

**SCREENING AND SCOPING REPORT FOR HABITAT REGULATIONS
 ASSESSMENT OF THE PROPOSED DEVELOPMENT AT STONE'S FARM,
 SITTINGBOURNE ON THE SWALE SITE**

CLIENT: G H DEAN & CO

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ASSESSMENT OF THE PROPOSED DEVELOPMENT AT STONE'S FARM,
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1. This report has been prepared by ecosulis ltd on behalf of G H Dean & Co in order to examine the likely effects of the proposed development at Stone's Farm, Sittingbourne, both alone and in combination with other proposals, on the nearby designated Swale site, and to consider whether these impacts are likely to be significant.
2. The Swale Site of Special Scientific Interest (SSSI), Special Protection Area (SPA) and Ramsar site is internationally and nationally designated for its breeding and overwintering wildfowl populations, important wetland and coastal habitats and their associated assemblages of plants and invertebrates. The site lies approximately 900m north of the Stone's Farm site.
3. The requirements of the Council Directive on the conservation of natural habitats and of wild flora and fauna and have been transposed into UK law by Regulation 48 of the Conservation (Natural Habitats &c) Regulations 1994 (as amended in 2007), commonly referred to as the Habitat Regulations. The Habitats Directive was introduced and designed to protect and enhance species and habitats of nature conservation importance at the European level. Under regulation 48(1), competent authorities are required to assess the potential impacts of land use plans on the Natura 2000 network of European protected sites. Natura 2000 sites include Special Areas of Conservation (SACs) and Special Protection Areas (SPAs). It is Government policy (as described in Planning Policy Statement 9: Biodiversity & Geological Conservation) for sites designated under the Convention on Wetlands of International Importance (Ramsar sites) to be treated as having equivalent status to Natura 2000 sites.
4. If the proposed development is not directly connected with or necessary to site management, the competent authority must determine whether the proposal is likely to have a significant effect on a European site. The competent authority should consider whether the effect of the proposal on the site, either individually or in combination with other projects, is likely to be significant in terms of the conservation objectives for which the site was classified.

5. The process by which the impacts of a plan or programme are assessed against the conservation objectives of a European site is known as Habitats Regulations Assessment (HRA). The HRA determines whether there will be any likely significant effects on any European site and, if so, whether these effects will result in an adverse effect on its integrity.
6. This report aims to provide information to the competent authority (the Local Planning Authority with guidance from Natural England) to decide whether an Appropriate Assessment is required for the site, and if so, to outline the proposed scope of information required to make this assessment.
7. ecosulis ltd has compiled this document based upon previous and current surveys undertaken on the site and recent desk review. A Phase I habitat survey was undertaken at the site by ecosulis ltd in March 2006 (report ref: E1358PSA11SFS), and wintering bird surveys are currently being undertaken at the site. Initial liaison regarding the proposed development and the need for an HRA has been undertaken with Natural England and the Kent Wildlife Trust.
8. A Development Brief is currently being drawn up for the site, which aims to provide an outline of development proposals, in line with requirements set out within the Swale Borough Council Adopted Local Plan 2008. Within the adopted Local Plan part of the site is allocated for housing development, with the eastern portion of the site proposed for retention as public open space, and also to provide scope for biodiversity enhancements. An agreed Development Brief would eventually form a Supplementary Planning Document. Early discussions with Natural England and Kent Wildlife Trust indicate that they would require a screening exercise as part of an HRA to determine possible impacts on The Swale SPA and Ramsar to be provided alongside the final Development Brief.

DESCRIPTION OF SITE AND PROPOSED DEVELOPMENT

9. The site lies on the eastern edge of Sittingbourne, Kent, extending eastward to Bapchild (Central grid reference TQ928 635). The site is immediately bordered by an active railway line to the north and beyond this improved pastures and orchards, which extend towards to the east. The north-eastern boundary of the site is bordered by an improved field. Immediately bordering the eastern site boundary is a spring-fed pond and watercourse with associated marginal wetland, and beyond this lies improved

- pasture and orchards. Residential properties border the south-eastern corner of the site. The main A2 road runs adjacent to the southern site boundary. Residential properties and a school adjoin the site to the west with a finger of housing extending east on the north side of the A2 at Canterbury Road.
10. The site itself occupies approximately 32.6ha of land comprising predominantly arable habitat, with some improved grassland, orchard, patches of scrub and wet woodland with associated watercourse. Several footpaths cross the site, between the arable and improved field units and adjacent to the railway line.
11. The site adjoins a spring-fed watercourse along its eastern boundary, which encroaches into wet woodland in the north-east corner of the site. The land gently rises from the A2 in the south and the watercourse in the east, up to the railway line to the north of the site.
12. The site is proposed for residential housing of 600 dwellings, with associated infrastructure including roads and parking, covering approximately 18ha on the west of the site (within the adopted Local Plans allocated area for housing). In accordance with the adopted Local Plan, the eastern portion of the site, an area of approximately 15ha, would be retained as green space to provide recreational areas for the public, and also areas to be enhanced for biodiversity benefit. These areas could link with the existing Tonge Mill Country Park to the east of the site. The proposed development footprint is located almost entirely on heavily managed arable land, and the most ecologically interesting areas of the site, including grassland, ditches and wet woodland, will be retained (for further information please refer to the ecological report ref: E1358PSA11SFS).

CHARACTERISTICS OF THE SWALE SPA AND RAMSAR SITE

13. The closest point of the Swale SPA and Ramsar site is located approximately 900m north of the proposed development site, although the main body of the site lies around 1.5km from the proposed development site. Intervening land is dominated by farmland, with pasture and arable fields, as well as the East Hall Farm development, which includes an allocation and unimplemented planning permissions for housing. The mainline railway also lies immediately north of the development site, between this and The Swale.
14. The Swale contains the largest remaining areas of freshwater grazing marsh in Kent and comprises numerous rare and biodiverse estuarine habitats including mudflats, saltmarsh

- and freshwater grazing marsh. The site is designated for internationally important numbers of wintering and passage wildfowl and waders, and there are also important breeding populations of a number of bird species. Outstanding assemblages of plants and invertebrates are associated with the various habitats on site.
15. This site qualifies under Article 4.1 of the Directive (79/409/EEC) by supporting populations of European importance of the following species listed on Annex I of the Directive:
- *Breeding*: Avocet, marsh harrier and Mediterranean gull
 - *Over-wintering*: Avocet, Bar-tailed godwit, golden plover and hen harrier
16. This site also qualifies under Article 4.2 of the Directive (79/409/EEC) by supporting populations of European importance of the following migratory species:
- *On-passage*: Ringed plover
 - *Over-wintering*: Black-tailed godwit, grey plover, knot, pintail, redshank, shoveler
17. The area qualifies under Article 4.2 of the Directive (79/409/EEC) by regularly supporting at least 20,000 waterfowl.
18. The Swale meets a number of the Ramsar criteria, including: The site supports a number of nationally-scarce plant species and British red-data book invertebrate species; the site has internationally important bird assemblages in winter; and the site supports bird species occurring in internationally important numbers.
19. In the most recent condition assessment, 96% of The Swale SSSI was in favourable condition. Small areas were unfavourable due to inappropriate management, disturbance, or urbanisation effects (e.g. litter).

POTENTIAL IMPACTS ON THE SWALE

20. The Swale site is dominated by wetland habitats and therefore susceptible to hydrological changes. There is also concern that increased recreational use of the area may have a detrimental impact on the habitats and cause disturbance to nesting and wintering birds; this is known to occur on other SPA sites which support ground nesting species such as woodlark and nightjar. No evidence for this exists for The Swale although studies are underway.

21. Discussions with Natural England and Kent Wildlife Trust have indicated that due to the distance of development from The Swale site (over 900m) direct impacts to the designated site are considered unlikely. The main concern raised was that of cumulative impacts of increased recreational use of the site from residents of the proposed development alongside those of other developments proposed in the area. Changes to hydrology were also noted as a potential impact.

ASSESSMENT OF SIGNIFICANCE

Habitat Loss and Fragmentation

22. As outlined above no direct impacts to The Swale are anticipated, and there will be no land take or fragmentation impacts. The proposed Stones Farm site provides some habitat suitable for wintering birds, in the form of arable land, however it is located some distance from the SPA, with similar farmland between, and combined with its location immediately adjacent to the urban edge of Sittingbourne and being used by dog-walkers it is not considered to provide a significant habitat for bird populations associated with the SPA/Ramsar site. Initial surveys undertaken by ecosulis ltd during January, February and March 2010 recorded one male hen harrier flying over the site, but did not otherwise record any species for which The Swale SPA/Ramsar is designated. The proposed development site does not provide suitable foraging habitat for the majority of species associated with The Swale site and it is therefore not considered that the loss of this habitat would have a significant impact on the site and its associated bird populations.
23. It is also not considered that impacts to air quality arising from the development would significantly affect The Swale given its distance from the proposed development site, and the existing levels of urban pollution.

Hydrological Changes

24. There is potential for The Swale to be impacted through changes to hydrology, through water pollution from groundwater or surfacewater flows, changes to the hydrological system impacting the habitats present, and through increased water abstraction affecting local hydrology. Given the distance from development, its relatively small size and measures inherent within the development design such as the retention of large areas of green-space that will alleviate run-off, significant impacts to The Swale are considered unlikely from this development alone. The development design will ensure that surface

water from the site will discharge into Tonge Mill Stream at a regulated rate equivalent to existing Greenfield run-off rate, in accordance with Environment Agency requirements. Information provided within existing assessments of the area, such as the Sittingbourne and Milton Creek HRA indicates that the existing infrastructure for dealing with waste water have more than sufficient capacity to deal with the additional treatment requirements without any significant deterioration in water quality that is discharged into The Swale. This HRA also concludes that existing measures including: Code for Sustainable Homes requirements to be implemented for all new developments within the Swale District; proposed measures to be implemented through Southern Water's emerging Water Resource Management Plan; and the Environment Agency's Restoring Sustainable Abstraction programme, are sufficient to ensure that development delivered by the Sittingbourne and Milton Creek Supplementary Planning Document does not have an adverse effect on the SPA, since most avoidance and mitigation mechanisms for impacts associated with water resource infrastructure are in the hands of the Environment Agency and water companies. It can therefore be concluded that the same is true for the much smaller proposed development at Stone's Farm.

Recreational Disturbance

25. The concern expressed by Natural England during initial consultation was the potential for increased recreational disturbance, attributed to new development, to impact detrimentally on the species and habitats of The Swale. The development will comprise an additional 600 homes located approximately 900m from The Swale.
26. There is currently a lack of available information in relation to the effects of recreational disturbance to The Swale site, although the current favourable condition of the SSSI designation indicates that existing levels of disturbance are not having a significant detrimental impact on the site. Increased disturbance has been shown to have a detrimental impact on other SPA sites in Britain, however this has been demonstrated mainly on heathland sites, where fires and trampling are a major hazard, and where the breeding success of ground-nesting species including Dartford warbler, nightjar and woodlark is known to be adversely impacted by increased recreational activity, most notably by dog walkers. The potential impacts to wintering birds and wildfowl species using The Swale site is less clear-cut, but frequent disturbance is likely to increase energetic output, and in the long-term may impact on species populations. Studies undertaken at the Stour-Orwell SPA (Wildside Ecology, 2007) to assess the impacts of

- disturbance to wintering birds at the SPA, found that dog walkers and boats caused most disturbances to birds. It concluded that whilst overall, birds in most parts of the SPA were affected little by the majority of activities at low tide, in areas with small mudflats even at low tide and with high visitor numbers, findings suggest that disturbance may be having an impact on populations of birds in the estuary.
27. In light of the possibilities for significant impacts due to recreational activities a precautionary approach should be taken when assessing the potential for increased recreational disturbance to cause a significant impact.
28. The Swale Estuary is known to be used by a wide range of people for recreational activities, including water-sports, as well as land-based recreation such as dog-walking. Activities of walkers (particularly dog walkers) and water-borne recreation can, particularly if carried out in winter, have a significant disturbing effect upon large numbers of waterfowl thus increasing energetic expenditure (as birds have to take flight more frequently) and competition on the less disturbed mudflats. Adverse effects on breeding water fowl can also result including greater exposure of eggs and chicks to predation as the parent birds are flushed more frequently.
29. There is a lack of available information relating to visitor numbers to The Swale, relating to distances travelled to the site, modes of transport and activities at the site, which would provide some information as to the likely impact of a housing development within 900m of the site. As a more general comparison figures from the latest England Leisure Visits Survey (Countryside Agency, 2005) indicate that people typically travel:
- 10.8 miles (17.2 km) to visit a countryside site for the day;
 - 11.3 miles (18.1 km) to visit a woodland site for the day; and
 - 16 miles (25.5 km) to visit a coastal site for the day.
30. In all cases, more journeys were made by car than on foot, with 68% of journeys made by car and 10% by walking. In addition almost 60% of visits to the coast (under which The Swale could be broadly classified) took place in summer. It should be noted that these are generalised figures, and are likely to vary extensively between individual sites.
31. The proposed development site is not particularly well linked to The Swale for visitors on foot. Footpaths cross the existing site but do not continue further north towards The Swale, due to the mainline railway providing a barrier along the northern boundary

- of the site. An underpass is present to the north-east of the site, however this is in the form of a road without pavements, and is therefore not considered to be frequently used as a link to areas to the north. Walkers would therefore have to undertake an extensive circular route from the development site to reach The Swale. Journeys by car, however, cannot be ruled out, as the site lies well within the average distance travelled to reach a countryside or coastal site, although these distances are based on day trips and are likely to reduce for daily trips by dog-walkers.
32. Research by the Mintel Group in 2005 showed that 19.8% of households were dog owners. Using these figures for the proposed development at Stone's Farm, this would mean an increase of approximately 119 dogs. Given the lack of good linkages to The Swale by foot, it can be expected that much of the dog walking would take place on the existing and proposed footpath network around the development site, however given the attractive nature of The Swale and the fact that it is within easy reach from the development by car, frequent visits to this site by residents and dog walkers cannot be ruled out.
33. Taking these figures into account in the context of the wider area, however, the population of the Swale district was 71,890 at the time of the 2008 mid-year population estimate, and Sittingbourne alone has an estimated population of 55,000. If existing numbers of dogs are taken into account, then this would mean that the numbers of dogs within Sittingbourne would increase by an estimated 0.1% as a result of the proposed development, and given that many of these are likely to use exercise areas other than The Swale, it is not considered that this would have a significant impact on bird populations associated with this site.
34. Research by Woods *et al* (2003) estimates that 23% of households own cats, and of these 75% own one cat, 16% two cats, 5% own three cats and 2% own four cats. Using these figures the Stone's Farm development would lead to an increase of approximately 178 cats in the area. Studies have found that the mean range of cats is 371m, although the maximum range was recorded at 1578m (Turner and Bateson, 1989). Given the distance of the development as over 900m from the Swale it cannot be ruled out that cats from the development would occasionally reach the Swale site, however it is not considered that significant numbers would reach the site, especially given intervening land use such as the main railway line. Therefore no significant adverse impacts to

- either breeding or wintering bird populations associated with the Swale are predicted as a result of increased numbers of cats associated with the proposed development.
35. Given the average travel distances outlined by the England Leisure Visits Survey, The Swale site is likely to attract visitors from an extensive surrounding area. It is not considered that the development of an additional 600 houses would impact significantly on the status of The Swale site from increased recreational visits alone, however this should be considered further in combination with other developments in the surrounding area, as a number of major developments are proposed for the area, and significant combined impacts must be considered.

In Combination Impacts

36. As outlined above the majority of potential impacts from the proposed development can be screened out as being unlikely to be significant. On its own increased recreational impacts from this development are also considered unlikely to be significant, however in combination with surrounding developments increased recreational pressure to the Swale could occur.
37. Surrounding developments within the immediate area include East Hall Farm, which lies immediately north of Stone's Farm, and includes an allocation of 850 houses currently being built; Sittingbourne Town centre and Milton Creek with an allocation of 1760 houses, and a proposed development at Queenborough and Rushenden, which would cover 168 ha of land adjacent to The Swale site at the western end of the Isle of Sheppey, and would include employment, residential and new infrastructure developments.
38. HRAs have been produced at the Design Brief stage for both the Sittingbourne and Milton Creek, and the Queenborough and Rushenden sites. These both consider in detail the stand-alone and in-combination impacts of the proposals on the Swale. The Queenborough and Rushenden Proposals assessed the possible impact of increased boating traffic on bird populations at the Swale, and assessed this as a likely negligible impact. Other potential impacts to the Swale from these proposals were screened out. The Sittingbourne and Milton Creek HRA recommended mitigation proposals for inclusion within the corresponding proposed Supplementary Planning Documents in order to off-set predicted impacts to international sites, including The Swale. In relation to The Swale these include alternative greenspace provision and access management. It

- was considered that if the proposed alterations were incorporated into the Supplementary Planning Document, that subsequent impacts to The Swale would be negligible. Both assessments therefore concluded no significant impacts to The Swale site, following the implementation of mitigation, either alone or in combination with surrounding proposals.
39. The East Hall Farm site is currently being built, and will result in a combined increase of 1450 houses in combination with the Stones Farm proposals (850 and 600 respectively). Whilst this increase is relatively small in terms of the existing residential pressure on The Swale, it cannot immediately be scoped out as a potential significant impact due to increased recreational pressure on bird populations.
40. In the Thames Basin Heaths area Thames Basin Heaths Joint Strategic Partnership Board has produced a Delivery Framework outlining recommendations on measures to enable the delivery of dwellings in the vicinity of the SPA - without having a significant effect on the SPA as a whole. It focuses on avoiding the impact of recreation and urbanisation on the SPA habitat and interest features. The document is designed to be referred to within Local Development Frameworks, Development Plan Documents and Supplementary Planning Documents. Whilst this plan relates to areas adjacent to the Thames Basin Heaths SPA and not to The Swale, its proposals for the measures required to avoid impacts of recreation and urbanisation on designated sites can be assumed to translate to other designated sites likely to be impacted by increased recreational visits. The Development Framework proposes measures to ensure that development would have no significant impact on surrounding designated sites:
- 'Developments can provide - or make a contribution to the provision of - measures to ensure that they have no likely significant effect on the SPA. In doing so, residential development will not have to undergo an appropriate assessment. The option remains for developers to undertake a Habitats Regulations screening assessment and where necessary a full appropriate assessment to demonstrate that a proposal will not adversely affect the integrity of the SPA.'*
- 'A three prong approach to avoiding likely significant effect on the SPA is appropriate, however this framework focuses on the two prongs of SANG (Suitable Alternative Natural Greenspace) and access management, which the Joint Strategic Partnership Board (JSPB) currently considers are the most appropriate avoidance measures'*

41. The Development Framework outlines a range of criteria that should be met by any SANGs in order to fulfil a function similar to that of the European/International site in question (i.e. dog walking and appreciation of nature rather than more formal recreational activities):
- Sufficient SANG should be provided in advance of completion of developments
 - SANG should be provided on a basis of at least 8ha per 1000 new population
 - Ideally SANG should be over 2ha in size, or linked to an existing network of open space
42. The Stones Farm Development Brief includes the provision of at least 15ha of open space within the eastern half of the site, proposed to maintain the existing countryside gap between Bapchild and Sittingbourne. Specifically the land is allocated for informal rather than formal public open space, and discussions are taking place between the developer and Natural England in order to ensure that this area is appropriately designed to maximise biodiversity potential at the site. The key principles of Natural England's Natural Development Project will be incorporated into the design, which aims to plan, design and deliver green infrastructure that provides multiple benefits for people and wildlife. Sports pitches and parks are also proposed within the development area on the western half of the site. A footpath currently runs through the area of proposed open space, however existing field networks currently restrict wider access within this area, and it is considered that improvements could greatly enhance the attractiveness of this area for walkers and dog walkers, and could perform the function of a SANG with respect to the proposed Stones Farm development.
43. The size of the area, its links with existing footpath networks and potential links to existing open space provide a good base for providing an attractive open space area, but enhancements to the area would be required to ensure that it would function as an attractive alternative greenspace to the Swale. The advantage of this area is that it is located immediately adjacent to the proposed development, and therefore ease of use for new residents would be very high, as opposed to the car journey required to access The Swale. Using figures taken from the Swale 2001 census an average figure of 2.44 persons per household is provided, giving an estimated population of 1464 people within

the proposed 600 houses on site. On the basis of the requirement of 8ha of SANG per 1000 population, a population of 1464 people would require a minimum of 11.7ha, significantly less than the 15ha site proposed. It is recommended that the Development Brief includes provision for the enhancement of this area for recreational use, including the creation of additional footpaths, litter bins and benches, ideally to create circular walks, and to link to existing footpaths to the south and if possible to Tonge Mill Country Park. Additional planting should also be undertaken to provide variety around the site, and also to add biodiversity interest. Sports pitches and play areas would not be included within this area as they would be incorporated into the development on the western half of the site. Any enhancements would need to take into account existing biodiversity on the site, such as retention of the areas of wet woodland, and should be agreed with the Local Planning Authority (LPA) and Natural England prior to a decision on any detailed planning permission. Provision for management of this area in perpetuity should be provided through a management scheme linked with the development, or an alternative agreed with the LPA.

44. It should be noted that the currently preferred route of the Sittingbourne Northern Relief Road runs through the northern part of the area proposed for SANG. As this route has no Development Plan status it is not considered that its impact should be considered as part of this Assessment. If the current scheme proceeds then it will be necessary to review the proposals and mitigate any adverse impacts on the SANG. The Sittingbourne Northern Relief Road as currently proposed may prejudice the likelihood of providing a safeguard of the proposed SANG in perpetuity. However, it is considered likely that the SANG could still provide suitable open space, dependent on the exact route of the road, or if appropriate pedestrian crossing facilities or underpasses were provided; however if this is the case then this assessment may need to be revisited at a later stage to ensure that the function of the remaining area of SANG can be maintained.

CONCLUSION OF ASSESSMENT

45. It is considered that as a stand-alone development the Stones Farm proposals are unlikely to have a significant impact on features for which The Swale site is designated. The proposals will have no direct impact on The Swale, and the assessment concludes that there will be no significant impact from indirect impacts due to habitat loss or fragmentation, hydrological changes or recreational disturbance. Taken in combination

- with developments proposed in the wider area, however, it cannot be certain that increased residential pressure, especially from dog walkers, would not have a significant impact on populations of breeding and wintering birds for which The Swale site is designated. Given the lack of available information relating to likely impacts from the East Hall Farm site a precautionary approach has been taken to this assessment, and whilst unlikely to be an essential requirement to mitigate impact on the protected area, enhancement of the allocated open space as a SANG is proposed.
46. As such, the area of public open space comprising the eastern half of the development site would be appropriately designed to provide biodiversity enhancements in accordance with Natural England's Natural Development Project, as well as a suitable alternative recreation area. Should this be incorporated into the designs it is considered that the Stones Farm development would be unlikely to lead to a significant adverse impact on The Swale SPA/Ramsar site and the features for which it has been designated. It is therefore concluded that a full appropriate assessment for the site is not required.
47. It is recommended that this report be revisited following public consultation and prior to finalisation of the Development Brief, in order to ensure that the assessment undertaken is still appropriate to the proposals.

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