

# **Technical Briefing Note**

Project: Clay Lane, Fishbourne, Chichester

TN01: Review of Ecological Constraints, Opportunities and Deliverability (Plus Recommendations for an Extension of West of Chichester to Fishbourne Strategic Wildlife Corridor and Amendments to the Wording of Policy S30)

February 2019

### 1 Introduction

- 1.1 Aspect Ecology is advising Gleeson Strategic Land in respect of land at Clay Lane, Fishbourne, Chichester (see Plan 5555/R1), hereafter referred to as 'the site'. Aspect Ecology has been commissioned to assess the ecological deliverability of any new development at the site and provide an overview of any likely ecological constraints and opportunities.
- 1.2 The site is located to the east of the village of Fishbourne, Chichester, with existing residential development demarking the western and part of the northern boundary of the site. The site is bound by a railway line to the south, Clay Lane and third party land to the east, whilst the remaining part of the northern boundary of the site lies adjacent to further third party land, comprising predominately of grassland and hedgerows.
- 1.3 An overview of the deliverability of the site is provided within this technical briefing note, and on the basis of this discussion, recommendations are made to guide the location of any future development within the site, in order to minimise any potential impacts on ecology. Where future development may adversely affect protected habitats or species, measures are outlined in order to demonstrate where suitable mitigation/compensation can be readily delivered.

### 2 Overview of the ecological status of the site

# Notes No ecological statutory or non-statutory designations are located within the site. The nearest statutory designations to the site are Chichester and Langstone Harbours Special Protection Area (SPA)/Ramsar and Solent Maritime Special Area of Conservation (SAC), along with Chichester Harbour Site of Special Scientific Interest (SSSI) located approximately 0.4km to the south of site, as shown on Plan 5555/R1. Chichester and Langstone Harbours SPA/Ramsar (and Chichester Harbour SSSI) are designated on the basis of supporting important populations of birds, whilst Solent Maritime SAC is designated primarily on the basis of three Annex I habitats, namely estuaries, Spartina swards and Atlantic salt meadows, along with a number of qualifying habitats and the Annex II species, Desmoulin's Whorl Snail.



The nearest non-statutory designation to the site is Fishbourne Meadow Site of Nature Conservation Interest (SNCI), located approximately 0.3km to the south of the site, as shown on Plan 5555/R1. The SNCI comprises low-lying damp meadows and chalk streams.

The site is also located within a proposed Strategic Wildlife Corridor, as identified within Chichester District Council's Local Plan Review 2016-2035 (Preferred Approach), as shown on Plan 5555/R1.

### **Habitats**

### Notes

A desktop review of habitats within the site has been undertaken by Aspect Ecology, including a review of historic and current aerial mapping. The site appears to comprise grassland bound by established hedgerows, whilst a series of ditches/watercourses are present at the site boundaries and within the southern-part of the site. The value of any habitats should be confirmed by site survey work at the detailed stage.

A review of historic aerial mapping indicates that the site was previously grazed (pre-2010), although cessation of management in recent years has meant much of the site (particularly in the south) is becoming overgrown with scrub.

### **Fauna**

### Notes

Given the nature of the habitats within the site, the site has the potential to support a number of notable and protected species, namely:

- Bats The hedgerow network and trees have the potential to provide foraging, commuting and roosting habitat for a number of bat species;
- Water Vole/Otter The drains/watercourses within the site may have the potential to support both Water Vole and Otter (subject to site survey work);
- Other mammals Habitats within the site have the potential to support other mammal species, including Hedgehog, whilst consideration should also be given to the potential presence of Dormouse within the hedgerow network;
- Reptiles The unmanaged grassland habitat within the site has the potential to support common reptiles. Indeed, it is understood that reptiles were recorded on land recently developed by Taylor Wimpey to the north of the site (planning ref: 15/02331/FUL);
- Amphibians No ponds are understood to be present within the site, although consideration should be given to any ponds in the site surrounds;
- Birds The hedgerow network has the potential to support a number of common bird species; and
- Invertebrates The habitats within the site, particularly mature trees, drains/watercourses
  and unmanaged grassland, have the potential to support a range of invertebrate species,
  although from desktop work habitats of elevated potential for this rare or notable species
  group may be absent (subject to site survey).

### 3 Discussion of the ecological deliverability of the site

### **Ecological Designations**

- 3.1 The site is located in the vicinity of the Chichester and Langstone Harbours SPA/Ramsar, Solent Maritime SAC and Chichester Harbour SSSI. To ensure that any development proposals do not pose a risk to these designations through possible hydrological effects and recreational disturbance, mitigation measures will be likely required.
- 3.2 In terms of hydrological effects, mitigation would potentially include a requirement to maintain the site's current green field run off rates post development, whilst any surface water leaving the site should carry no pollutants. Such measures would also mitigate for any potential adverse effects on local ecological designations such as Fishbourne Meadow SNCI



and could be secured through a sensitively designed drainage strategy e.g. SUDs, and general construction good practice.

- 3.3 In terms of recreational disturbance, the effects arising from residential development and the requirement for mitigation is set out in the 'Solent Recreation Mitigation Strategy', dated December 2017. This strategy identifies that any residential development within 5.6km of the Solent coastal designations (which includes Chichester and Langstone Harbours SPA/Ramsar and Solent Maritime SAC) has the potential to result in adverse effects on the bird populations present. As such, mitigation is required which can be readily provided by way of the provision of developer contributions towards the established strategic mitigation solution for the Solent, which is in place and will fund and monitor management measures. Subject to provision of this financial contribution, it is considered that any development at the site will not affect the integrity of the Solent designations or the other designations in the wider vicinity of the site, in the light of their conservation objectives.
- 3.4 Accordingly, it is considered that the above nature conservation designations should not form a constraint to any future development. Further consideration of Strategic Wildlife Corridors is set out at Section 4.

### **Priority Habitats**

- 3.5 **Hedgerows.** The hedgerows within and bounding the site have the potential to qualify as Priority Habitat. The retention and enhancement of these boundary features, using native planting to close gaps and the use of positive management to maintain their ecological structure and function for example, could provide enhancements for biodiversity, increasing connectivity between off-site habitats as well as within the site. Where removal of hedgerows may be required in order to facilitate access or sightlines, it is recommended that an equivalent length be replanted along the site boundaries.
- 3.6 **Other habitats.** The other habitats present within the site are considered unlikely to qualify as Priority Habitats, but are likely to be of some ecological value in the context of the site and local area, including the potential to support protected and notable faunal species.
- 3.7 Subject to a sensitively designed masterplan, it is considered unlikely that habitats will present an overriding constraint to future development, while benefits to habitats can be brought forward by bringing these into positive ecological management, resulting in a net gain for biodiversity.

### **Protected Faunal Species**

- 3.8 Habitats within the site have the potential to support a number of notable and protected species. As such, any planning application at the site should be informed by ecological survey work, which would likely include specific survey work for bats, reptiles and riparian mammals. Should protected species be identified to be present, mitigation will be required in order to mitigate for any loss of habitat and safeguarding measures to avoid injury to animals during development works. However, given the size of the site, it is considered unlikely that any significant populations of faunal species will be present.
- 3.9 Further, under any sensitively delivered proposals, there is the opportunity to increase the faunal opportunities at the site, by the arresting and reversal of current habitat declines on site and bringing habitats into positive management to favour protected species (e.g. bats), as well as by the provision of additional opportunities for fauna (e.g. provision of integrated nesting opportunities for birds by way of Swift bricks and bird boxes, including a Barn owl box



- within the area of open space; roosting opportunities for bats by way of integrated bat tubes and bat boxes; and invertebrates by way of nesting, hibernation and foraging features). Such measures would result in a net gain for biodiversity.
- 3.10 Accordingly, it is considered unlikely that protected faunal species will present an overriding constraint to future development.
- 4 Further consideration of Strategic Wildlife Corridors
- 4.1 As set out above, the site is located within a proposed Strategic Wildlife Corridor, namely 'West of Chichester to Fishbourne Strategic Wildlife Corridor', as shown on Plan 5555/R1. Further information regarding the identification and purpose of wildlife corridors is set out below, along with a specific assessment of the deliverability of the site in relation to the objectives of the wildlife corridors.
  - Overview of Strategic Wildlife Corridors
- 4.2 **Background.** Chichester District Council's (CDC) Local Plan Review 2016-2035 (Preferred Approach) sets out a series of strategic policies for new development in the District. This includes strategic policy S30, which relates to the identification and protection of strategic wildlife corridors to ensure connectivity and passageways are available for wildlife through the landscape.
- 4.3 The identification of these strategic wildlife corridors and the rationale for their locations in the district are set out in CDC's 'Strategic Wildlife Corridors Local Plan Review Background Paper' (December 2018). This sets out that background mapping of ecological networks was carried across the District during 2012-14 in partnership with Forest Research UK, which utilised data from Sussex Biodiversity Records Centre. The work adopted a species-based approach to define ecological networks and six focal species/species groups were identified to represent key habitats and landscape features, namely Water Vole, Barn Owl, woodland bats, Dormouse, Lapwing and Chalk-hill Blue Butterfly.
- 4.4 The ecological networks, in addition to high concentrations of species records and the location of priority habitats and designated sites, enabled CDC to identify four strategic wildlife corridors to the west of Chichester to provide ecological connectivity between Chichester Harbour SPA and the South Downs National Park (see Plan 5555/R2), along with a further corridor to the south and east of Chichester to provide connectivity between Pagham Harbour SPA and the National Park.
- 4.5 **Features of Strategic Wildlife Corridors.** The identified Strategic Wildlife Corridors are predominately formed of semi-natural habitat and appear to have been selected where there is greatest overlap in the ecological networks of the different target species, along with any ecological designations in the local area and other semi-natural features, such as Ancient Woodland and Priority habitats, such as hedgerows and woodland. Large parts of the corridors also incorporate Biodiversity Opportunity Areas (BOA), which are understood to have been identified by the Sussex Biodiversity Partnership as areas where the greatest opportunities for habitat creation and restoration lie in the District.
- 4.6 Notably, from a review of the Strategic Wildlife Corridors, they appear to avoid areas supporting intensively farmed arable land, with in places areas of built development and urban areas preferentially incorporated over arable land, for example at Westbourne in the westernmost Strategic Wildlife Corridor (shown as SWC1 on Plan 5555/R2). Therefore, the



selection of these developed areas clearly acknowledges that residential areas often retain functional habitat for wildlife, particularly within green infrastructure, and can readily meet the requirements of the Strategic Wildlife Corridors in terms of ensuring ecological connectivity is maintained for wildlife through the landscape.

Review of West of Chichester to Fishbourne Strategic Wildlife Corridor (SWC4)

- 4.7 The site is located within the eastern-most proposed wildlife corridor to the west of Chichester, namely 'West of Chichester to Fishbourne' Strategic Wildlife Corridor (herein referred to as SWC4), as shown on Plan 5555/R3.
- 4.8 SWC4 is the largest of the four corridors to the west of Chichester (comprising approximately 2.3sq.km of land) and incorporates semi-natural habitat to the east of Fishbourne, areas of Priority Habitat, namely parkland and lowland deciduous woodland, a small area of Ancient Replanted Woodland at Brandy Hole Copse Local Nature Reserve (LNR) and farmland. SWC4 also incorporates areas of built development, including two areas of residential development and a solar farm, as well as a section of the A27, as shown on Plan 5555/R3.
- 4.9 The site itself is located within the southern part of SWC4 to the east of Fishbourne and to the south and west of the A27. Within this part of the wildlife corridor, ecological features are predominately focused on the ditch/watercourse and hedgerow network (functioning primarily for bats, birds and riparian mammals along with associated other species), which are generally located at field boundaries, along with small areas of Barn Owl habitat, as shown on Plan 5555/R4.
- 4.10 The A27, which runs east-west through all of the strategic wildlife corridors, has the potential to interrupt ecological connectivity for wildlife through the landscape. This is addressed in CDC's Strategic Wildlife Corridors Local Plan Review Background Paper, which sets out that connectivity across the A27 is maintained predominately by existing culverts and underpasses. Within SWC4, a review of OS mapping identifies that connections under the A27 are limited to two underpasses formed by Clay Lane and Fishbourne Road, along with the railway line, located to the east of the wildlife corridor with limited connectivity under the A27 to the rest of the corridor, as shown on Plan 5555/R4.

Consideration of Development Proposals, Opportunities and Recommendations

4.11 Compatibility of Proposed Development with Strategic Wildlife Corridor Objectives. Aspect Ecology is advising Gleeson Strategic Land in terms of the development potential of the site at Clay Lane. Having undertaken the above review of the Strategic Wildlife Corridors, it is evident that the functional elements of the wildlife corridor in the location of the site centre on the ditch/watercourse and hedgerow network (functioning primarily for bats, birds and riparian mammals along with associated other species), which are generally located at the field margins. It is also evident from a review of the Strategic Wildlife Corridors as a whole that residential development can contribute positively to the function of the corridors particularly where key habitats are retained and green infrastructure is included. As such, it is considered that, subject to a sensitive ecologically led masterplan, development can be accommodated whilst fully maintaining the functional elements of the corridor. Furthermore, appropriate development could also bring forward considerable benefits to biodiversity through the securement of long-term favourable ecological management to retained habitats and other faunal enhancements (see above). These comments are based on the following recommendations being implemented:



- The grassland fields to the east of the site adjacent to the A27 are retained;
- Development at the site is limited to land north of the railway;
- Key habitats within the site, namely the ditch/watercourse and hedgerow networks are maintained within dark buffered corridors (maintained through lighting controls);
- The development delivers a net gain for biodiversity, including through the provision of faunal enhancements (e.g. as described above at para 3.9).
- 4.12 It is considered that such recommendations could be readily incorporated into a sensitively designed scheme and therefore the presence of a Strategic Wildlife Corridor does not form an overriding constraint to development at the site.
- 4.13 **Opportunities to Extend SWC4.** As set out above, the A27 represents a partial barrier to movement across the Strategic Wildlife Corridor SWC4. Connectivity is centred on culverts and underpasses with the three primary underpasses of SWC4 present in the Fishbourne area.
- 4.14 It is considered that there is the opportunity to strengthen the ecological network in this important connective location through the incorporation of further land into the wildlife corridor to the east of the A27, as shown on Plan 5555/R4. This proposed extension incorporates the dense area of roadside planting along the eastern side of the A27, along with semi-natural habitat in the form of hedgerows and grassland fields and will bolster the linkages beneath the A27 to aid with the movement of faunal species through SWC4.
- 4.15 This would provide a beneficial acknowledgement of the importance of the role of the habitat to the east of the A27 in this location as a corridor for wildlife movement.
- 4.16 **Consideration of Policy S30 wording.** Under policy S30, in order for any proposed development within or in close proximity to a Strategic Wildlife Corridor to be granted planning permission, as currently drafted, there is a requirement to demonstrate that there are no sequentially preferable sites available outside the wildlife corridor and that any proposed development will not have an adverse effect on the integrity of the corridor as a whole. However, as set out in this note, it is evident that sensitive development can positively contribute to the objectives of the Strategic Wildlife Corridors. Indeed, policy S30 goes on to set out that 'minor development within the strategic wildlife corridor will be acceptable where it does not undermine the connectivity and ecological value of the corridor', although no indication is given to what constitutes a minor development.
- 4.17 Accordingly, to more accurately reflect the acknowledged role of sensitive development in adhering and positively contributing to the objectives of the corridors, amended policy wording is proposed:
  - 'Development proposals within, or in close proximity to, strategic wildlife corridors will be granted where it can be demonstrated that the development will not have an adverse impact on the integrity and function of the wildlife corridor and that for large scale strategic development there are no sequentially preferable sites available outside the wildlife corridor. Development within the strategic wildlife corridor will be acceptable where it does not undermine the connectivity and ecological value of the corridor. Development located in close proximity to a strategic wildlife corridor should protect and enhance its features and habitats.'



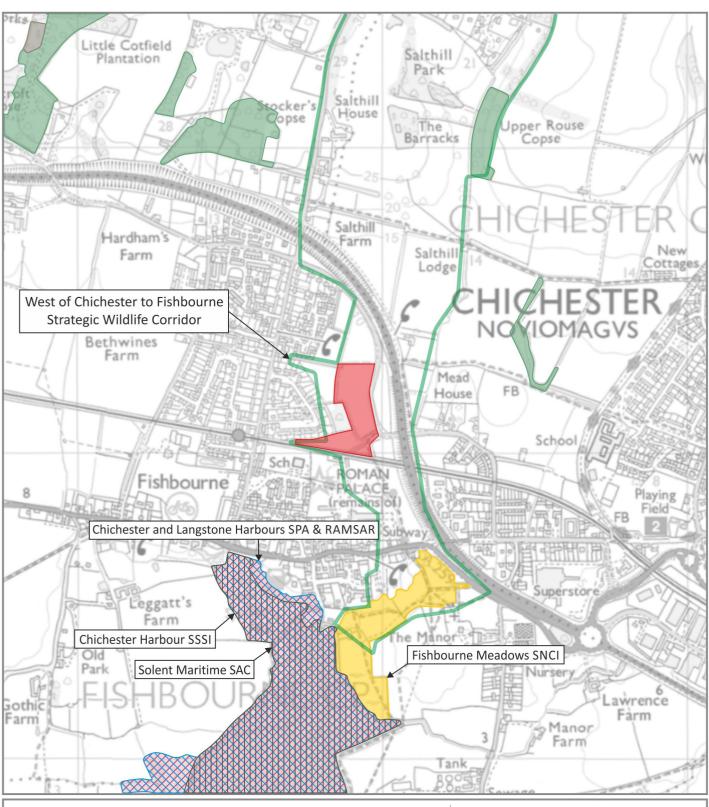
### 5 Conclusion

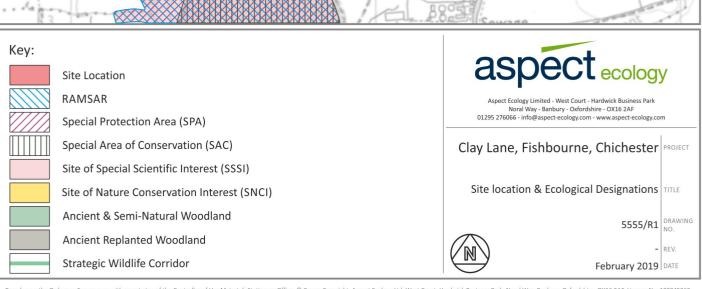
- In conclusion, a review of the functional elements of SWC4 in the location of the site, finds that these are centred on species utilising the hedgerow and ditch/watercourse network at the site. These features do not appear to currently be in positive ecological management and hence over time will decline in value to biodiversity, in the absence of a proposal to arrest and reverse this decline. An opportunity is available at the site, to bring forward a sensitively designed site layout that is ecologically driven, so as to ensure that the key functional habitats of the Strategic Wildlife Corridor are maintained, buffered and remain in dark corridors. Moreover, any proposals would considerably benefit biodiversity through the inclusion of green infrastructure and the securement of long-term favourable ecological management for the retained habitats such that their value to biodiversity will be assured into the future. As such any use of the site by protected species could be fully accommodated. Indeed, a range of enhancements for habitats and fauna would be incorporated into the proposals such that the proposal would not only maintain and enhance the function of the wildlife corridor but in addition bring forward a net gain for biodiversity.
- 5.2 A further wider opportunity is identified to extend the Strategic Wildlife Corridor to the east of the A27 at Fishbourne so as to acknowledge the presence of key connective underpasses in this location and the role of the habitats in the east as important links.
- 5.3 Lastly, amended wording to policy S30 is proposed so as to acknowledge the role that sensitive development can play in furthering the objective of the Strategic Wildlife Corridors.



# Plan 5555/R1:

Site Location & Ecological Designations

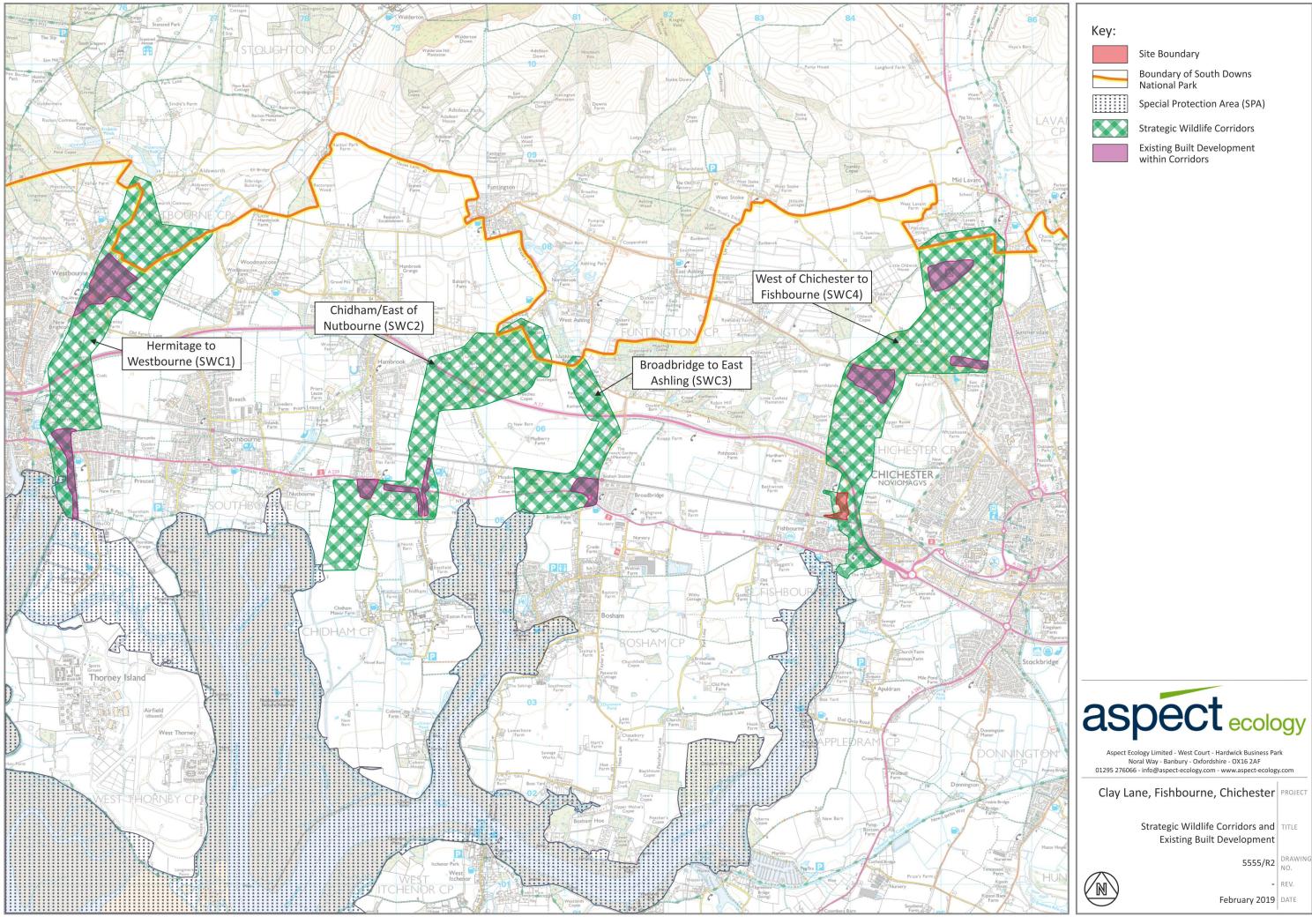






# Plan 5555/R2:

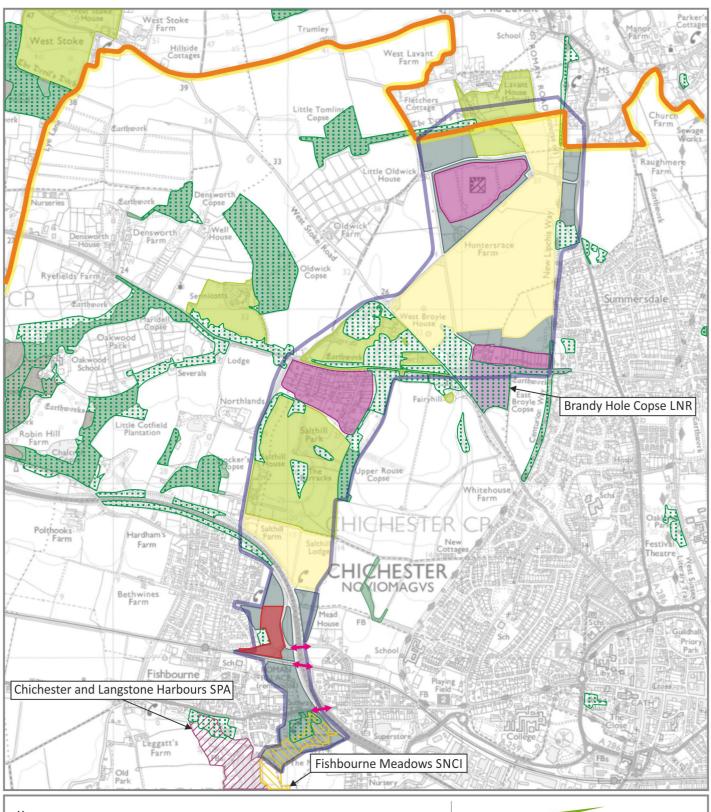
Strategic Wildlife Corridors and Existing Built Development

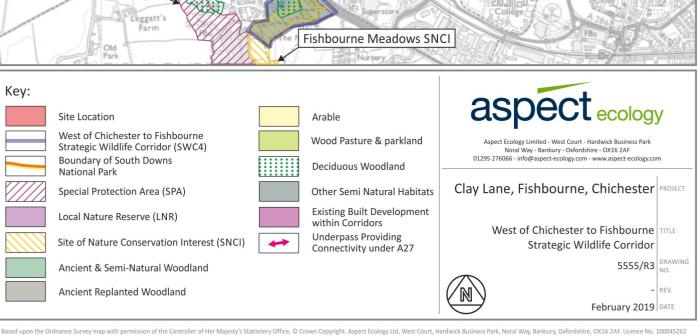




# Plan 5555/R3:

West of Chichester to Fishbourne Strategic Wildlife Corridor

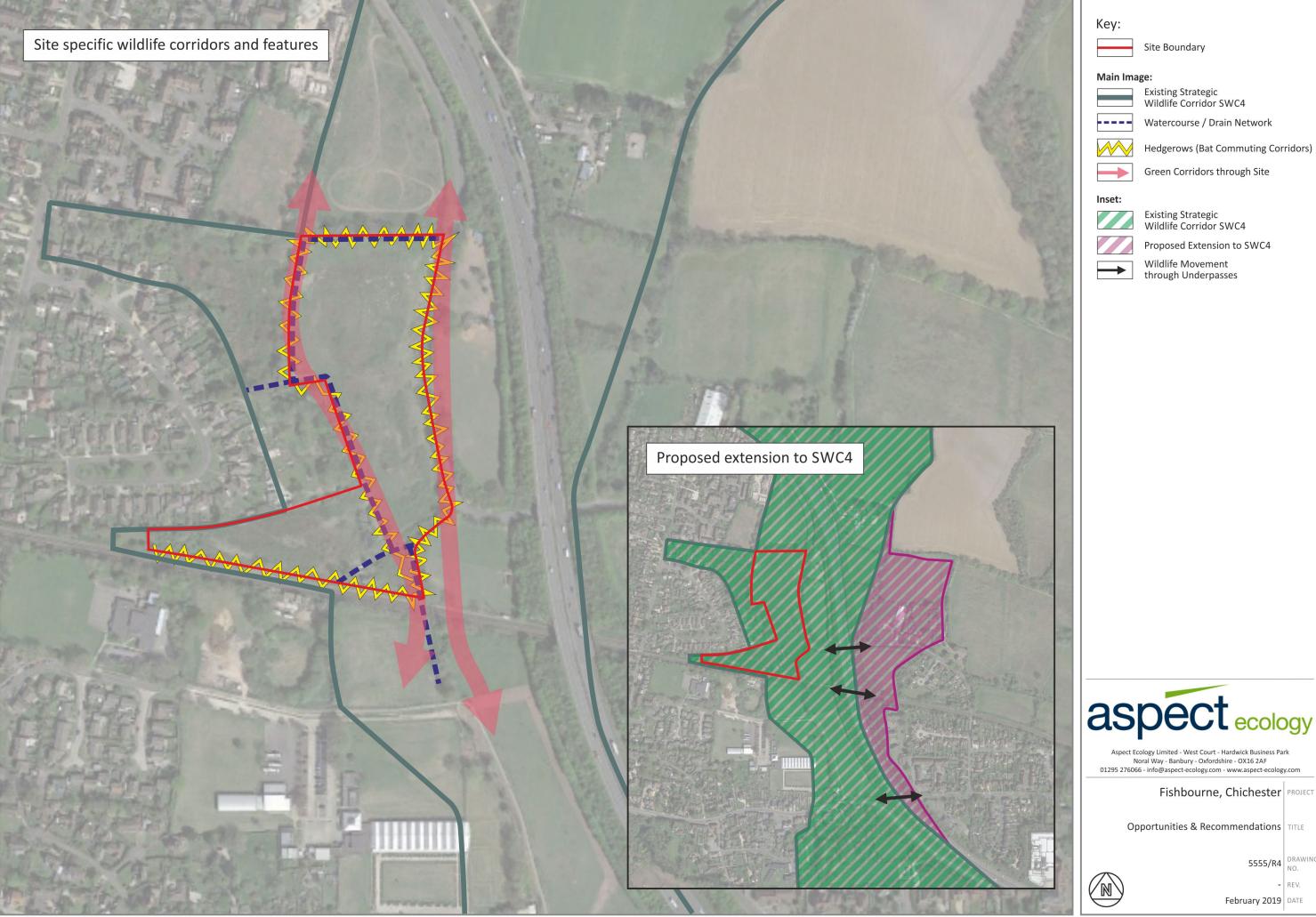






# Plan 5555/R4:

Opportunities & Recommendations



5555/R4

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landscape planning • ecology • arboriculture



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