

Habitat Regulation Assessment (HRA)
Screening Matrix and Appropriate Assessment Statement

PLEASE NOTE: Undertaking the HRA process is the responsibility of the decision maker as the Competent Authority for the purpose of the Habitats Regulations. However, it is the responsibility of the applicant to provide the Competent Authority with the information that they require for this purpose.

HRA drafting date:	16/10/2023
HRA completion date:	16/10/2023
Application reference:	F/23/95844
Application address:	LAND AT STOKE PARK FARM, BISHOPSTOKE, EASTLEIGH, SO50 6DW
Application description:	Use of agricultural land as Suitable Alternative Natural Greenspace (SANG) for recreational purposes, with associated access, car parking, paths, landscaping, infrastructure and other works. The site currently comprises predominantly of poor neutral grassland formerly used for cattle grazing and silage, along with a belt of broadleaved woodland (including some non-native introduced species), a pond (priority habitat) situated within the woodland, seasonally wet ditches within the woodland belt and along Sewall Drive, gravel/ aggregate tracks within the field, sealed road surface along Sewall Drive, and hedgerows. Immediately adjacent to the west and south lies Stoke Park Woods. To the north lies Bow Lake Farm Fish Farm, and to the east lies further former pasture fields and woodland copses
Lead Planning Officer:	Nicholas Parker
Case Officer:	Dawn Errington
Please note that all references in this assessment to the 'Habitats Regulations' refer to The Conservation of Habitats and Species Regulations 2017.	

Stage 1 - details of the plan or project	
European site potentially impacted by planning application, plan or project:	River Itchen Special Area of Conservation (SAC) and SSSI
Is the planning application directly connected with or necessary to the management of the site (if yes, Applicant should have provided details)?	No. The development involves the change of use of c20ha of former agricultural land to SANG informal recreational use with landscaping and access upgrades, which is neither connected to nor necessary to the management of any European site.
Are there any other projects or plans that together with the planning application being	Yes, there is a potential that other development sites could have an in-

assessed could affect the site (Applicant to provide details to allow an 'in combination' effect to be assessed)?

combination effect on the watercourse however large sites will be supported by their own Construction Environmental Management Plans (CEMP).

Stage 2 - HRA screening assessment

Screening under Regulation 63(1)(a) of the Habitats Regulations – The Applicant to provide evidence so that a judgement can be made as to whether there could be any potential significant impacts of the development on the integrity of the SPA/SAC/Ramsar.

The applicant has provided Information to Inform a Habitats Regulations Assessment with the planning application:

European site qualifying features and conservation objectives:

River Itchen Special Area of Conservation (SAC)

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

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

The Itchen is a classic example of a sub-type 1 chalk river. The river is dominated throughout by aquatic *Ranunculus* spp. The headwaters contain pond water-crowfoot *Ranunculus peltatus*, while two *Ranunculus* species occur further downstream: stream water-crowfoot *R. penicillatus* ssp. *pseudofluitans*, a species especially characteristic of calcium-rich rivers, and river water-crowfoot *R. fluitans*.

Annex II species that are a primary reason for selection of this site

Southern damselfly *Coenagrion mercuriale*

Strong populations of southern damselfly occur here, estimated to be in the hundreds of individuals. The site in central southern England represents one of the major population centres in the UK. It also represents a population in a managed chalk-river flood plain, an unusual habitat for this species in the UK, rather than on heathland.

Bullhead *Cottus gobio*

The Itchen is a classic chalk river that supports high densities of bullhead throughout much of its length. The river provides good water quality, extensive beds of submerged plants that act as a refuge for the species, and coarse sediments that are vital for spawning and juvenile development.

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

White-clawed (or Atlantic stream) crayfish *Austropotamobius pallipes*

Brook lamprey *Lampetra planeri*

Atlantic salmon *Salmo salar*

Otter *Lutra lutra*

Conservation objectives

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

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

Ecological characteristics associated with the features of the European site:

The Itchen typifies the classic chalk river and shows a greater uniformity in physical characteristics along its entire length than other rivers of this type. Since the river is mainly spring-fed, there is only a narrow range of seasonal variation in physical and chemical characteristics. The water is of high quality, being naturally base-rich and of great clarity; and its temperature is relatively constant, with dissolved oxygen levels at or near saturation.

The river's vegetation is dominated by higher plants, and the aquatic flora is exceptionally species rich with many of the typical chalk stream plants present in abundance.

The proposal site is located within the River Itchen operational catchment in an area of farmland which is connected to field and roadside drains. These drains run with a flow in the direction of the SAC before eventually joining it approximately 900m from the proposal site.

The main threats to the River Itchen SAC originating from outside of the SAC bounds are identified within the JNCC citation as "pollution to groundwater (point sources and diffuse sources)" and "human induced changes in hydraulic conditions".

Sediment pollution can smother important river habitats such as fish spawning habitats and resulting in changes to water chemistry, which is potentially damaging to the designated features of the SAC. Pollution from fuels and other chemicals can have a variety of effects on fresh water ecology and can lead to death of fish and invertebrates.

Ecological survey results for the application site:

A desk study and suite of ecological surveys were undertaken in 2023 by Burton Reid Associates at the site known as the Proposed Stoke Park Farm SANG, Eastleigh.

Surveys undertaken at the site included UK Habitat classification (and condition assessments), Badger survey, eDNA survey of pond for Great Crested Newt and breeding bird surveys.

The results of the surveys collated to date are summarised as follows:

- UK Habitat Classification surveys identified the grassland (which occupies the majority of the site area) as being "g3c – other neutral grassland" in a "poor" condition. The wooded belt is comprised of "w1g – other woodland; broadleaved" in "moderate" condition.
- eDNA analysis of pond water returned a negative result for Great Crested Newt;
- Badger setts were identified within the site boundary, possibly the remnants of a former main sett (some entrances disused / collapsed) now in use as an outlier.
- Breeding bird surveys undertaken in 2023 identified assemblages typical of this habitat type. The majority of nesting activity recorded was in association with neighbouring woodland habitats. No ground-nesting activity was recorded within the grassland habitats. Activity within the grassland was largely limited to foraging

by species such as Woodpigeon (individually or in small groups) and Herring Gull (individuals).

- No surveys for invertebrates were undertaken as part of this assessment. However, Emperor Dragonfly *Anax imperator*, Azure Damselfly *Coenagrion puella* and Meadow Grasshopper *Pseudochorthippus parallelus* were recorded incidentally during bird surveys;
- The site has potential to support additional Species of Principal Importance such as European Hedgehog *Erinaceus europaeus* as well as foraging and commuting bat species. The grassland on site is currently considered suboptimal for reptile species due to a lack of litter layer within the sward, although reptiles may still be present in small numbers in association with adjacent woodland habitats.

The identified ways in which the Qualifying Features of the European site could be affected by the proposal:

1. Increase of sediments into the River Itchen through increased run-off entering water ways linked to the SAC.
2. Increase in chemicals / pollutants into the River Itchen through increased run-off entering water ways linked to the SAC

Would the proposal lead to a likely significant effect on European site integrity? YES

(If yes, continue to Stage 3).

Stage 3 - Appropriate Assessment

Appropriate Assessment under Regulation 63(1) - if there are any potential significant impacts, the applicant must provide evidence showing avoidance and/or mitigation measures to allow an Assessment to be made. The Applicant must also provide details which demonstrate any long term management, maintenance and funding of any solution.

The proposal has the potential to create significant impacts on the water quality of surface water features during the temporary phase of construction and during site operation:

Temporary impacts

Standard pollution prevention will be implemented during the construction phase to mitigate any impacts due to spillages etc. Measures to be secured via contractor's Construction Environmental Management Plan (CEMP) condition.

In addition, sediment control is an important feature of the construction phase on this site and keeping sediment at source; preventing it entering water courses is essential during these works. In order to ensure this can be achieved the following will be implemented during the construction phase:

- Install physical barriers around earthwork areas as detailed in the CEMP. This will be undertaken by creating silt traps and with the installation of silt fencing, designed to slow overland flow, ensure sediments cannot enter the water course, and to protect retained habitat as much as possible.
- Any areas of surface water ponding/pooling within work compounds/enclosures must be contained and not allowed to spill over into surface water features or the culverted area in the north of the site.

- Earthworks should not take place on days with heavy rainfall forecasted or very dry days that would emit significant dust from the site.

Operational impacts

Suitable SuDS would be implemented, designed in line with CIRIA guidance (CIRIA SuDS Manual (C753)).

The proposals include the creation of attenuation features in the form of a long swale between the northern edge of the proposed car park and the existing field boundary to the north (up to the Root Protection Zone), opening out into a wider basin situated to the north-west of the proposed car park. A French drain is proposed to the south of the car park.

The low permeability of the ground conditions means that infiltration drainage methods are not possible for the development. The proximity of an existing land ditch to the site means discharge to a water course is possible and is the preferred method for this site at a controlled rate.

The carpark will result in additional runoff which will be mitigated with attenuation. The QBAR greenfield runoff for the car park was calculated to be around 0.4l/s. UK Suds Runoff estimation states that when the QBAR is <2.0 l/s/ha then limiting discharge rates are set at 2.0 l/s. The discharge rate for the carpark is therefore set to 2.0 l/s which is an increase from the calculated 0.4l/s.

The principle of the surface water strategy is to discharge to the existing land ditch limited to greenfield rates of 2.0l/s. To achieve this, the proposed surface water attenuation will be incorporated with an attenuation pond. The pond will have a permanent water depth of 350mm, which will act as a natural pond with ecological benefits within the SANG.

be collected with a land ditch. The land ditch will divert the water into the attenuation pond. Using InfoDrainage software quick storage estimates the volumes required are in the range of 31m³ – 47m³. For the purposes of this exercise, we have assumed the volume of 35m³.

A French drain will bypass the attenuation and flow control, therefore there will be no increase in surface runoff for the French drain as it will be collecting the greenfield runoff rate. The French Drain will discharge with a positive system to headwall into the existing land ditch. This is essentially taking what would be discharging naturally into the land ditch as sheet flow over the surface, to a single point. The total volume of water will not increase, and is still in line with the calculated greenfield run off rate.

All SuDS will be required by condition, including monitoring and management requirements. Management would be undertaken by Eastleigh Borough Council Direct Services, to include future maintenance and replacement of works as necessary.

Stage 4 – Summary of the Appropriate Assessment (To be carried out by the Competent Authority (the local planning authority) in liaison with Natural England

In conclusion, the application could have a likely significant effect on the European protected Solent SPA, SAC and Ramsar sites in the absence of avoidance and mitigation measures. With the above mitigation measures in place secured by condition, it is

considered SAC qualifying features would not be adversely affected. It is therefore considered there would be no adverse effect on the integrity of the European site alone or in-combination with other plans or projects. The authority has therefore concluded that any adverse effects arising from the proposal can be mitigated through a condition relating to the submitted Construction Environmental Management Plan and SuDS details and management. It can therefore be concluded that there will be no adverse effect on the integrity of the designated sites identified above. This represents the authorities Appropriate Assessment as Competent Authority in accordance with requirements under Regulation 63 of the Conservation of Habitats and Species Regulations 2017, Article 6 (3) of the Habitats Directive and having due regard to its duties under Section 40(1) of the NERC Act 2006 to the purpose of conserving biodiversity. Consideration of the Ramsar site/s is a matter of government policy set out in the National Planning Policy Framework (Jul 2021).