Habitats Regulations Assessment Screening Proforma
River Itchen SAC

Case Details	
Application site:	The Piggeries, Allington Lane, West End, Southampton, SO30 3HP
Summary of proposal:	Outline application for the redevelopment of existing agricultural site to light industrial uses (use class B1b, B1c) and general industrial (use class B2). Detailed matters to consider: access only (access to be provided from Allington Lane).
Description of River Itchen SAC European site of nature conservation designation:	The River Itchen SAC site comprises of chalk stream and river, fen meadow, flood pasture and swamp habitats and is designated for its habitat and species including the Southern Damselfly, Otter and White-clawed crayfish.
Distance of application site to designation:	82m

1 Introduction

1.1. This Habitats Regulations Assessment has been undertaken as part of Eastleigh Borough Council's duty under the Conservation of Habitats & Species Regulations 2010 (as amended) Regulation 61(1) The assessment will identify any individual or in-combination Likely Significant Effects (LSE) on the designated interest features of the **River Itchen SAC** within the context of their conservation objectives. If individual or in-combination impacts are identified the HRA will seek to provide avoidance and mitigation measures to alleviate risk.

1.2. It is the applicant's duty under the Conservation of Habitats and Species Regulations (as amended) must provide such information as the competent authority may reasonably require for the purposes of the assessment or to enable them to determine whether an appropriate assessment is required.

2 HRA Conclusions

2.1 Based on the information provided by the applicant and the assessment below, it is Eastleigh Borough Council's considered opinion that there is inadequate information to assess the impacts of the proposed scheme on the River Itchen SAC and there is a risk that the scheme could lead to significant adverse effects on the **River Itchen SAC** in combination with other plans or projects.

Screening of 'likely significant effect'					
Issue	**Potential Impact pathways**	**Likely significant effect**	**Potential measures to avoid adverse impacts**	**How does the application address the issue?**	**What are the planning conditions/legal requirements used?**
Assessment of application *independently*					
Water quality	a. Contaminants carried to the River Itchen SAC by surface water drainage and surface run-off, including sediment, and oil, salt and heavy metals could have an adverse impact. b. Construction which impacts on the watercourse itself, for example through changes to the banks of the Itchen, or to watercourses which feed into the Itchen can have negative impacts on flow rates.	These contaminants may have a negative impact on the life cycles of flora and fauna of the River Itchen SAC. Decrease in flow velocities and increase in siltation oil, salt and heavy metals can result in negative impacts on a variety of species including cover of macrophyte, in particular Water Crowfoot for which the River Itchen is designated.	Potential adverse water quality effects during construction should be addressed adherence to a construction environment management plan. Details should be included relating to, Storage of fuels and chemicals in non-permeable areas • Safety procedures and mechanisms to ensure no fuel spill during construction • Diagrammatic and written details of a temporary drainage system with three forms of filtration Potential adverse water quality effects during operation should be addressed by careful design of a sustainable Urban Drainage System containing three forms of naturalised filtration within the treatment train.	No Hydrological and Contamination surveys were submitted to within the application process and therefore inadequate information was available to inform a Construction Environment Management Plan (CEMP) However, due to the temporary nature of the construction process,, impacts can be alleviated by provision of safety measures and construction drainage, details of which to can be provided and agreed to by condition. To conserve the natural hydrological flows on site to inform the SuDS design, and to avoid any deleterious impacts due to disturbance of contaminants from previous agricultural use, contamination and hydrological surveys were requested. These were not submitted. Despite the applicant being informed of the criteria for three naturalised forms of filtration within the treatment train, only one form of mechanised filtration, an oil interceptor was provided within the indicative	A Construction Environmental Management Plan (CEMP) will be produced before construction commences detailing • Safeguards for fuel and chemical storage and use, to ensure no pollution of the surface water leaving the site. • Diagrammatic and written details of construction drainage containing three forms of temporary filtration **Reason** To ensure no impact on the River Itchen SAC/ Solent SAC from pollution within the construction process

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			The altering of natural watercourses should not be permitted except in exceptional conditions. Positive enhancement of watercourses such as in channel works and creation of meanders should be considered but only after ensuring any impact on the otter population and the EA and NE have been consulted on the scheme. Culverted and canalised waterways should be naturalised whenever it is possible and safe to do so. All waterways within the Itchen catchment should be buffered by 20m from the top of each bank. Headwaters and headwater streams connected to the Itchen or tributaries of the Itchen should be identified within the site and buffered by 20m.	SuDS. **Therefore Eastleigh Borough Council as the determining authority was not provided with adequate information to undertake a HRA under Regulation 61(2) of the Conservation of Habitats and Species Regulations 2010 and could not rule out significant impact.** n/a no works proposed n/a no works proposed n/a no works proposed n/a No waterways are present on site n/a no headwaters or associated streams within the application	

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				site	
Invasive non-native species	Invasive non-native species (INNS) can be introduced to the designated site in a number of ways eg. via water run-off into tributaries of the European site. a. Existing INNS on site may be spread during construction or operational phases of the development b. INNS can be brought onto site eg. During construction (such as soil) and by use of inappropriate or contaminated planting and seeding in landscape and design.	Invasive non-native species can become dominant, outcompeting native species, transforming ecosystems and causing considerable harm to the interest features of the European site.	All applications should be accompanied by a botanical survey identifying all INNS present on site. A bespoke INNS eradication method statement should be produced if INNS are present <u>Circulation of information leaflets to householders</u> where appropriate. A <u>native seeding/planting</u> mix should be used in any landscaping of the site to minimise the risk of invasive non-native plants entering the catchment this location. No species listed on schedule 9 of the Wildlife and Countryside Act or cherry laurel should be used on site. A native plant/seed mix should always be used.	No INNS were identified within the Phase 1 Habitat survey n/a no landscaping provided	
Otters	Impacts on otters can occur in both direct and in direct ways. Direct: construction on site can result in direct land take of otter habitat and direct damage to otter feeding sites and networks. Construction and occupation of a site could lead to disruption of the	Habitat destruction: the availability of suitable cover is essential for otter shelters and if the animals are to tolerate incidental disturbance in the longer term Otters are unable to access part of their foraging range with	All possible habitat and dispersal routes should be surveyed to ensure otter use of the site and adjacent areas is fully understand and mitigation measures can be targeted appropriately. Otter presence should be assumed on any water course within the Itchen catchment A <u>construction environmental management plan</u> is required to ensure no damage occurs to streams, ditches or hedgerows or	Otters could have used the site intermittently due to its proximity to habitat connected to the Itchen but the habitats would be unlikely to be part of otter core habitat and therefore development would be unlikely to cause significant impact on this species n/a this site is not thought to be within an otter key foraging area.	

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	otter's foraging routes Indirect: construction noise and recreational disturbance.	possible disruption of food availability. Damage to shelters: these are essential for breeding and resting destruction of food sources: damming rivers and streams, draining ponds and otherwise altering watercourses may all contribute to a reduction in the amount of food which is available Disturbance: otters are intolerant of dogs or, where suitable cover is absent, intense human disturbance such as recreation areas	disturbance to otters during construction. The layout of the site should be sensitively designed to ensure that all otter corridors are preserved and remain undisturbed and open. All waterways within the Itchen or catchment should be buffered by 20m from the top of each bank All hedgerows connected to the waterways should be buffered by 5m on each side The altering of natural watercourses should not be permitted except in exceptional conditions. Positive enhancement of watercourses such as in channel works and creation of meanders should by considered but only after ensuring any impact on the otter population and the EA and NE have been consulted on the scheme. Culverted and canalised waterways should be naturalised whenever it is possible and safe to do so Headwaters and headwater streams connected to the Itchen or tributaries of the Itchen should		

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			be identified within the site and buffered by 20m.		
Hydrology	Impacts may occur as a result of changes in hydrology and increases or decreases of the water flow into the Itchen	Degradation of the flora and fauna communities and associated riparian habitats due to significant increases or decreases in water flows	Hydrological survey to ascertain water flows throughout the site. Safeguards to ensure natural drainage pathways are mirrored within the development. Changes in water flow could be addressed by ensuring that the development does not exceed existing greenfield sites runoff levels. If changes may occur the EA biodiversity section should be consulted	To conserve the natural hydrological flows on site to inform the SuDS design, and to avoid any deleterious impacts due to disturbance of contaminants from previous agricultural use, contamination and hydrological surveys were requested. These were not submitted. Despite the applicant being informed of the criteria for three naturalised forms of filtration within the treatment train, only one form of mechanised filtration, an oil interceptor was provided within the indicative SuDS. **Therefore Eastleigh Borough Council as the determining authority was not provided with adequate information to undertake a HRA under Regulation 61(2) of the Conservation of Habitats and Species Regulations 2010 and could not rule out significant impact.**	
Coastal squeeze / direct land take	Construction works or development proposals to the river bed, banks or immediate surround of the watercourse of the River Itchen may result in direct	Direct loss of land would result in the reduction in quantity of European protected habitat.	Construction management plan to avoid construction processes of development resulting in direct land take. The altering of watercourses	n/a the site is not adjacent to the coast and is note adjacent to the River Itchen	

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	loss of land of the European site.		should not be permitted except in exceptional conditions. Positive enhancement of watercourses such as in channel works and creation of meanders should be considered but only after ensuring any impact on the otter population and the EA and NE have been consulted on the scheme. If the development proposals require or, at this stage, involve direct loss of European protected habitat or supporting habitat please contact Natural England. Direct loss of protected habitat will require a full appropriate assessment		
Assessment of application *'in-combination'* with other plans and proposals					
Eastleigh Borough Local Plan 2011-2029- Are there any policies/ allocations which could act in combination with this application ?	These could include other applications or infrastructure works that could cause e.g. contamination, or otter disturbance which alone would not be an issue but taken as a whole could cause impact.	Increases in pollution and nutrient enrichment Cumulative noise near to or within an important otter migration corridor	Safeguards to ensure pollutants and nutrient are not increased to deleterious levels within permissions granted. Regular monitoring of the levels within and adjacent to the Itchen. Ensure that the timing of construction and works on sites near to and within important otter corridors do not coincide to produce unacceptable noise levels.	Multiple developments within the Local Plan drain into the River Itchen Catchment including large strategic developments such as Chalcroft Farm and Land West of Horton Heath and Land South of Chestnut Avenue. n/a this site is not thought to be within core otter foraging areas	

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Other applications. Are there any applications which could act in combination with this application?	Consideration should be given to applications not included within the Local Plan or assessed within the in-combination assessment of the strategic HRA e.g. windfall sites, unplanned development	Could increase all impacts to unacceptable levels. As these sites may not be backed up by site specific policies they could cause impacts both individually and in-combination with other developments.	Ensure that safeguards for pollution, spread of invasive species, enrichment, and change in water flows are applied to these applications as well as those included in the Local Plan. Require information from the applicant to assess the impact of the development in relation to the strategic HRA and any other unplanned development and integrate appropriate additional mitigation if impacts are assessed as causing in-combination significant impacts.	A number of small application sites	

Appendix A: Habitats Regulations Assessment - Context

Habitats Regulations Assessment

European sites provide ecological infrastructure for the protection of sites which are of exceptional importance in respect of rare, endangered or vulnerable natural habitats and species within the European Union. These sites consist of Special Areas of Conservation (SACs, designated under the Habitats Directive) and Special Protection Areas (SPAs, designated under European Union Directive 79/409/EEC *on the conservation of wild birds* (the Birds Directive)). Government policy (Circular 06/05[1]) recommends that Ramsar sites[2] are treated as if they are fully designated European sites for the purposes of considering development proposals that may affect them. This report takes the same approach.

Under Article 6(3) of the Habitats Directive, the assessment must determine whether or not the project will adversely affect the integrity of the European site(s) concerned. Where negative effects are identified, the process should consider alternatives to the proposed actions and explore mitigation opportunities. If it is impossible to avoid or remove the perceived adverse effect, the Local Planning Authority must demonstrate, under the conditions of Article 6(4) of the Habitats Directive, that there are Imperative Reasons of Overriding Public Interest to continue with the proposal. This is widely perceived as an undesirable position and should be avoided if at all possible.

[1] ODPM (2005): *Government Circular: Biodiversity and Geological Conservation – Statutory Obligations and their Impact within the Planning System*.

[2] UNESCO (1971): Convention on Wetlands of International Importance especially as Waterfowl Habitat. (Ramsar (Iran), 2 February 1971, UN Treaty Series No. 14583).

Appendix B: European Sites – River Itchen SAC

Scope of the Study

European sites of nature conservation interest can be affected by development in a number of different ways. These include the direct footprint of new development, the type of use the land will be put to (for example, a noise emitting use), the pollution a development generates and the resources it uses (during both construction and operation).

Best practice guidance[3] on Habitats Regulations Assessment suggests that all European sites within the area of coverage of a plan, together with all those within a 10km buffer zone should be considered as potential receptors for negative effects. In addition to these, other European sites further than 10km from the area of coverage of a plan may also be affected. This is particularly the case where there is potential for developments resulting from the plan to generate water-borne pollutants, or where there are particularly high demands for water resources.

The following European sites are wholly or partially within the area covered by the proposal, or close to it, and may potentially be affected by activities arising from the proposal:

River Itchen SAC;

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Site Description

The site comprises of chalk stream and river, fen meadow, flood pasture and swamp habitats, particularly formations of in-channel vegetation dominated by water crowfoot *Ranunculus* spp, riparian vegetation communities (including wet woodlands) and site channels, runnels and ditches associated with the main river and former water meadows. There are significant populations of the nationally-rare southern damselfly *Coenagrion mercurial* and assemblages of nationally-rare and scarce freshwater and riparian invertebrates, including the white-clawed crayfish

[3] David Tyldesley and Associates (for English Nature, 2006): *Draft Guidance: The Assessment of Regional Spatial Strategies and Sub-Regional Strategies under the Provisions of the Habitats Regulations*. [Please note: similar guidance is being prepared by David Tyldesley and Associates for Natural England but is not yet available. In the absence of this document it has been agreed with Natural England and the Environment Agency that the guidance prepared for RSS and SRS is suitable for use with LDD.]

Austropotamobius pallipes. Other notable species include otter *Lutra lutra*, water vole *Arvicola terrestris*, freshwater fishes including bullhead *Cottius gobo*, brook lamprey *Lampetra planeri* and Atlantic salmon *Salmo salar*. A good range of wetland bird species breed within the site.

Qualifying Features

The qualifying features of the site (that is, the reasons for which the site was designated) are as follows.

- Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-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*.

- Southern damselfly *Coenagrion mercuriale*:
  Strong populations of southern damselfly *Coenagrion mercuriale* 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 *Cottus gobio* 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.

- Brook lamprey *Lampetra planeri*:
  This species is a qualifying feature, but not a primary reason for site selection. Sites that hold healthy populations of brook lamprey *Lampetra planeri*, with clean water and suitable areas of gravels, silt or sand required for spawning have been selected. The SAC series provides representation over the geographical range of the species and includes a range of high-quality river types in which it occurs. Sites selected are generally extensive river systems, including important tributaries, which provide conservation of the range of habitat features required by the species.

- Atlantic salmon *Salmo salar*:
  This species is a qualifying feature, but not a primary reason for site selection. The UK salmon population is important in a European context, and this has influenced the selection of SACs. Site selection has focused on the identification of rivers

holding large salmon populations across the geographical range of the species in the UK. Site selection has also taken into account the considerable variation in the ecological and hydrological characteristics of salmon rivers in the UK, and in the life-cycle strategies adopted by the salmon within them. Spawning and nursery requirements are well-represented in all the selected sites, and the river systems selected include the main tributaries where significant redds occur.

- White-clawed crayfish *Austropotamobius pallipes*:
  This species is a qualifying feature, but not a primary reason for site selection. Sites have been selected to provide representation over a wide geographical area. The sites selected are within parts of the country where the keeping of live non-native crayfish has (since 1996) been prohibited except under licence, and where there are high-quality aquatic habitats and recent (post-1990) records of healthy, recruiting *Austropotamobius pallipes* populations free of crayfish plague. A number of these safe havens in the north of England have been selected, as they are away from the main outbreaks of crayfish plague. The sites selected cover a variety of habitats, including rivers, natural lakes, and some 'refuges' of artificial origin (but within the natural geographical range of the species) that contain large isolated populations with a good chance of remaining free of crayfish plague.

- Otter *Lutra lutra*:
  Qualifying feature, but not a primary reason for site selection. The SAC series reflects the present discontinuous distribution of otters *Lutra lutra* in the UK. Sites that are known to support high densities have been selected to represent the current strongholds of the population. The sites selected also cover the ecologically variable conditions in which the species is found across its range. As well as a known high density of otters, sites selected have good quality habitat features necessary for feeding and breeding. This is demonstrated by a known record of continuous occupation of the site, even, in England, during the period of population decline. Recent research has demonstrated that this approach has also ensured good coverage of the main lines of genetic variation in British otters. The otter population is widespread and individuals are wide-ranging, normally occurring at low a density, which is reflected in the relatively large number of sites where the species occurs as a qualifying feature, but is not a primary reason for site selection. The selected sites include some very extensive areas (totalling over 175,000 ha).

Conservation Objectives

To maintain*, in favourable condition, the river as a habitat for:

- floating formations of water crowfoot (*Ranunculus*) of plain and sub-mountainous rivers
- populations of Atlantic salmon (*Salmo salar*)
- populations of bullhead (*Cottus gobio*)
- populations of brook lamprey (*Lampetra planeri*)

- populations of white-clawed crayfish (*Austropotamobius pallipes*)

and the river and adjoining land as habitat for:

- populations of southern damselfly (*Coenagrion mercuriale*)
- populations of otter (*Lutra lutra*)

*maintenance implies restoration, if the feature is not currently in favourable condition.

Vulnerabilities and Opportunities

Every European site has distinctive characteristics that make it vulnerable to a variety of impact-inducing activities. Many sites, due to their location or condition, also offer various opportunities for improvement.

The vulnerabilities and opportunities of the above named sites are as follows.

Vulnerabilities:

- Decreases in flow velocities due to increased abstractions in the upper catchment and below average rainfall affecting macrophyte cover and increased siltation.
- Damage to the ditch network supporting otter populations and their activity.
- Pollution e.g. phosphorous.
- Grazing pressure essential for Southern damselfly habitat.

Opportunities:

- Provide on-site recreation to mitigate/prevent/avoid recreational impacts off site
- Management of the ancient woodland located on site of the proposed Sunday's Hill bypass.

(All information taken from HRA screening Report Pre-submission Local Plan 2011-2029)