereafter referred to as 'the Appeal Scheme'). The Site location is shown in Appendix A.
- 1.2 This document provides information to assist the Inspector in their consideration of whether the Appeal Scheme will have likely significant effects on European sites, and in ascertaining any adverse effects on their integrity. This process is commonly termed Habitats Regulations Assessment (HRA).
- 1.3 As the decision-making authority, the Inspector is the 'competent authority' in respect of Regulation 63 of the Conservation of Habitats and Species Regulations 2017 (as amended). This document is intended to provide the necessary information to the Inspector with which to make their assessment (pursuant to Regulation 63(2) of the above Regulations).

Project Background

- 1.4 The Appeal Site occupies an area of c. 3.51ha and is located around central grid reference SU 482 078, in Eastleigh Borough, Hampshire. It comprises an irregular shaped parcel of land enveloped to the east by Satchell Lane, existing residential dwellings and a static caravan holiday park, and lies immediately east of the old Hamble Airfield. The Appeal Site's present use is as horse grazed pasture.
- 1.5 A full planning application was made to Eastleigh Borough Council (EBC) for the erection of 61 no. dwellings at the Appeal Site, with associated public open space, landscaping and amenity areas. This application was validated in January 2021 (EBC ref: F/20/89488).
- 1.6 Planning permission for the development of up to 70 dwellings at the Appeal Site was previously consented through Appeal on 20 December 2018 (PINS ref: App/W1715/W/18/3194846; EBC ref: O/17/80319). Outline planning permission was granted with all matters reserved except for access, however this permission has subsequently lapsed.
- 1.7 The 2021 full application was refused by EBC on 13 August 2021; a decision that has been appealed (PINS ref: APP/W1715/W/22/3292580). Reason for Refusal 5 stated as follows:

"Insufficient information has been provided to the Local Planning Authority, as the competent authority, to enable it to determine that a suitable scheme for sustainable urban drainage for the proposed

development would be provided which ensures that the hydrological and ecological interests of the Solent Complex are protected, as set out in the Conservation of Habitats and Species Regulations 2017. The application is therefore contrary to the requirements of Saved Policies 25.NC and 45.ES of the Eastleigh Borough Local Plan (2001-2011), Draft Policies DM6, DM8, DM10 & DM26 of the submitted Eastleigh Borough Local Plan (2016–2036) and the provisions of the National Planning Policy Framework."

1.8 Reason for Refusal 7 stated as follows:

"The application fails to provide for the required mitigation to offset the impacts of the development on the European protected site (SPA, SAC and Ramsar) from nitrogen loading and recreational disturbance generated by the population increase resulting from the development. The application is therefore contrary to the requirements of Saved Policies 25.NC and 45.ES of the adopted Eastleigh Borough Local Plan Review 2001-2011, Draft Policies DM10 and DM11 of the Submitted Eastleigh Borough Local Plan 2016-2036, provision within the National Planning Policy Framework and The Conservation of Habitats and Species Regulations 2017."

Summary of Applicable Legislation and Policy

- 1.9 Special Areas of Conservation (SACs) and Special Protection Areas (SPAs), termed European sites, collectively form part of a suite of sites known in the UK as the national site network. For ease of reference and consistent with their treatment under UK government policy, Ramsar sites are also referred to here as European sites.
- 1.10 All European sites in England and Wales are afforded strict protection through the Conservation of Habitats and Species Regulations 2017 (as amended). These Regulations, widely referred to as the 'Habitat Regulations', establish a framework for decision-making authorities to assess the potential for harmful effects on European sites to arise as a result of proposed plans or projects. This assessment process is commonly referred to as 'Habitats Regulations Assessment' (HRA).
- 1.11 Within Eastleigh, development management policy relevant to the protection of European sites are currently set out within Policy DM11 of the adopted Local Plan 2016-2036.
- 1.12 Further detail of the legislative and case law context, as well as national and local planning policies relevant to HRA, are provided within Appendix B.

2.0 EXEMPTION, EXCLUSION AND ELIMINATION

2.1 It is necessary in the first instance to undertake preliminary screening to determine whether the Appeal Scheme is exempt, excluded or eliminated from the Regulation 63 requirements, and to refine which European site designations warrant further consideration. If the Appeal Scheme 'passes' any of the preliminary screening tests shown below in Table 1, then no further screening for likely significant effects is required.

Table 1. Preliminary Screening

Preliminary Screening Test	Pass?
Is the scheme directly connected with or necessary to the management of a European site for nature conservation purposes?	No
Is the proposed scheme the continuation, without material change, of ongoing activities not subject to any form of authorisation?	No
In light of the nature, scale, duration and location of the scheme, is it obvious that it could not have any conceivable effect on any European site?	No

2.2 In view of the final preliminary screening test in Table 1, it is the professional opinion of the author that the following European sites could conceivably be affected by the Appeal Scheme, in view of its nature, scale, duration and location. These designations will therefore be screened for likely significant effects in Section 3 of this document.

- Solent and Dorset Coast SPA (c. 180m east)
- Solent and Southampton Water SPA (c. 180m east)
- Solent and Southampton Water Ramsar site (c. 180m east)
- Solent Maritime SAC (c. 180m east)
- New Forest SAC (c. 6.11km south-west)
- New Forest SPA (c. 6.11km south-west)
- New Forest Ramsar site (c. 6.11km south-west)

2.3 Comprehensive details on the characteristics of the above European sites are presented in Appendix C. These characteristics form the basis of assessment and include their spatial relationship with the Appeal Site, component Sites of Special Scientific Interest (SSSIs), qualifying features, published conservation objectives and any known vulnerabilities or threats to their favourable conservation statuses.

3.0 SCREENING FOR LIKELY SIGNIFICANT EFFECTS

Potential Impact Pathways

- 3.1 In the context of the information on European site characteristics (Appendix C), potential impact pathways shared by the Appeal Scheme and the conservation objectives of the European sites identified in Section 2 of this report are screened below (Tables 2a-g).
- 3.2 Pathways are considered in Tables 2(a-g) on the basis of the development as proposed, i.e. including any facets which, in addition/secondary to their primary purpose, may act to mitigate effects that might otherwise occur on European sites. However, in accordance with the 'People Over Wind' ruling of the Court of Justice for the European Union (CJEU; Case C-323/17), screening for likely significant effects takes place in the absence of measures specifically adopted to avoid or reduce harmful effects on European sites.

Table 2.a. Screening for Likely Significant Effects

Solent and Dorset Coast SPA	
<i>Any potential changes to the site or its qualifying features arising as a result of the following impact pathways:</i>	
Land take by development within European site	None
Fragmentation of European site habitats	None
Increased mortality of key species	None
Disturbance to key species/deterioration of habitats within the European site	None
Disturbance to key species/deterioration of supporting habitats, beyond the European site	None
Atmospheric pollution/air quality	None
Hydrological regime change	None
Pollution of surface/ground water	None
<i>Those facets of the Appeal Scheme, or combination of facets, where the above pathways have the potential to give rise to significant effects, or where the scale or magnitude of potential effects is not known:</i>	
On appraisal of the scale, nature and location of the Appeal Scheme, and with reference to the qualifying features of the SPA and their known vulnerabilities, no potential impact pathways have been identified. The designation is intended to protect important foraging areas at sea used by breeding tern colonies, which are not recognised to be susceptible to shore-based human recreation, traffic-derived pollutants or eutrophication.	

Table 2.b. Screening for Likely Significant Effects

Solent and Southampton Water SPA	
<i>Any potential changes to the site or its qualifying features arising as a result of the following impact pathways:</i>	
Land take by development within European site	None
Fragmentation of European site habitats	None
Increased mortality of key species	None
Disturbance to key species/deterioration of habitats within the European site	Possible

Disturbance to key species/deterioration of supporting habitats, beyond the European site	None
Atmospheric pollution/air quality	None
Hydrological regime change	None
Pollution of surface/ground water	Possible
<i>Those facets of the Appeal Scheme, or combination of facets, where the above pathways have the potential to give rise to significant effects, or where the scale or magnitude of potential effects is not known:</i>	
<p>The Appeal Site lies within 180m of the SPA, which provides feeding grounds for internationally protected populations of overwintering waders and wildfowl. As such, potential exists for construction processes emitting very loud and percussive noises to create damaging levels of disturbance to bird species forming qualifying features for the designation.</p> <p>The effects on these same species of disturbance by humans and companion animals have been widely studied, such as by Stillman <i>et al.</i> (2012). It is known that birds alerted by a perceived threat will continue to observe the threat, or otherwise flee by flying, swimming or walking. These both deplete energy reserves and reduce the time available to the birds to replenish their energy through feeding at low tide. The physiological stress response triggered by disturbance may exacerbate the energy deficit further, and repeated exposure to disturbance may displace birds from a foraging ground, leading to greater competition elsewhere. By accommodating an increase in the local population, development at the Appeal Site could lead to greater recreation pressure and associated disturbance at the SPA.</p> <p>Overwintering migratory birds of the SPA, notably dark bellied brent geese <i>Branta bernicla bernicla</i>, mainly feed in the intertidal zone, and at high tide supplement their diet using grasslands and arable fields within 5km of roost sites, beyond the spatial footprint of the Solent designations (Stroud <i>et al.</i>, 2016). The Solent Waders and Brent Goose Strategy (SWBGS; Whitfield, 2020) has been set up to identify, monitor and protect such non-designated supporting habitats or 'functionally linked land'. The SWBGS includes a suite of maps, GIS layers and bird records; the results of a bird movement study carried out over three years. This mapping does not record the Appeal Site as being functionally linked to the SPA, therefore development would not constitute a loss of supporting habitat.</p> <p>The Appeal Site is within the fluvial catchment of the East Solent System; specifically the River Hamble which discharges to Southampton Water. Foul water discharges from the Appeal Site will be treated at the Peel Common Waste Water Treatment Works (WWTW), which itself returns treated effluent to the local water environment. Increased inputs associated with new residential development will have a corresponding increase in nutrient loading from treated outputs, to which the qualifying features of the Solent's European sites are known to be vulnerable.</p> <p>Finally, while there is no direct surface water hydrological connectivity with the potential to vector pollutants to the SPA during construction and operation of the Appeal Scheme, the Appeal Site is sufficiently close that uncontrolled point or diffuse sources of surface water pollution could impact upon SPA features.</p>	

Table 2.c. Screening for Likely Significant Effects

Solent and Southampton Water Ramsar site	
<i>Any potential changes to the site or its qualifying features arising as a result of the following impact pathways:</i>	
Land take by development within European site	None
Fragmentation of European site habitats	None

Increased mortality of key species	None
Disturbance to key species/deterioration of habitats within the European site	Possible
Disturbance to key species/deterioration of supporting habitats, beyond the European site	None
Atmospheric pollution/air quality	None
Hydrological regime change	None
Pollution of surface/ground water	Possible
<i>Those facets of the Appeal Scheme, or combination of facets, where the above pathways have the potential to give rise to significant effects, or where the scale or magnitude of potential effects is not known:</i>	
<p>As described in respect of the SPA, potential exists for damaging levels of disturbance to bird species associated with the Ramsar site, both as a result of construction processes emitting very loud and percussive noises with the potential for damaging levels of disturbance, and increases in recreation pressures driven by the increase in local population.</p> <p>Also as described in respect of the SPA, development of the Appeal Scheme would not constitute a loss of supporting habitat for these species.</p> <p>Parts of the Ramsar site fall within 200m of the M27 and A27 major roads. The Appeal Scheme will precipitate an increase in the local population contributing to vehicle traffic on the local road network, which in principle could lead to air quality impacts on susceptible habitats/species. However, traffic increases brought about by the 61 unit Appeal Scheme in isolation would self-evidently fall short of Natural England's advocated screening thresholds (e.g. 1000 Average Annual Daily Traffic; AADT). An assessment of the potential effects of this impact pathway resulting from wider residential growth in and around Eastleigh is presented by Urban Edge (2019) concluding that this would be unlikely to have significant effects on the Ramsar site in respect of traffic-derived nitrogen deposition.</p> <p>As described in respect of the SPA, development at the Appeal Site will increase foul water discharges to the Peel Common WWTW, with a corresponding increase in nutrient loading from treated outputs to which the Solent's European sites are known to be vulnerable, and the Appeal Site is sufficiently close that construction or operational phase surface water pollution could impact upon Ramsar site features.</p>	

Table 2.d. Screening for Likely Significant Effects

Solent Maritime SAC	
<i>Any potential changes to the site or its qualifying features arising as a result of the following impact pathways:</i>	
Land take by development within European site	None
Fragmentation of European site habitats	None
Increased mortality of key species	None
Disturbance to key species/deterioration of habitats within the European site	None
Disturbance to key species/deterioration of supporting habitats, beyond the European site	None
Atmospheric pollution/air quality	None
Hydrological regime change	None
Pollution of surface/ground water	Possible
<i>Those facets of the Appeal Scheme, or combination of facets, where the above pathways have the potential to give rise to significant effects, or where the scale or magnitude of potential effects is not known:</i>	
Despite falling within 180m of the Appeal Site, the qualifying features of the SAC (unlike those of the Solent and Southampton SPA/Ramsar) are not considered	

susceptible to significant effects associated with noise and vibration or recreation pressures. The Appeal Site is also unsuitable to support the habitats or species forming qualifying features of the SAC, therefore development of the Appeal Scheme wouldn't represent a loss or deterioration of functionally linked land.

As described in respect of the Solent and Southampton Water Ramsar site, although the SAC falls within 200m of major roads which could experience increased traffic volumes as a result of the Appeal Scheme, significant effects relating to air quality are unlikely.

Again as described in respect of the Solent and Southampton Water sites, development at the Appeal Site will increase foul water discharges to the Peel Common WWTW, with a corresponding increase in nutrient loading from treated outputs to which the Solent's European sites are known to be vulnerable, and the Appeal Site is sufficiently close that construction or operational phase surface water pollution could impact upon SAC site features.

Table 2.e. Screening for Likely Significant Effects

New Forest SAC	
<i>Any potential changes to the site or its qualifying features arising as a result of the following impact pathways:</i>	
Land take by development within European site	None
Fragmentation of European site habitats	None
Increased mortality of key species	None
Disturbance to key species/deterioration of habitats within the European site	Possible
Disturbance to key species/deterioration of supporting habitats, beyond the European site	None
Atmospheric pollution/air quality	None
Hydrological regime change	None
Pollution of surface/ground water	None
<i>Those facets of the Appeal Scheme, or combination of facets, where the above pathways have the potential to give rise to significant effects, or where the scale or magnitude of potential effects is not known:</i>	
Research has recently been undertaken by Footprint Ecology into the increasing levels of housing development planned in and around the New Forest. The extensive research identified a range of potential impacts associated with increased recreation pressure arising from new development and the associated increase in population. A zone of influence of 13.8km was defined.	
No further potential impact pathways have been identified.	

Table 2.f. Screening for Likely Significant Effects

New Forest SPA	
<i>Any potential changes to the site or its qualifying features arising as a result of the following impact pathways:</i>	
Land take by development within European site	None
Fragmentation of European site habitats	None
Increased mortality of key species	None
Disturbance to key species/deterioration of habitats within the European site	Possible
Disturbance to key species/deterioration of supporting habitats, beyond the European site	None
Atmospheric pollution/air quality	None
Hydrological regime change	None

Pollution of surface/ground water	None
<i>Those facets of the Appeal Scheme, or combination of facets, where the above pathways have the potential to give rise to significant effects, or where the scale or magnitude of potential effects is not known:</i>	
As described above in respect of the SAC, the Appeal Site falls within the zone of influence within which likely significant effects on the New Forest designations could arise as a result of increases in recreation pressure.	

Table 2.g. Screening for Likely Significant Effects

New Forest Ramsar site	
<i>Any potential changes to the site or its qualifying features arising as a result of the following impact pathways:</i>	
Land take by development within European site	None
Fragmentation of European site habitats	None
Increased mortality of key species	None
Disturbance to key species/deterioration of habitats within the European site	Possible
Disturbance to key species/deterioration of supporting habitats, beyond the European site	None
Atmospheric pollution/air quality	None
Hydrological regime change	None
Pollution of surface/ground water	None
<i>Those facets of the Appeal Scheme, or combination of facets, where the above pathways have the potential to give rise to significant effects, or where the scale or magnitude of potential effects is not known:</i>	
As described above in respect of the SAC and SPA, the Appeal Site falls within the zone of influence within which likely significant effects on the New Forest designations could arise as a result of increases in recreation pressure.	

The Appeal Scheme Alone and In Combination

- 3.3 At the screening stage it is necessary to consider whether the Appeal Scheme will have likely significant effects on European sites (having regard to the meaning of these terms as established by applicable case law) either as a result of potential impacts of the development acting alone, or when considered in combination with other plans or projects. The Appeal Scheme will consist of 61 dwellings, within the context of an assessed need for 14,580 dwellings in Eastleigh Borough in the period to 2036. Further residential development is projected within neighbouring districts.
- 3.4 In light of the foregoing, it can be concluded that in the absence of mitigation the Appeal Scheme has the potential to result in likely significant effects on six European sites. As such, further Appropriate Assessment is required, including consideration of proposed measures intended to avoid or reduce harmful effects, in order that it may be ascertained whether the Appeal Scheme will have any adverse effect on the integrity of the above European sites. A summary of screening conclusions is presented in Table 3 below.
- 3.5 Four European sites occur within 180m of the Appeal Site, and of these the qualifying features of the Solent and Southampton Water SPA and

Ramsar site are considered to be susceptible to potentially damaging levels of disturbance stemming from **noise and vibration**, which can be associated with certain construction processes.

- 3.6 The qualifying habitats and species of the Solent and Southampton Water SPA and Ramsar site, as well as the New Forest SAC, SPA and Ramsar site, are known to be vulnerable to **recreation pressure**. The Appeal Scheme will precipitate an increase in the local population, and therefore has the potential to act in combination with the projected increase in housing within Eastleigh and adjacent districts to increase recreation pressure at these European sites.
- 3.7 Even beyond the spatial extent of a designation, any damage, deterioration or **loss of supporting habitat** has the potential to undermine conservation objectives. The Appeal Site is however excluded from mapping under the Solent Wader and Brent Goose Strategy, therefore development of the Appeal Scheme will not constitute such a loss.
- 3.8 Increased traffic flows resulting from the scale and location of the Appeal Scheme and wider projected housing growth may give rise to localised **air quality** impacts. Areas of the Solent and Southampton Water Ramsar site and Solent Maritime SAC exist within 200m of a major road (A-road or motorway), and could therefore experience localised increases in atmospheric and deposited pollutants. The effects of increased traffic resulting from the Appeal Scheme in isolation are unlikely to be appreciable, and for a 61 unit scheme would self-evidently fall far short of the screening thresholds advocated by Natural England (e.g. additional 1000 AADT). Furthermore, Urban Edge (2019) identify no likely significant effect on these sites as a result of projected traffic increases associated with wider delivery of housing across the Borough.
- 3.9 Peel Common WWTW, which itself returns treated effluent to the water environment of the East Solent system and its associated European site designations, will receive **foul water discharges** from the Appeal Site. The qualifying features of these designations are known to be sensitive to and already suffering from eutrophication (Natural England, 2022). Nutrient (principally nitrogen) loading within treated foul effluent resulting directly from the Appeal Scheme is unlikely to have a significant effect on the qualifying habitats and species in isolation, however may act in combination with wider projected housing growth to undermine conservation objectives.
- 3.10 Finally, in view of the Appeal Site's proximity to the Solent and Southampton Water SPA and Ramsar site, as well as the Solent Maritime SAC, any uncontrolled sources of **surface water pollution** during construction or operation of the Appeal Scheme could impact on designated site features.

Table 3. Screening for Likely Significant Effects

Summary			
Impact pathway	European sites	Likely significant effect: development alone	Likely significant effect: in combination
Noise and vibration	Solent and Dorset Coast SPA	No	No
	Solent and Southampton Water SPA and Ramsar site	Yes	N/A
	Solent Maritime SAC	No	No
	New Forest SAC, SPA and Ramsar site	No	No
Recreation pressure	Solent and Dorset Coast SPA	No	No
	Solent and Southampton Water SPA and Ramsar site	No	Yes
	Solent Maritime SAC	No	No
	New Forest SAC, SPA and Ramsar site	No	Yes
Loss of supporting habitats	Solent and Dorset Coast SPA	No	No
	Solent and Southampton Water SPA and Ramsar site	No	No
	Solent Maritime SAC	No	No
	New Forest SAC, SPA and Ramsar site	No	No
Air quality (vehicle emissions)	Solent and Dorset Coast SPA	No	No
	Solent and Southampton Water SPA and Ramsar site	No	No
	Solent Maritime SAC	No	No
	New Forest SAC, SPA and Ramsar site	No	No
Water quality (eutrophication/foul water discharges)	Solent and Dorset Coast SPA	No	No
	Solent and Southampton Water SPA and Ramsar site	No	Yes
	Solent Maritime SAC	No	Yes
	New Forest SAC, SPA and Ramsar site	No	No
Water quality (surface water)	Solent and Dorset Coast SPA	No	No
	Solent and Southampton Water SPA and Ramsar site	No	Yes
	Solent Maritime SAC	No	Yes
	New Forest SAC, SPA and Ramsar site	No	No

4.0 APPROPRIATE ASSESSMENT

The Appeal Site

- 4.1 The Appeal Site occupies an area of c. 3.51ha and is located around central grid reference SU 4822 0785, in Hamble-le-Rice, Hampshire. It comprises an irregular shaped parcel of land to the west and south of Satchell Lane, predominately used as horse pasture.
- 4.2 In a Preliminary Ecological Appraisal (PEA) of the Site undertaken by Ecosupport (2020), the Site is characterised as being dominated by relatively species-rich semi-improved grassland which is heavily grazed by horses. A follow-up Habitat Condition Assessment (HCA) of the Appeal Site was undertaken in August 2022 by CSA Environmental, whereby the habitats on-site were reclassified under the UK Habitats (UKHab) method. The grassland was classified as modified grassland (g4) with a very short sward resulting from prolonged horse grazing.
- 4.3 A parcel of woodland, described by Ecosupport as 'Broadleaved woodland/treeline' is present to the north of the Appeal Site, with dominant oak and ash. Under UKHab, this parcel of woodland was classified as 'Lowland Deciduous Mixed Woodland' (w1f) which is a priority habitat. Toward the eastern end of the woodland it becomes a linear feature, where a treeline forms the northern boundary. A native hedgerow present to the west runs the length of the western boundary and contains hawthorn *Crataegus monogyna*, blackthorn *Prunus spinosa*, field maple *Acer campestre* and hazel *Corylus avellana*, with occasional standard oak *Quercus robur* trees. A short stretch of hawthorn-dominated native hedgerow is also present along the eastern boundary to the north, while single species ornamental hedgerows form partial field boundaries along the rest of the eastern boundary.
- 4.4 A disused pill box is present within the northern parcel of woodland and was assessed by Ecosupport to be of 'Low' roost potential for bats due to the lack of evidence of bat occupation found, and limited internal features for larger roosts to form, identified during the preliminary roost assessments undertaken by Ecosupport in 2017 and 2020. Bat activity surveys undertaken in 2017 and 2020 recorded similar results with bat activity dominated by common pipistrelle *Pipistrellus pipistrellus* and soprano pipistrelle *Pipistrellus pygmaeus*, with occasional *Myotis* sp., Nathusius' pipistrelle *Pipistrellus nathusii*, long-eared species *Plecotus* sp., barbastelle *Barbastella barbastellus*, noctule *Nyctalus noctula* and serotine *Eptesicus serotinus*. Dormouse nest tube surveys undertaken in 2017 by Ecosupport in 2017 found no evidence of dormice *Muscardinus avellanarius* within on-site habitats, which remained unchanged when reassessed in 2020, suggesting likely absence of the species. Winter bird surveys undertaken at the Site in 2017 by Ecosupport and as part of the Solent Wader and Brent Goose Strategy returned negative results for

brent geese. A full description of baseline ecological conditions at the Site is provided within the PEA (Ecosupport, 2020).

The Appeal Scheme

- 4.5 The Appeal Scheme seeks full planning permission for a residential development of 61 no. dwellings, with associated public open space, landscaping and amenity areas, with access off Satchell Lane, Hamble-le-Rice (EBC ref: F/20/89488). This follows outline planning permission for the development of up to 70 dwellings (with all matters reserved except for access) having been granted at Appeal for the Site in December 2018 (PINS ref: App/W1715/W/18/3194846; EBC ref: O/17/80319); a permission which has since lapsed.
- 4.6 The construction phase of the Appeal Scheme will include the following:
- Cessation of grazing management and permanent loss of grassland pasture
 - Removal of a portion of outgrown boundary hedgerow shrubs, and likely crown lifting of limited trees, to accommodate access
 - Construction of 61 residential dwellings
 - Construction of associated gardens, parking and access infrastructure
 - The establishment of amenity greenspace
 - Establishment of infiltration Sustainable Urban Drainage Systems (SUDS) features
- 4.7 The operational phase of the Appeal Scheme will include the following:
- Occupation of new residential dwellings, corresponding to an increase in local population
 - Increase in human activity, including use of vehicles and presence of domestic pets
 - Increased artificial lighting and anthropogenic noise

Potential Adverse Effects

Noise and vibration

- 4.8 It has been determined that the Appeal Scheme, in the absence of mitigation, has the potential to result in damaging levels of disturbance stemming from noise and vibration on the qualifying features of the Solent and Southampton Water SPA and Ramsar site. Construction processes emitting a noise level with the potential to change the distribution of qualifying species within the SPA/Ramsar site (or important supporting area), displacing them from otherwise suitable habitats, could thereby reduce time spent foraging, increase competition for finite resources and ultimately compromise survival and fecundity rates. Peak levels of noise/vibration are likely to occur during piling activities, during construction.

- 4.9 Urban Edge (2019) determine that very loud (i.e. greater than 70dB) and percussive noises have the potential to result in such disturbance to birds, and cite that these activities can have an impact on bird species at a distance of up to 300m. The area designated within the Solent and Southampton Water SPA/Ramsar site, which occurs within 300m of the Appeal Site, totals c. 2.93ha (i.e. c. 0.06% of the designation). There are no further, undesignated recognised supporting habitats within 300m.
- 4.10 It is not clear that construction noise related disturbance from the Appeal Scheme could, in isolation, adversely affect the integrity of the Solent and Southampton Water SPA or Ramsar site, giving that the impact would be significantly both spatially and temporally constrained. However, mitigation measures are in any case proposed below on a precautionary basis.

Recreation pressure

Solent and Southampton Water

- 4.11 The Appeal Scheme will result in an increased human population c. 180m from the Solent and Southampton Water SPA and Ramsar site at its closest point.
- 4.12 Research into the effects of recreation on the waterfowl forming qualifying features for the European sites across the Solent has been undertaken through the Solent Disturbance and Mitigation Project (SDMP; Stillman *et al.* 2009 & 2012), coordinated by the Solent Forum. The SDMP identified that there is a likely significant effect on SPA/Ramsar sites due to recreational disturbance arising from increases in the local population brought about by new residential development.
- 4.13 The presence of humans and their companion animals, which will be perceived as a predatory threat, is believed to affect the SPA/Ramsar birds in several ways, resulting in a synergistic effect. Birds are likely to be more alert when human presence is detected, or they may move away from the source of the disturbance, either way causing a corresponding reduction in the amount of food eaten. In the latter case a bird will not only miss valuable feeding time, but will additionally waste energy in taking the evasive action. Where disturbance is substantial, then birds may be displaced from food-rich areas altogether, with a corresponding increase in competition for finite resources in other areas. The cumulative effect of these impacts may result in reduced energy reserves being available to individual birds to sustain them for their spring migration and subsequent breeding season, ultimately resulting in reduced survival and fecundity.
- 4.14 On the basis of the above research, Natural England issued formal advice to the Solent local planning authorities in March 2013 advising that the SDMP identifies a likely significant effect associated with new housing growth around the Solent, and that this work represents the best

available evidence. As such, Natural England's advice is that avoidance measures are required in order to ensure the significant effects arising from new housing development around the Solent are avoided.

- 4.15 Evidence presented by Liley D & Tyldesley D (2013) indicates that the core catchment area from which the Solent sites draw recreational visitors is 5.6km linear distance; equivalent to the zone in which 75% of coastal visitors live. In view of its scale, the Appeal Scheme is in itself unlikely to generate sufficient recreation pressure to appreciably affect the conservation objectives pertaining to the qualifying features of the Solent and Southampton Water sites. However, it must be concluded that potential exists, in the absence of mitigation, for a contribution toward a combined effect stemming from wider residential growth within the catchment from which these sites draw recreational visitors.

New Forest

- 4.16 Research into the implications of new residential development, and in particular the recreational pressures linked to the associated growth in local population, has recently been undertaken by Footprint Ecology. The work was jointly commissioned by six local planning authorities (including EBC), together with Natural England and Forestry England, with funding from central government.
- 4.17 The impacts of visitor pressure at the New Forest designated sites, which have the potential to undermine conservation objectives, are summarised by Lake, Liley & Saunders (2020) as follows:
- Disturbance (avoidance of breeding habitat, physiological impacts, reduced breeding success)
 - Fire (resulting in direct mortality, removal of breeding habitat, long term changes to vegetation structure)
 - Contamination (including litter; nutrient enrichment through dog fouling; pollution from dogs entering water courses; spread of alien species and pathogens; greywater from campervans, etc)
 - Trampling/wear (soil compaction, erosion, direct damage to breeding or wintering sites, expansion of path networks, churning up sediment in water bodies)
 - Harvesting (e.g. collection of wood, fungi)
 - Grazing issues (impacts on grazing animals, e.g. from feeding, worrying by dogs, open gates, road traffic accidents)
 - Visitor expectation including pressure for facilities and public perceptions of management resulting in difficulties achieving necessary habitat and species protection
- 4.18 The Footprint Ecology research included a telephone survey and an on-site visitor survey to determine where visitors came from, why they visited the New Forest and how frequently. The on-site survey found that over

62% of visitors on a short visit or day trip from home lived within 5km of the New Forest protected sites boundary, and three quarters of visitors were from within 13.8km. Furthermore, based on the findings of the telephone survey (Liley & Panter, 2020), approximately 68% of residents of Eastleigh Borough had visited the New Forest protected sites in the last 12 months.

- 4.19 In view of the scale, location and nature of the Appeal Scheme, it must therefore be concluded that, in the absence of mitigation, potential exists for an adverse effect on the integrity of the New Forest SAC, SPA and Ramsar site in respect of projected housing growth within 13.8km of the sites, and that the Appeal Scheme would contribute toward this.

Eutrophication (foul water discharges)

- 4.20 The Site is within the surface water catchment of the East Solent system, and foul water discharges from the Appeal Scheme during occupation will be treated at the Peel Common WWTW, one of Southern Water's largest operational sites, which serves all of Eastleigh, Fareham and Gosport Boroughs.
- 4.21 The Peel Common WWTW is located between Fareham and Gosport, to the east of Stubbington, in the catchment of the River Alver. Following treatment of wastewater, final effluent is discharged to the Solent, leading to an impact pathway as has been described to the associated European sites.
- 4.22 As summarised by Natural England (2020) there are high levels of nutrient loading (nitrogen and phosphorus) within the water environment of the East Solent, with evidence that this is causing eutrophication at the aforementioned European sites. Nutrient inputs are currently predominately derived from agricultural sources and residential wastewater. Eutrophication can lead to dense mats of green algae and other effects on the marine ecology of the Solent's protected habitats and bird species. There is evidence that inputs of both phosphorus and nitrogen influence eutrophication of the water environment, however, modelling and evidence suggest that the principal nutrient driving eutrophication in the marine environment is nitrogen (Natural England, 2020).
- 4.23 In light of the evidence of adverse effects on the qualifying features of the various European sites, uncertainty exists over the potential impact of any new development within the Solent catchment which would generate additional wastewater, thereby increasing the volume of treated effluent entering the East Solent system. Natural England have therefore advised the Solent planning authorities, including EBC, that any new overnight accommodation that isn't 'nitrogen neutral' will have a likely significant effect on the European sites.

- 4.24 A nitrogen budget for the Appeal Scheme, using the standardised calculator published by Natural England (2022), is provided at Appendix D. The budget demonstrates that in the absence of mitigation the Appeal Scheme would result in a net increase in Total Nitrogen (TN) entering the water environment. With development of 61 dwellings discharging foul effluent to the Peel Common WWTW, which has an EA permit limit of 7mg/l TN, it is likely that an additional 40.43kg TN/year would be contributed to the local water environment via foul drainage.
- 4.25 Transferal of the 3.51ha Appeal Site from agricultural use (currently lowland grazed pasture) to 2.87ha of residential land plus 0.73ha of open urban land, would not only fail to offset the increased loading to foul water, but would in fact increase nitrogen loading by a further 0.29kg TN/year.
- 4.26 The Appeal Scheme, in the absence of mitigation, would ultimately result in a net increase of 48.86kg TN/year entering the water environment of the East Solent system (including Natural England's built-in precautionary buffers). While this contribution to nitrogen loading within the environment is in itself unlikely to have an appreciable effect on conservation objectives pertaining to the qualifying features of the Solent and Southampton Water SPA and Ramsar site, or Solent Maritime SAC, it may, in the absence of mitigation, act in combination with contributions from wider projected housing growth within the catchment to produce adverse effects on the integrity of these designations.

Surface water pollution

- 4.27 Separately from potential impact pathways associated with foul water discharges, the Appeal Scheme is situated within the surface water catchment of the Solent and Southampton Water SPA and Ramsar site; positioned within c. 180m at its closest point. There is therefore potential for any poor water quality in surface drainage (such as hydrocarbons, oils, grit salts and other chemical pollutants associated with traffic, garden chemicals such as enriching fertilisers or herbicides/insecticides, household detergents etc.) to negatively impact on the habitats and species associated with these designations.
- 4.28 Set in context, and noting the absence of any direct hydrological connectivity shared by the Appeal Site and these designations (such as a watercourse), it is not clear that such potential impacts from the Appeal Scheme could, in isolation, adversely affect the integrity of the SPA or Ramsar site. However, the closest constituent SSSI to the Appeal Site is Lee-on-The Solent to Itchen Estuary SSSI, specifically Unit 12, which is classified by Natural England as being in Unfavourable condition. This

follows a University of Brighton field survey carried out on Natural England's behalf in 2010, which noted as follows:¹

*"In the Hamble estuary, significant retreat of coastal marsh was observed with large areas along the eastern shore indicating loss of mature marsh and replacement by mudflats. There were extensive algal mats in the Hamble estuary and elsewhere in the SSSI, with *Ulva lactuca* particularly abundant."*

- 4.29 The most recent desk-based assessment, carried out by Natural England in 2018, further recorded that:

"The water environment of the unit is assessed as unfavourable for the interest features on the on the weight of evidence on inorganic nitrogen and biological indication of eutrophication shown by macroalgae abundance. A large part of the nitrogen load input is carried by the River Hamble and by tidal flow from Southampton Water and the Solent."

- 4.30 As such, there is potential, in the absence of mitigation, for the Appeal Scheme to act in combination with wider pollution and nutrient enrichment (principally from agricultural run-off and the above foul water discharge impact pathway) to produce a significant adverse effect on the qualifying features of the Solent and Southampton water designations through pollution vectored by surface water drainage.

Mitigation Measures

Noise and vibration

- 4.31 The potential for adverse impacts of the Appeal Scheme on the Solent and Southampton Water SPA and Ramsar site, as a result of construction-related noise and vibration, will be addressed through the preparation and implementation of a Construction Environmental Management Plan (CEMP). As well as wider environmental best practice measures to be observed during the construction phase, the CEMP will commit to construction noise being kept below a maximum of 69dBA (measured at the nearest point of the SPA/Ramsar site) during the bird overwintering period of November through March. This may be achieved through a combination of sensitive timing of noise generating activities (i.e. to avoid coinciding with the presence of qualifying migratory species) or other specific noise suppression measures.
- 4.32 Subject to the implementation of the CEMP, which may be readily secured through a very standard planning condition, it may be ascertained that the Appeal Scheme will have no adverse effect on the integrity of the Solent and Southampton Water European sites in respect of construction-related noise and vibration.

¹ Not specific to Unit 12

Recreation pressure

Solent and Southampton Water

4.33 The SDMP ultimately informed the Solent Recreation Mitigation Strategy (SRMS; Bird Aware Solent, 2017) adopted by the Solent authorities, including EBC. The SRMS is fully supported by Natural England and is considered by them to provide sufficient mitigation to offset recreational pressure from new development. The Strategy includes detailed mitigation measures to address the identified impacts arising from recreational disturbance, which include:

- A ranger team
- Communications, marketing and education initiatives
- Initiatives to encourage responsible dog walking
- Codes of conduct
- New/enhanced strategic greenspaces
- Site-specific visitor management and bird refuge projects
- Monitoring

4.34 A financial levy is applied to each new dwelling situated within 5.6km of the Solent SPAs which is used to fund the mitigation measures. These financial contributions are secured by Policy DM11 3(a)(i) of the EBC Local Plan (see Appendix B). The EBC Planning Obligations SPD and associated updated index-linked guidance set out that as of April 2022, developer contributions are as follows:

- 1 bedroom property - £401.58
- 2 bedroom property - £580.67
- 3 bedroom property - £757.54
- 4 bedroom property - £891.03
- 5 bedroom property - £1045.65

4.35 Based on the accommodation schedule set out on the submitted Site Plan, an indicative financial contribution for the Appeal Scheme can therefore be calculated as shown below in Table 4.

Table 4. Indicative financial contributions for the Appeal Scheme in respect of SRMS

<i>Unit Size</i>	<i>Tariff per unit</i>	<i>No. of units</i>	<i>Developer contribution</i>
One bed flats	£401.58	2 no.	£803.16
Two bed flats	£580.67	2 no.	£1,161.34
Two bed houses	£580.67	7 no.	£4,064.69
Three bed houses	£757.54	10 no.	£7,575.40
Four bed houses	£891.03	40 no.	£35,641.20
Total			£49,245.79

4.36 Subject to payment of the applicable financial contribution to the SRMS prior to occupation of the Appeal Scheme, which will be used to fund

strategic mitigation, it can be concluded that the Appeal Scheme will have no adverse effect on the integrity of the Solent and Southampton Water SPA or Ramsar site as a result of impacts associated with recreation pressure.

New Forest

- 4.37 Eastleigh Borough Council's 'Interim Mitigation Strategy to address recreation impacts on New Forest protected sites' can be found as Appendix 1 to the EBC Cabinet Meeting held on 24 March 2022. The Council has developed a strategic mitigation package based on providing Suitable Alternative Natural Greenspace (SANG) within the Borough, and securing financial contributions from developers toward Strategic Access Management and Monitoring (SAMM) within the New Forest.
- 4.38 A SANG is a recreation area specifically created (or enhanced from an existing destination) to draw visitor pressure away from designated sites, being positioned in a more local and convenient location. It is a well-established mitigation tool for recreational disturbance and is widely used across England, including nearby in the Thames Basin Heaths and the Dorset Heaths. Proportionate to the relative contribution of visitor pressure from Eastleigh Borough, the interim strategy is based on a requirement of 2ha per 1,000 population.
- 4.39 Developer contributions towards SANG provision will be secured to cover land acquisition costs, the capital costs of infrastructure/landscaping and associated costs, ongoing management/maintenance costs in perpetuity and for monitoring. To manage the growing number of visits to the New Forest, the National Park Authority has established site wardening, monitoring and information services that are intended to reduce recreational disturbance at source (i.e. SAMM), and the EBC Interim Strategy will support this work by funding the equivalent of one ranger post throughout the strategy period.
- 4.40 The total contribution required from new development in Eastleigh Borough for SANG and SAMM is calculated at £1,161 per dwelling (subject to index linking and annual review). The 61 unit Appeal Scheme will therefore attract a pre-commencement financial contribution requirement of £70,821.
- 4.41 Subject to payment of the applicable financial contribution to SANG and SAMM, prior to commencement of the Appeal Scheme, which will be used to fund strategic mitigation, it can be concluded that the Appeal Scheme will have no adverse effect on the integrity of the New Forest SAC, SPA or Ramsar site as a result of impacts associated with recreation pressure.

Eutrophication (foul water discharges)

- 4.42 It has been determined that the Appeal Scheme will, in the absence of mitigation, result in an increased nitrogen load within the marine environment of the East Solent system of c. 48.86kg TN/year, and that in combination with wider projected housing growth, this increase has the potential to contribute toward adverse effects on the integrity of the associated SACs, SPAs and Ramsar sites.
- 4.43 In response to the impact on housing delivery caused by nutrient loading of the Solent's water environment, EBC has implemented a scheme to offset excess nutrient outputs against Council-owned land through the purchase of nutrient credits. This initiative is a key part of EBC's Climate Change and Environmental Emergency action plan, and supports the Housing Development and Healthy Communities themes outlined in the Council's Corporate Action Plan 2015 - 2025.
- 4.44 The Council reports that they currently preside over 238 hectares of mitigation land, worth a total of 11,354 credits (1 credit = 1 kilogram of nitrogen per year),² which have all been created through the cessation of farming practices (i.e. do not rely on any proactive interventions such as creation of wetland, planting of woodland, installation of nutrient-retaining SUDs features or the like). However, EBC have indicated in their Statement of Case that all of their credits are reserved for allocated development sites under the adopted Local Plan, and that the Council are *"not in a position to provide nitrate credits for this development."*
- 4.45 In order to mitigate the potential in-combination effects of the Appeal Scheme, the Appellants have therefore secured third party mitigation provided at Whitewool Farm, in the upper Meon Valley. Known as 'Meon Springs', this wetland creation scheme is located at a 441ha dairy farm on a tributary of the River Meon. The project was permitted and is monitored by South Downs National Park Authority (SDNP/20/01263/FUL) and is listed by the Partnership for South Hampshire as a suitable mitigation provider for developments discharging to Peel Common WWTW. A letter from the owners of Meon Springs is provided at Appendix E; confirming that sufficient capacity remains and has been provisionally allocated to the Appeal Scheme.
- 4.46 In light of the foregoing, it can be concluded that the Appeal Scheme will have no adverse effect on the integrity of the Solent and Southampton Water SPA and Ramsar site, or Solent Maritime SAC, as a result of eutrophication linked to foul drainage impacts to water quality.

Surface water pollution

- 4.47 In order to avoid impacts on the Solent and Southampton Water SPA and Ramsar site in connection with pollution vectored by surface water

² <https://www.eastleigh.gov.uk/planning-and-building/nutrient-offset-schemes>

drainage, the Appeal Scheme will be implemented in accordance with the provisions of a submitted Flood Risk Assessment and Drainage Strategy (Bright Plan Civils, 2020).

- 4.48 It is recognised that infiltration is the preferred method of surface water disposal (over other methods such as direct discharge to watercourse and sewers) however site-specific investigation has determined that such a solution is not viable at the Appeal Site, due to the presence of high groundwater. The strategy therefore utilises permeable paving across residential parking spaces and private roads, with the remainder of the site using the existing gully and pipe drainage to direct flows to a storage basin in the east. The proposed basin consists of two pond areas connected by a swale, with further storage to be provided within two geocellular storage tanks under vegetated banks.
- 4.49 The CIRIA SuDS Manual C753 regarding methods for managing pollution risks advocates an index approach whereby the risk posed by surface water runoff to the receiving environment is a function of (i) the pollution hazard (the source), (ii) the SuDS treatment techniques (the pathway), and (iii) the sensitivity of the environment (the receptor). For a strategy to be considered effective, the total pollution mitigation index for each contaminant type should equal or exceed the pollution hazard index. The submitted Drainage Strategy concludes that, as the pollution hazard index does not exceed any pollution mitigation index for any contaminant type, for any proposed land use, the proposed SuDS methods will provide sufficient treatment for the residential areas.
- 4.50 In their comments of 24 February 2021 (Appendix F) the Ecology Officer Paul Howe MCIEEM supported the detailed drainage strategy, noting that the proposed approach was established as acceptable in the previous application (O/17/80319). In their comments of 15 February 2021, the Hampshire County Council (HCC) Flood and Water Management Team stated that the proposed strategy was *“acceptable in principle since the ground investigation showed that infiltration is not feasible at the application site, and in the absence of any nearby watercourse.”*
- 4.51 In their further comments of 27 April 2022 (Appendix F) Mr Howe remarks as follows:
- “I have now reviewed the Appellant's Statement of Case (Foreman Homes, February 2022) and the additional information in relation to Reason for refusal 5. I raised no objection on drainage grounds in my original response given that the principle of the proposed scheme had been accepted at the appeal for the previous application (O/17/80319).*
- The subsequent concerns raised [by HCC Flood and Water Management Team] are centred on technical details of the drainage*

proposals and a concern about land ownership. The Appellant's Statement of case indicates that a requisition can be approved with Southern Water which will provide the necessary certainty that the technical elements can be delivered in order to provide the agreed drainage strategy.

On this basis I have no further concerns or comments to add regarding the drainage strategy."

- 4.52 Notwithstanding the Council's support for the proposed surface water treatment strategy, comments received from Natural England on the application (05 February 2021) raised concerns. It was noted that the requirement for extra treatment should be considered in relation to discharge to environmentally protected sites and, in line with the precautionary approach in respect of the European site, it was advised further cleaning/filtration treatment features/steps may be required.
- 4.53 In response to Natural England's comments, Bright Plan Civils have prepared additional information in the form of a Technical Note (2022). In recognition of the sensitivity of the receiving environment, it is proposed that additional stages of treatment will be built into the strategy. Landscaping around the Appeal Site between built development and the open drainage features or Third Party land will be designed with grassing and planting which, in drainage terms, will constitute a filter strip in accordance with CIRIA guidance, to provide additional treatment to overland runoff. In addition, the use of gullies or channel drains with additional treatment filters will allow for a first stage of treatment to road and driveway runoff captured by conventional drainage, rather than permeable pavement.
- 4.54 It is further anticipated that a long term monitoring and maintenance strategy will be secured by pre-commencement planning condition, to demonstrate that the surface water treatment system will operate effectively. This strategy will detail appropriate funding, responsibilities and mechanisms to ensure compliance for the lifetime of the Appeal Scheme.
- 4.55 In light of the foregoing, it can be ascertained that the Appeal Scheme will have no adverse effect on the integrity of the Solent and Southampton Water SPA or Ramsar site in relation to surface water quality.

Residual Effects on Site Integrity

- 4.56 With implementation of the proposed measures intended to avoid or reduce adverse effects, it can be concluded that the Appeal Scheme will have no adverse effect on the integrity of the Solent and Southampton Water SPA and Ramsar site, Solent Maritime SAC, or New

Forest SAC, SPA and Ramsar site. These measures can be summarised as follows:

- Implementation of a CEMP, with commitment to construction noise being kept below a maximum of 69dBA during the bird overwintering period of November through March.
- Payment of the applicable financial contribution to the SRMS to fund strategic mitigation to address recreation pressures at the Solent coastal sites.
- Payment of the applicable financial contribution toward strategic SANG and SAMM strategic mitigation to address recreation pressures at the New Forest, in accordance with EBC's Interim Mitigation Strategy.
- Proportionate funding of wetland creation at Meon Springs, to offset increases in nutrient loading (totally 48.86kg TN/year) within the water environment which would otherwise occur as a result of additional foul water discharges.
- Implementation of the proposed surface water drainage strategy.

4.57 The surface water drainage strategy is integral to the development proposal, securing the mitigation, and the financial contributions towards the SRMS, SANG, SAMM and nutrient neutrality may readily be secured through planning condition or appropriate legal mechanism. The Appeal Scheme may therefore be permitted without conflict with the provisions of Regulation 63 of the Conservation of Habitats and Species Regulations 2017 (as amended), it having been ascertained that there will be no adverse effect on the integrity of any European site, either alone or in combination with other plans or projects.

4.58 This conclusion is consistent with that expressed by the Secretary of State, as recorded in the Planning Inspectorate's letter of 02 September 2022; stating that in consideration of the *"nature, scale and location of the Proposed Development and nature of the receiving environment, whilst there may be some impact on the surrounding area and nearby designated sensitive areas as a result of this development, it would not be of a scale and nature likely to result in significant environmental impact."*

4.59 Through submission of this document, the Appellant has discharged the statutory requirement pursuant to Regulation 63(2) of the above Regulations, to provide such information as the competent authority may reasonably require for the purposes of appropriate assessment.

5.0 REFERENCES

Bird Aware Solent (2017). *Solent Recreation Mitigation Strategy*. December 2017.

Bright Plan Civils, 2020. *Flood Risk Assessment and Drainage Strategy*. D1891/FRA1.1, 08 December 2020.

Bright Plan Civils, 2022. *Drainage Consultant Technical Note - September 2022*. D1891, 15 September 2022.

Eastleigh Borough Council, 2022a. *Eastleigh Borough Local Plan 2016-2036*. Adopted April 2022.

Eastleigh Borough Council, 2022b. Interim Mitigation Strategy to address recreation impacts on New Forest protected sites. Appendix 1 to the Cabinet Meeting held 24 March 2022. Available online at: <https://meetings.eastleigh.gov.uk/documents/g6868/Public%20reports%20pack%20Thursday%2024-Mar-2022%2018.30%20Cabinet.pdf?T=10>.

EcoSupport, 2020. *Updated Preliminary Ecology Appraisal: Land to the West of Satchell Lane, Hamble*. Revised for new layout, 9th December 2020.

Lake, S., Liley, D. & Saunders, P., 2020. *Recreation use of the New Forest SAC/SPA/Ramsar: Impacts of recreation and potential mitigation approaches*. Unpublished report by Footprint Ecology.

Liley, D. & Caals, Z., 2020. *Discussion and analysis relating to the New Forest SAC/SPA/Ramsar and a zone of influence for recreation*. Unpublished report by Footprint Ecology.

Liley, D. & Tyldesley, D. (2013). *Solent Disturbance and Mitigation Project: Phase III. Towards an Avoidance and Mitigation Strategy*. Unpublished report. Footprint Ecology/David Tyldesley & Associates.

Liley, D., Clarke, R.T., Panter, C. & Saunders, P., 2019. *Recreation use of the New Forest SAC/SPA/Ramsar: Overview of visitor results and implications of housing change on visitor numbers*. Unpublished report by Footprint Ecology.

Liley, D. & Panter, C., 2020. *Recreation use of the New Forest SAC/SPA/Ramsar: Results of a telephone survey with people living within 25km*. Unpublished report by Footprint Ecology.

Liley, D., Panter, C., Caals, Z. & Saunders, P., 2019. *Recreation use of the New Forest SAC/SPA/Ramsar: New Forest Visitor Survey 2018/19*. Unpublished report by Footprint Ecology.

Ministry of Housing, Communities and Local Government, 2021. *National Planning Policy Framework (NPPF)*. London: Ministry of Housing, Communities and Local Government.

Natural England (2018). *Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations*. V1.4 Final, June 2018.

Natural England (2020). *Advice on Achieving Nutrient Neutrality for New Development in the Solent Region*. Version 5, June 2020.

Natural England (2022). *Advice for development proposals with the potential to affect water quality resulting in adverse nutrient impacts on habitats sites*. Open letter to LPA Chief Executives & Heads of Planning, County Council Chief Executives and Heads of Planning, EA Area and National Team Directors, Planning Inspectorate, Natural Resources Wales (Cross border sites only) & Secretary of State for Department for Levelling Up Housing & Communities (DLUHC). 16 March 2022.

Panter, C., & Saunders, P., 2020. *Recreation use of the New Forest SAC/SPA/Ramsar: Impacts New Forest Vehicle Counts 2018/19*. Unpublished report by Footprint Ecology.

Stillman, R. A., Cox, J., Liley, D., Ravenscroft, N., Sharp, J. and Wells, M. (2009). *Solent disturbance and mitigation project: Phase I report*. Report to the Solent Forum.

Stillman, R. A., West, A. D., Clarke, R. T. & Liley, D. (2012) *Solent Disturbance and Mitigation Project Phase II: Predicting the impact of human disturbance on overwintering birds in the Solent*. Report to the Solent Forum.

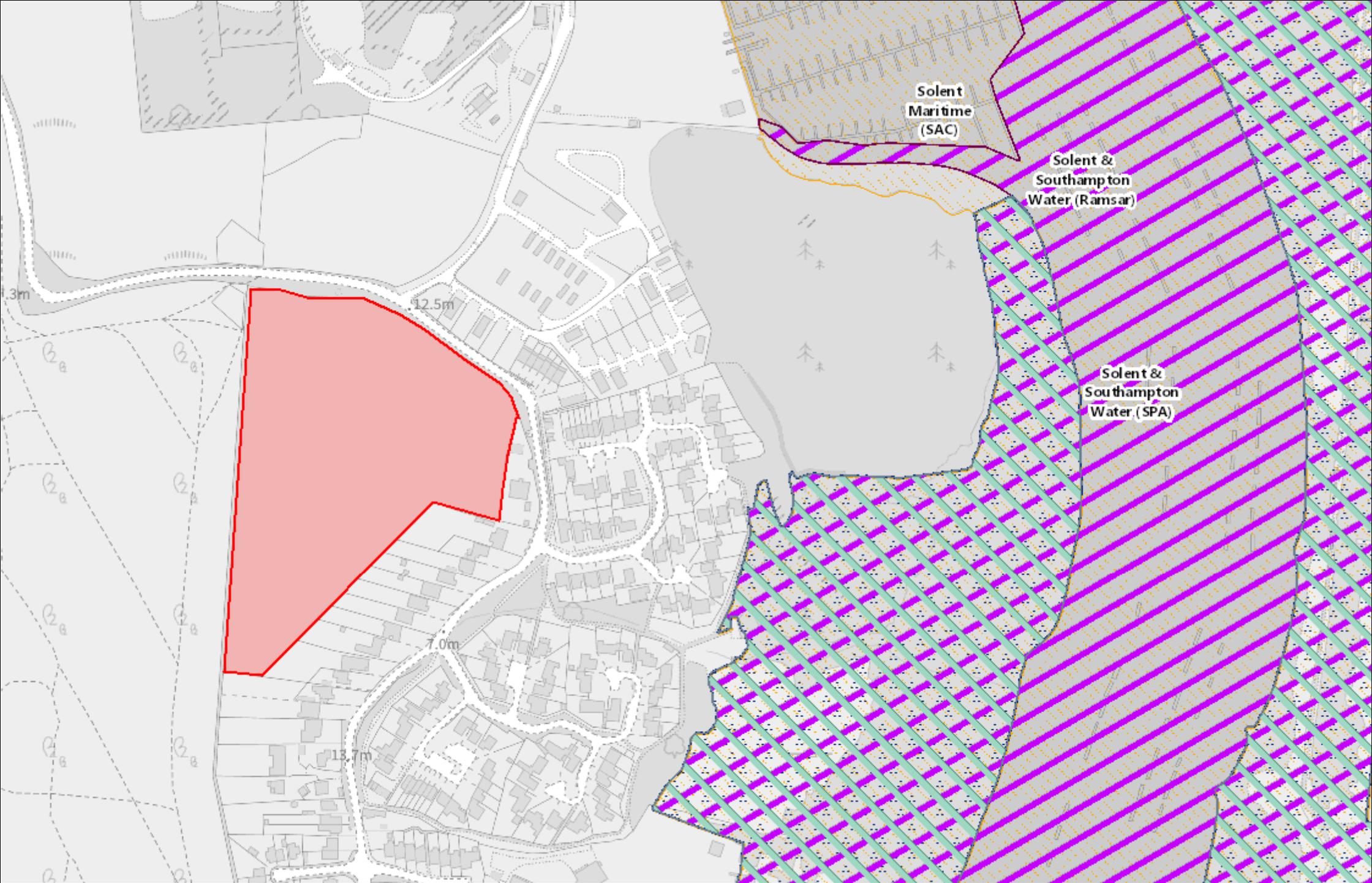
Stroud, D.A., Bainbridge, I.P., Maddock, A., Anthony, S., Baker, H., Buxton, N., Chambers, D., Enlander, I., Hearn, R.D., Jennings, K.R, Mavor, R., Whitehead, S. & Wilson, J.D. - on behalf of the UK SPA & Ramsar Scientific Working Group (eds.), 2016. *The status of UK SPAs in the 2000s: the Third Network Review*. JNCC, Peterborough.

Urban Edge Environmental Consulting, 2019. *Habitats Regulations Assessment for the Eastleigh Borough Local Plan 2016-2036*. HRA Report for the Submission Plan. June 2019.

Whitfield, D. (2020). *Solent Waders and Brent Goose Strategy*. Hampshire and Isle of Wight Wildlife Trust. Curdridge.

Appendix A

Site Location

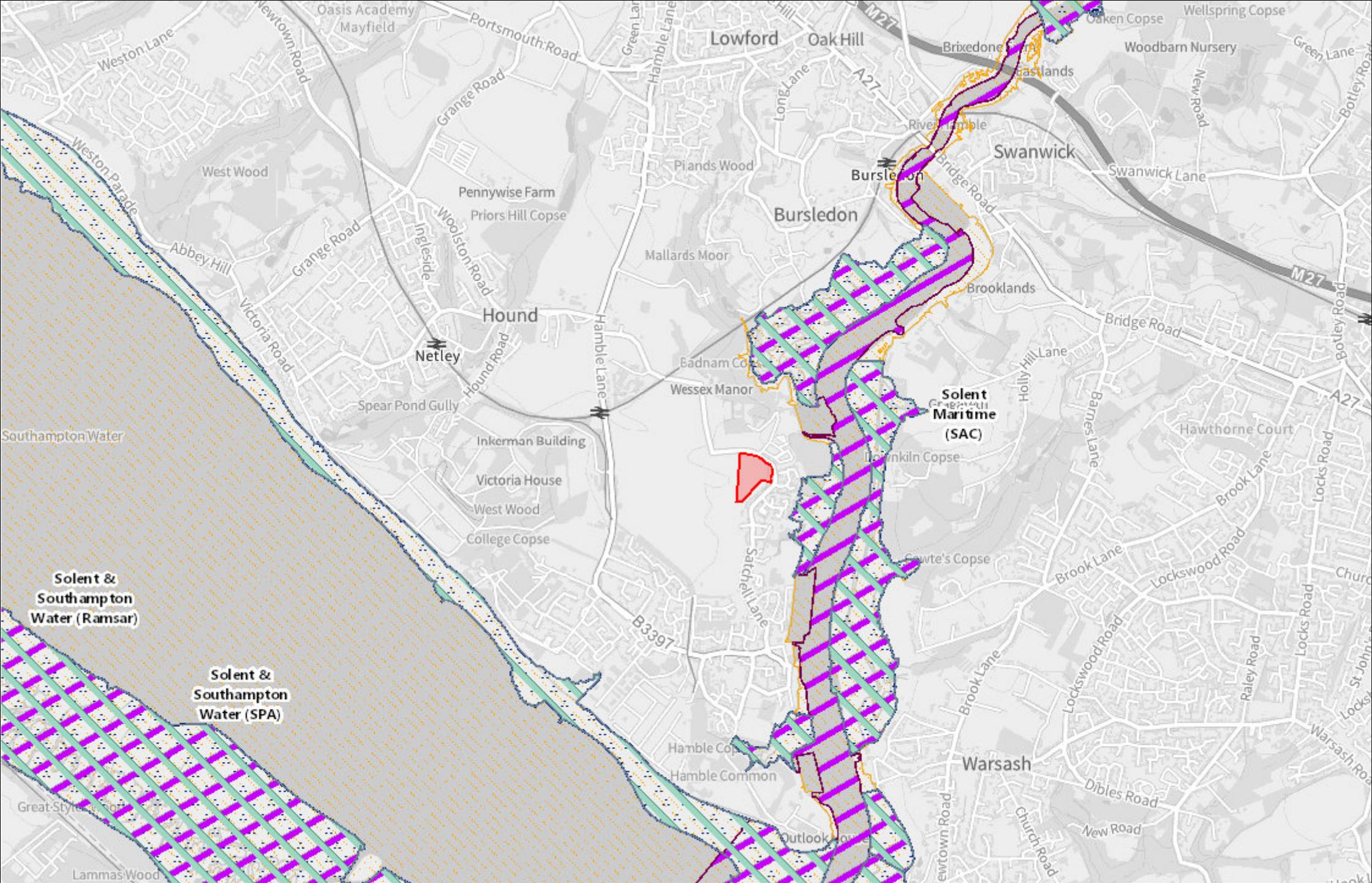


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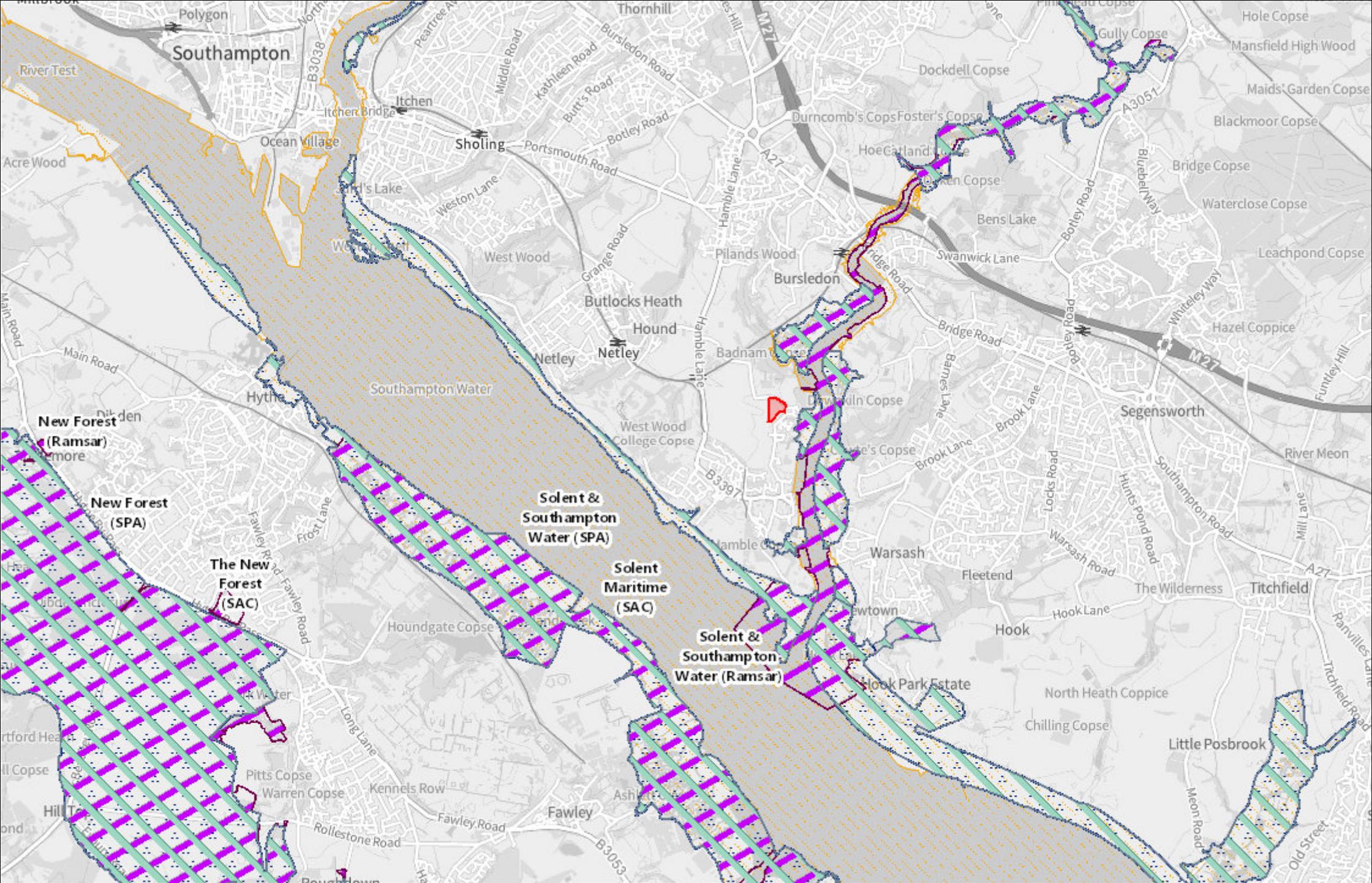


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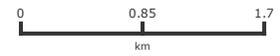




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Appendix B

Legislation and Planning Context

European Sites

- 1.1. Special Areas of Conservation (SACs) and Special Protection Areas (SPAs), termed 'European sites', collectively form part of a suite of sites known in the UK as the national site network, and are afforded strict protection from the potentially damaging effects of human activities. For ease of reference here, and consistent with their treatment under UK government policy, sites designated by the Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention, 1971), or 'Ramsar sites', are also referred to here as European sites.
- 1.2. All European sites in England and Wales are afforded protection through the Conservation of Habitats and Species Regulations 2017 (as amended). These Regulations are widely referred to as the 'Habitat Regulations'. Regulation 63 of these Regulations states that, "A competent authority, before deciding to undertake, or give any consent, permission or other authorisation for, a plan or project which (a) is likely to have a significant effect on a European site...(either alone or in combination with other plans or projects), and (b) is not directly connected with or necessary to the management of that site, must make an appropriate assessment of the implications of the plan or project for that site in view of that site's conservation objectives." This assessment process is commonly referred to as 'Habitats Regulations Assessment' (HRA).
- 1.3. The above Regulations formerly transposed Article 6(3) of Council Directive 92/43/EEC on the 'Conservation of Natural Habitats and of Wild Fauna and Flora', commonly referred to as the 'Habitats Directive'. This Directive is the means by which the European Union meets its obligations under the Bern Convention (1992) on the Conservation of European Wildlife and Natural Habitats. Following the UK's departure from the European Union, the provisions of the Regulations have been retained through enactment of the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019, which came into force on 31 December 2020.

Notable Case Law

- 1.4. Many procedural facets of HRA have been established through case law. In light of Section 6(3) EU (Withdrawal) Act 2018 (as amended), UK courts will continue to be bound by HRA judgments handed down by the Court of Justice for the European Union CJEU prior to 31 December 2020 when interpreting the Conservation of Habitats and Species Regulations 2017 (as amended). A non-exhaustive summary of some of some key judgements is provided below:

In Relation to HRA Screening

Waddenzee (ECJ Case C-127/02; 07.09.04.)

- 1.5. This case considered when Appropriate Assessment might be triggered and concluded that it is required where there is a, "probability or risk," of significant effects, and that, "*such a risk exists if it cannot be excluded on the basis of objective information that the plan or project will not have significant effects on the site concerned.*" The ruling clarifies that, "*in case of doubt as to the absence of significant effects such an assessment must be carried out.*"
- 1.6. The ruling further states that, "*in assessing the potential effects of a plan or project, their significance must be established in the light, inter alia, of the characteristics and species environmental conditions of the site concerned by that plan or project.*" As such, when assessing potential effects the current condition of the features for designation of a European site must be considered. Such information may be provided within, amongst other sources, published Condition Assessments of component Sites of Special Scientific Interest (SSSI's) and Site Improvement Plans (SIPs).

Boggis v Natural England (EWCA Civ 1061; 20.10.09.)

- 1.7. This case built upon guidance for the correct interpretation of what constitutes a 'likely' significant effect from that provided in Waddenzee. It was ruled that, "*Notwithstanding the word 'likely'...the precondition before there can be a requirement to carry out an appropriate assessment is not that significant effects are probable, a risk is sufficient...*" however this must be, "*real, rather than a hypothetical, risk...*"

People over Wind (CJEU Case C-323/17, 12.04.2018)

- 1.8. The recent 'People Over Wind' ruling determined whether mitigation measures may be considered when determining if an effect is 'likely' and therefore whether it should be 'screened-in' for further assessment within the HRA process (i.e. be subject to Appropriate Assessment). Previously it has been established (R (Hart DC) v SSCLG; known as the 'Dilly Lane' decision) that any measures introduced to avoid or mitigate effects on a European sites could be considered in the initial screening stage. However, in the People Over Wind case the CJEU ruled that that such measures not be considered during HRA screening.
- 1.9. Paragraph 40: "*...in order to determine whether it is necessary to carry out, subsequently, an appropriate assessment of the implications, for a site concerned, of a plan or project, it is not appropriate, at the screening stage, to take account of the measures intended to avoid or reduce the harmful effects of the plan or project on that site.*"

In Relation to Appropriate Assessment

Waddenzee (ECJ Case C-127/02; 07.09.04)

- 1.10. Paragraph 59 of the ruling provides guidance on confidence thresholds in Appropriate Assessment, stating that, “An appropriate assessment of the implications for the site concerned of the plan or project implies that prior to its approval, all the aspects of the plan or project which can...affect the site's conservation objectives must be identified in the light of the best scientific knowledge in the field. The competent national authorities, taking account of the conclusions of the appropriate assessment of the implications of [a project] for the site concerned, in light of the site's conservation objectives, are to authorise such activity only if they have made certain that it will not adversely affect the integrity of that site. That is the case where no reasonable scientific doubt remains as to the absence of such effects.”

National Policy

- 1.11. The term ‘European site’ used in reference to SACs and SPAs is derived from the above Regulations. The National Planning Policy Framework (NPPF) (Ministry of Housing, Communities and Local Government, 2021) establishes that sites designated by the Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention, 1971), or ‘Ramsar sites’, as well as ‘potential SPAs’ and ‘possible SACs’, should be given the same protection as European sites.
- 1.12. At paragraph 182, the Framework establishes that the presumption in favour of sustainable development (also known as the ‘tilted balance’ in planning) does not apply where the plan or project is likely to have a significant effect on a European site, unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the European site.

Local Policy

- 1.13. The adopted Eastleigh Borough Local Plan sets out extant development management policies relevant to HRA in Eastleigh Borough. These are shown in Table B.1 below.

Table B1. Summary of relevant local planning policies

Policy	Relevant extracts
Eastleigh Borough Local Plan 2016-2036	
Policy DM11: Nature Conservation	International Designations 2. Development which is likely (either individually or in combination with other developments) to adversely affect the integrity of an international or European nature conservation site will not be permitted subject only to imperative reasons of overriding public interest and securing any necessary compensatory measures in the absence of alternative solutions. A ‘project level’ Habitat

Regulations Assessment will be required where there are likely significant effects or uncertainty. Any mitigation measures required to ensure no adverse impact must be implemented at the appropriate time.

3. The Council will work with PFSH, Natural England, the Environment Agency and other wildlife organisations to develop and implement with developers a strategic approach to the protection and enhancement of international and European sites from the direct and indirect effects of development. Within Eastleigh Borough this will include:

a. implementing:

i. the Solent Recreation Mitigation Strategy (requiring contributions from residential developments within 5.6 kilometres of the Solent Special Protection Area to the Strategy); and

ii. the interim and any future New Forest Recreation Mitigation Strategy if required;
or alternative agreed site specific measures to address recreational disturbance;

b. preserving the water quality and flows within the Itchen and Hamble, Southampton Water and Solent;

c. protecting the River Itchen SAC, in particular the maintenance and where appropriate restoration of habitats and qualifying species to favourable conservation status (as defined by article 1 of the Habitats Directive); and

d. seek contributions towards measures set out in the Southern Damselfly Conservation Strategy (or other strategy) specifically to deliver biodiversity net gain.

Appendix C

European Site Characteristics

Table C1. Site Characteristics

Solent and Dorset Coast SPA	
Distance and direction from Site	c. 590m south-west
Size	88980.55ha
Grid reference	SZ 7021 9353
Component SSSIs	Numerous, however, those within 10km of the Site are: Sinah Common SSSI Bracklesham Bay SSSI
Qualifying features	The site supports internationally important breeding populations of sandwich tern <i>Sterna sandvicensis</i> , common tern <i>Sterna hirundo</i> and little tern <i>Sternula albifrons</i> .
Published Conservation Objectives	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 and restoring: <ul style="list-style-type: none"> • 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.
Known vulnerabilities	Threats, pressures and activities with impacts identified on the Natura Standard Data Form include exploration and extraction of oil or gas; renewable abiotic energy use; shipping lanes, ports, marine constructions; urbanised areas; discharges; fishing and harvesting of aquatic resources; outdoor sports and leisure activities; and military use.

Table C2. Site Characteristics

Solent and Southampton Water SPA	
Distance and direction from Site	c. 4.8km south-west
Size	5401.12
Grid reference	SZ33559351
Component SSSIs	Numerous, none within 10km of the Site.
Qualifying features	The site supports internationally important populations of Mediterranean gull <i>Larus melanocephalus</i> , sandwich tern <i>Sterna sandvicensis</i> , common tern <i>Sterna hirundo</i> , little tern <i>Sterna albifrons</i> , roseate tern <i>Sterna dougalli</i> , dark-bellied brent geese <i>Branta bernicla bernicla</i> , teal <i>Anas crecca</i> , ringed plover <i>Charadrius hiaticula</i> and black-tailed godwit <i>Limosa limosa islandica</i> . The site is regularly used by over 20,000 waterfowl and over 20,000 waders.

Published Conservation Objectives	<p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring:</p> <ul style="list-style-type: none"> • 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.
Known vulnerabilities	Threats, pressures and activities with impacts identified on the Natura Standard Data Form include fishing and harvesting aquatic resources, outdoor sports and leisure activities, pollution to groundwater, changes in abiotic conditions and changes in biotic conditions.

Table C3. Site characteristics

Solent and Southampton Water Ramsar	
Distance and direction from Site	c. 4.8km south-west
Size	5415ha
Grid reference	SZ33559351
Component SSSIs	Numerous, none within 10km of the Site.
Qualifying features	<p>The site is one of the few major sheltered channels between a substantial island mainland in European waters, exhibiting an unusual strong double tidal flow and has long periods of slack water at high and low tide. It included 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.</p> <p>The site supports an important assemblage of rare plants and invertebrates, including at least 33 British Red Data Book invertebrates and at least eight British Red Data Book plants.</p> <p>The site supports internationally important assemblages of waterfowl, with peak counts of 51,343.</p> <p>Internationally important populations of black-tailed godwit <i>Limosa limosa islandica</i>, dark-bellied brent goose <i>Branta bernicla bernicla</i> and teal <i>Anas crecca</i> are regularly present within the Site.</p>
Published Conservation Objectives	N/A
Known vulnerabilities	Threats, pressures and activities with impacts identified on the Ramsar Information Sheet includes erosion.

Table C4. Site Characteristics

Solent Maritime SAC	
Distance and direction from Site	c. 7.6km west
Size	11325.09
Grid reference	SU756003

Component SSSIs	Chichester Harbour Langstone Harbour Sinah Common
Qualifying features	<p>Annex I habitats present within the site for which it is primarily selected include estuaries, spartina swards (<i>Spartinion maritimae</i>), Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>).</p> <p>Annex I habitats which are present as a qualifying feature but not the primary reason for selection include sandbanks which are slightly covered by sea water all the time, mudflats and sandflats not covered by seawater at low tide, coastal lagoons, annual vegetation of drift lines, perennial vegetation of stony banks, Salicornia and other annuals colonizing mud and sand and shifting dunes along the shoreline with <i>Ammophila arenaria</i> ("white dunes").</p> <p>Annex II species present as a qualifying feature but not the primary reason for selection includes Desmoulin's whorl snail <i>Vertigo moulinsiana</i>.</p>
Published Conservation Objectives	<p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Favourable Conservation Status of its Qualifying Features, by maintaining and restoring:</p> <ul style="list-style-type: none"> • The extent and distribution of qualifying natural habitats and the habitats of the qualifying features • 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.
Known vulnerabilities	Threats, pressures and activities with impacts identified on the Natura Standard Data Form include fishing and harvesting of aquatic resources, outdoor sports and leisure activities, pollution to groundwater, changes in abiotic conditions and changes in biotic conditions.

Table C5. Site Characteristics

New Forest SAC	
Distance and direction from Site	c. 15.6km south-west
Size	29,213.57ha
Grid reference	SU225075
Component SSSIs	Numerous

Qualifying features	<p>SAC qualifying features include the Annex I habitats oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>); oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoëto-Nanojuncetea</i>; northern Atlantic wet heaths with <i>Erica tetralix</i>; European dry heaths; <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>); depressions on peat substrates of the <i>Rhynchosporion</i>; Atlantic acidophilous beech forests with Ilex and sometimes also Taxus in the shrub layer (<i>Quercion robori-petraeae</i> or <i>Illici-Fagenion</i>); <i>Asperulo-Fagetum</i> beech forests; old acidophilous oak woods with <i>Quercus robur</i> on sandy plains; bog woodland; alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i>; transition mires and quaking bogs; and, alkaline fens.</p> <p>Qualifying Annex II species of the SAC designation are the southern damselfly <i>Coenagrion mercuriale</i>, stag beetle <i>Lucanus cervus</i> and great crested newt <i>Triturus cristatus</i>.</p>
Published Conservation Objectives	<p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;</p> <ul style="list-style-type: none"> • 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.
Known vulnerabilities	<p>Threats, pressures and activities with impacts identified on the Natura 2000 Standard Data Form include outdoor sports and leisure/recreational activities, biocenotic evolution/succession, human induced changes in hydraulic conditions, problematic native species and forest/plantation management and use.</p> <p>A study on visitor patterns within the New Forest National Park (Sharp <i>et al.</i>, 2008) identified impacts which result from such pressure as disturbance of wild birds; wild fires; cats and other urban predators; trampling, compaction and erosion; air pollution/traffic; and, management problems.</p> <p>An additional pressure identified on the Site Improvement Plan is that of air pollution / nitrogen deposition.</p>

Table C6. Site Characteristics

New Forest SPA	
Distance and direction from Site	c. 15.6km south-west
Size	27,968.96ha
Grid reference	50 49 32 N, 01 39 22 W
Component SSSIs	New Forest SSSI, River Avon System SSSI, Norley Copse and Meadow SSSI and Lymington River SSSI

Qualifying features	<p>During the breeding season: Dartford Warbler <i>Sylvia undata</i> Honey Buzzard <i>Pernis apivorus</i> Nightjar <i>Caprimulgus europaeus</i> Woodlark <i>Lullula arborea</i></p> <p>Over winter: Hen Harrier <i>Circus cyaneus</i></p>
Published Conservation Objectives	<p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;</p> <ul style="list-style-type: none"> • 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.
Known vulnerabilities	<p>Threats, pressures and activities with impacts identified on the Natura 2000 Standard Data Form include air pollution, fishing/harvesting aquatic resources, biocenotic evolution/succession and human induced changes in hydraulic conditions.</p> <p>A study on visitor patterns within the New Forest National Park (Sharp <i>et al.</i>, 2008) identified impacts which result from such pressure as disturbance of wild birds; wild fires; cats and other urban predators; trampling, compaction and erosion; air pollution/traffic; and, management problems.</p> <p>An additional pressure identified on the Site Improvement Plan is that of air pollution / nitrogen deposition.</p>

Table C7. Site Characteristics

New Forest Ramsar site	
Distance and direction from Site	c. 15.6km south-west
Size	28,002.81ha
Grid reference	50 49 32 N, 01 39 22 W
Component SSSIs	New Forest SSSI, River Avon System SSSI, Norley Copse and Meadow SSSI and Lymington River SSSI

Qualifying features	<p>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.</p> <p>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.</p> <p>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.</p>
Published Conservation Objectives	For the purposes of assessment, these are taken to be as those for the corresponding SPA and SAC.
Known vulnerabilities	<p>Threats, pressures and activities with impacts identified on the RIS include commercial-scale forest exploitation, unspecified drainage/land-claim, introduction/invasion of non-native plant species and recreational/tourism disturbance.</p> <p>A study on visitor patterns within the New Forest National Park (Sharp <i>et al.</i>, 2008) identified impacts which result from such pressure as disturbance of wild birds; wild fires; cats and other urban predators; trampling, compaction and erosion; air pollution/traffic; and, management problems.</p>

Appendix D

Nutrient Budget

Stage 1

User Inputs

Date of first occupancy:	01/01/2024
Average occupancy rate:	2.40
Water usage (litres/person/day):	120
Development Proposal (dwellings/units):	61
Include deductible acceptable loading?	Yes
Wastewater treatment works:	Peel Common WwTW
Wastewater treatment works N permit (mg TN/litre):	7

Stage 1 Calculated Loading

Stage 1 Nutrient Loading

Additional population	146.4	people
Wastewater by development	17568	litres/day
Annual wastewater TN load	40.43	kg TN/yr

Stage 2

User Inputs

Catchment:	Itchen
Soil drainage type:	Freely draining
Annual average rainfall (mm):	750.1 - 800
Within Nitrate Vulnerable Zone (NVZ):	Yes

Existing land use type(s)	Area (ha)	Annual nitrogen nutrient export (kg TN)
Lowland	3.51	46.09
Total:	3.51	46.09

Stage 3

User Inputs

New land use type(s)	Area (ha)	Annual nitrogen nutrient export (kg TN)
Residential urban land	2.78	40.16
Open urban land	0.73	6.22
Total:	3.51	46.38

Stage 4

Calculated Outputs

Annual Nutrient Budget

The total annual nitrogen load to mitigate is:

48.86 kg TN/year



- Indicative site boundary
- Open urban land
- Residential urban land



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Project	Land at Satchell Lane, Hamble-le-Rice	Date	Sept 2022	Drawing No.	CSA/3212/113
Drawing Title	Nutrient Loading Land Use Plan	Scale	Refer to scale	Rev	-
Client	Foreman Homes	Drawn	JVG	Checked	MR

Appendix E

Nutrient Mitigation

H. N. BUTLER FARMS LTD

WHITEWOOL FARM, EAST MEON, PETERFIELD, HANTS. GU32 IHW

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EMAIL: admin@meonsprings.com

Planning Inspectorate
Temple Quay House
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Temple Quay
Bristol
BS1 6PN

23rd September 2022

To whom it may concern,

I confirm that, subject to a completed allocation agreement, we have allocated to Foreman Homes Ltd,, Unit 1, Station Industrial Park, Duncan Rd, Park Gate, Southampton SO31 1BX **48.86 Kg/TN/yr** mitigation offset, for use at Satchell Lane (APP/W1715/W/22/3292580). This is based on the total nitrogen load increase calculated using the Natural England Nitrogen Budget Calculator (March 2022) for their proposed development at Satchel Lane.

Details of our scheme and relevant legal documents can be found at:

<https://planningpublicaccess.southdowns.gov.uk/online-applications/applicationDetails.do?activeTab=documents&keyVal=Q7G535TUM0900>

The scheme currently has over 1000 Kg/TN/yr remaining credits to allocate.

Yours sincerely



Jamie Butler
Director

Appendix F

Ecology Officer Comments

F/20/89488 LAND AT SATCHELL LANE, HAMBLE-LE-RICE,

Residential development of 61 no. dwellings, with associated public open space, landscaping and amenity areas with access off Satchell Lane.

Thank you for consulting Ecology, my observations are as follows:

General

The site is located off Satchell Lane and is around 0.5km west of the Hamble Estuary. The estuary comprises a network of statutorily designated sites: Solent Maritime SAC; Solent and Southampton Water SPA and Ramsar; Lee-on-the-Solent to Itchen Estuary and Lincegove and Hackett's Marshes SSSIs. There are numerous locally designated Sites of Importance for Nature Conservation (SINCs) in the local area with Mercury Marshes located around 200m east being the closest.

In addition, the former Hamble Airfield Site is located immediately west of the site boundary and this is listed as a network opportunity (for habitat restoration) as part of the Hampshire Ecological Network Map. The airfield has also been identified as a "Priority Biodiversity Link" in the Eastleigh Biodiversity Action Plan (BAP) 2012-2022 as it is an important link between two priority areas located east and west of the airfield. Opportunities for the application site to contribute to this habitat linking and enhancement should be considered.

Solent Sites Complex

As previously noted, the site is located within 5.6km of the Solent and Southampton Water SPA and in the absence of mitigation the development will have a significant impact in terms of recreational disturbance. The development will therefore need to make monetary contributions to relevant mitigation scheme secured through a S106 agreement.

Nitrates

The Solent has recognised problems from nitrate enrichment; high levels of nitrogen from human activity and agricultural sources in the catchment have caused excessive growth of green algae (eutrophication) which is having a detrimental impact upon protected habitats and bird species. Since mid-April 2019 Natural England (NE) has required developers in south Hampshire including the Borough of Eastleigh to quantify the nitrate level of their development and mitigate any increase in nitrates compared to the existing land use. A development must demonstrate how it will ensure for at least 80 years there will be no nitrate loading from the development within the Solent.

Given that the development will result in an increase in housing the scheme will need to enter into an agreement with the council to purchase Nitrate credits as part of the nitrate strategy to ensure the development can achieve nutrient neutrality and that the obligations of the council are met in terms of the Habitats Regulations.

Drainage

A detailed drainage strategy has been submitted with the application and indicates that surface water runoff from the application site will be managed through permeable paving, two cellular storage tanks and a storage basin. Surface water will be discharged at a rate of 3.5l/s into the public sewer network at the Halyards housing development off Satchell Lane. This is acceptable in principle since the ground investigation showed that infiltration is not feasible at the application site, and in the absence of any nearby watercourse.

The approach detailed here was established as acceptable in the previous application (O/17/80319) process and notwithstanding comments from the Hampshire Flood Team is acceptable here.

Site Ecology

The application is accompanied by an updated (from the previous application) Preliminary Ecology Appraisal (PEA) by ecosupport (December 2020) and an updated Bat Activity Survey report (ecosupport December 2020). Targeted dormouse survey work was also undertaken for the previous application but given the nature of the species and the lack of significant change in the general landscape scale ecology it was not felt necessary to update this work and I agree that this is acceptable. A combination of previous survey work and data held by HBIC also indicates that the site is not currently supporting notable wintering birds including assemblages that may be associated with the Solent and Southampton Water SPA.

The site is predominantly comprised of horse-grazed semi-improved grassland albeit with moderate floral diversity comprising mainly common and widespread species. The boundary features (hedgerows and trees) are also an important feature and are generally retained apart from access. Generally speaking, the site can be considered to have a level of on-site ecology that does not necessarily constrain development on the site.

However, the **NPPF (2019) paragraph 174 (b)** states that plans should “...promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing **measurable net gains** for biodiversity”.

With the recent development of the DEFRA Biodiversity Metric we now have a tool which can quantify the level of enhancement a development will provide. The Environment Bill (which is likely to pass into law later this year) sets a target of a minimum of 10% net gain to be achieved. The PEA and also the Landscape and Environmental Management Plan (LEMP) set out a number of potential enhancements all of which I am supportive of, but they are not quantified.

I also note the comments from the Hampshire Swift Group and I support these. The provision of these nest boxes within the dwellings should be reflected in the Supplementary Design Document and/or the elevation plans indicating where on the proposed dwellings they will be incorporated should permission be granted. These cannot be considered within the framework of the metric but are an important enhancement that should be included.

At this point I would like to place a **holding objection** and request that the DEFRA biodiversity metric is applied, and the calculations submitted to demonstrate that the development will provide a net gain for biodiversity as outlined in the NPPF and draft Local Plan Policy DM11 (Nature Conservation).

I can comment further on the specifics of enhancements, the need for a CEMP and other potential planning conditions that could be applied if the application was to be approved once I have received the additional information requested.

Paul Howe MCIEEM

Ecologist

24/02/2021

F/20/89488 LAND AT SACHELL LANE, HAMBLE-LE-RICE,(APPEAL COMMENTS)

Residential development of 61 no. dwellings, with associated public open space, landscaping and amenity areas with access off Satchell Lane.

Thank you for consulting Ecology, my observations are as follows:

Reason for Refusal 5 (Drainage):

Insufficient information has been provided to the Local Planning Authority, as the competent authority, to enable it to determine that a suitable scheme for sustainable urban drainage for the proposed development would be provided which ensures that the hydrological and ecological interests of the Solent Complex are protected, as set out in the Conservation of Habitats and Species Regulations 2017. The application is therefore contrary to the requirements of Saved Policies 25.NC and 45.ES of the Eastleigh Borough Local Plan (2001-2011), Draft Policies DM6, DM8, DM10 & DM26 of the submitted Eastleigh Borough Local Plan (2016–2036) and the provisions of the National Planning Policy Framework.

I have now reviewed the Appellant's Statement of Case (Foreman Homes, February 2022) and the additional information in relation to Reason for refusal 5. I raised no objection on drainage grounds in my original response given that the principle of the proposed scheme had been accepted at the appeal for the previous application (O/17/80319).

The subsequent concerns raised are centred on technical details of the drainage proposals and a concern about land ownership. The Appellant's Statement of case indicates that a requisition can be approved with Southern Water which will provide the necessary certainty that the technical elements can be delivered in order to provide the agreed drainage strategy.

On this basis I have no further concerns or comments to add regarding the drainage strategy.

Ecology

If the Inspector is minded to grant Permission for the proposals, I would recommend that the following ecology conditions (or similar) are applied:

- All ecological measures and/or works shall be carried out in accordance with the recommendations contained in the Preliminary Ecological Appraisal and Bat Activity Surveys (Ecosupport) dated December 2020 as already submitted with the planning application and agreed in principle with the Local Planning Authority prior to determination.

Reason: To ensure that the measures considered necessary as part of the ecological impact assessment are carried out as specified.

- No development shall start until a Biodiversity Enhancement and Mitigation Plan (BEMP) has been submitted to and approved in writing by the Local Planning Authority. This should incorporate the management prescriptions outlined in the Landscape and Ecological Management Plan (LEMP) (Foreman Homes, December 2020) and will also include specific details of types and locations of bat or bird boxes which will be incorporated into the building and/or the surrounding area and a sensitive lighting scheme. The development shall then be carried out in accordance with the approved details.

Reason - To ensure biodiversity net gain as required by the National Planning Policy Framework.

- No construction work shall start until a Construction Environment Management Plan (CEMP) has been submitted to and approved in writing by the LPA detailing how ecological receptors will be protected during the construction period. Demolition and construction work shall only take place in accordance with the approved details of the CEMP.

Reason: To ensure no adverse impact on biodiversity during the construction process.

Paul Howe MCIEEM

Ecologist

27/04/2022



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