



Access and Sensitive Features Appraisal

Coastal Access Programme

This document records the conclusions of Natural England’s appraisal of any potential for ecological impacts from our proposals to establish the England Coast Path in the light of the requirements of the legislation affecting Natura 2000 sites, SSSIs, NNRs, protected species and Marine Conservation Zones.

Highcliffe to Calshot

14 March 2018

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This appraisal should be read alongside Natural England’s related Coastal Access Report in which the access proposal is fully described and explained.

[Highcliffe to Calshot coastal access report](#)

1. Our approach

Natural England's approach to ensuring the protection of sensitive nature conservation features under the Coastal Access Programme is set out in section 4.9 Coastal Access: Natural England's Approved Scheme 2013 (Natural England, 2013). We call our internal processes to support this approach the 'Access and Sensitive Features Appraisal' (ASFA) and this document is a record of our conclusions. The appraisal includes our Habitats Regulations Assessment wherever relevant to the site in question.

Our final published proposal for a stretch of England Coast Path is preceded by detailed local consideration of options for route alignment, the extent of the coastal margin and any requirement for restrictions, exclusions or seasonal alternative routes. The proposals are thoroughly considered before being finalised and initial ideas may be modified or rejected during the iterative design process, drawing on the range of relevant expertise available within Natural England.

Evidence is also gathered as appropriate from a range of other sources which can include information and data held locally by external partners or from the experience of local land owners and occupiers. The approach includes looking at any current visitor management practices, either informal or formal. It also involves discussing our emerging conclusions as appropriate with key local interests such as land owners or occupiers, conservation organisations or the local access authority. In these ways, any nature conservation concerns are discussed early and constructive solutions identified as necessary.

The conclusions of our appraisal are certified by both the member of staff responsible for developing the access proposal and the person responsible for considering any environmental impacts. This ensures appropriate separation of duties within Natural England.

Where our proposals for the England Coast Path and associated Coastal Margin are relevant to a Natura 2000 site, this appraisal fulfils our duty under the Habitats Regulations 2010 to assess their potential implications in order to ensure no likely significant effect on the site(s). The formal conclusions relating to this are recorded in Section 7 of the document.

2. Scope

In this part of the document we define the geographic extent for the appraisal and the features that are included. Note that this appraisal is concerned with ecological, geological and geomorphological features; any other possible sensitivities, including landscape and historic features, are discussed in our coastal access report.

2.1 Geographic extent

This Access and Sensitive Features Assessment (ASFA) covers the coast between Highcliffe, near Christchurch, Dorset and Calshot, Hampshire. The information will be used in the assessment of the England Coast Path Stretch: Highcliffe to Calshot.

To better assess this Stretch we have divided it into the following areas. Please see below these areas and how they relate to the Chapters in our Coastal Access Proposals:

Chewton Bunny, Highcliffe to Hurst Spit, Hurst

Chapter 1 of the Coastal Access Report

Hurst Spit, Hurst to Lymington Bridge, Lymington

Chapter 2 of the Coastal Access Report

Lymington Bridge, Lymington to Park Lane, Thorns Beach

Chapter 3 of the Coastal Access Report

Park Lane, Thorns Beach to Oxleys Copse, Beaulieu

Chapter 3 of the Coastal Access Report

Oxleys Copse, Beaulieu to Summers Lane, Exbury

Chapter 3 of the Coastal Access Report

Summers Lane, Exbury to Calshot

Chapter 4 of the Coastal Access Report

2.2 Designated sites

The following designated sites within the proposed coastal margin are considered in this appraisal:

- Hurst Castle and Lymington River Estuary SSSI
- North Solent SSSI
- Highcliffe to Milford Cliffs SSSI
- The New Forest SSSI
- Lymington River Reedbeds SSSI
- Sowley Pond SSSI

- Solent and Southampton Water SPA
- New Forest SPA
- Solent and Dorset Coasts pSPA

- Solent Maritime SAC
- Solent and Isle of Wight Lagoons SAC
- The New Forest SAC

- Solent and Southampton Water RAMSAR
- New Forest RAMSAR

- North Solent NNR

2.3 Cross reference

The neighbouring Stretch Calshot to Gosport route is still in progress at the time of writing.

Any interaction between the proposals and this stretch will be assessed in the Calshot to Gosport ASFA, which has not yet been completed.

2.3.1 Multiple stretches affecting a Natura 2000 site

Where multiple stretches affect a Natura 2000 site we may need to consider if a combination of minor effects we identify for individual stretches could add up to an overall effect that is significant at the European site level. We do this by treating each of the affected stretches as an independent project for the purposes of our Habitat Regulations Assessment and considering in-combination assessment as part of the Likely Significant Effect screening stage of the Habitats Regulation Assessment in Section 7 of this document.

The following sites are affected by one or more stretch proposals

Stretch	Solent and Southampton Water SPA		New Forest SPA		Chichester and Langstone Harbours SPA		Portsmouth Harbour SPA		Pagham Harbour SPA		Solent and Dorset Coasts pSPA		Portsmouth Harbour Ramsar		New Forest Ramsar		Chichester and Langstone Harbours Ramsar		Solent and Southampton Water Ramsar		Pagham Harbour Ramsar		Solent Maritime SAC		Solent & IOW Lagoon SAC		South Wight Maritime SAC		The New Forest SAC	
	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Highcliffe to Calshot	✓	✓									✓				✓								✓	✓					✓	
Calshot to Gosport	✓										✓												✓							
Gosport to Portsmouth						✓					✓	✓													✓					
Portsmouth to South Hayling																								✓	✓					
South Hayling to East Head						✓						✓												✓						
East Head to Shoreham											✓	✓											✓							
Isle of Wight	✓											✓											✓	✓	✓					

Table 1: Natura 2000 sites affected by local England Coast Path proposals

2.3.2 Bird Aware Solent

Bird Aware Solent (also known as the Solent Recreation Mitigation Partnership, or SRMP) is a strategic collaboration between 15 local councils and other partners including Natural England, around the Solent to mitigate the impact of recreational disturbance due to planned house building. Plans to build 63,684 new homes between 2016 and 2034 within the 5.6 km Zone of Influence of the Solent SPAs will increase the number of recreational visits to the coast. Research has found that, without mitigation, this will have an impact on the Solent SPAs, and particularly the populations of waterbirds that depend on the estuaries and harbours during the winter months. The main concern is increased disturbance, by people and their dogs to birds feeding on exposed intertidal mud, and birds roosting/feeding on coastal grazing marsh and other suitable habitats. The Partnership oversees delivery of long term measures to fully mitigate impacts, funded by contributions from house builders. Their approach focusses on positive visitor management and aims to maintain public access, but with measures to ensure that access and nature conservation interests are not in conflict.

The Interim Solent Recreation Mitigation Strategy was published in December 2014 (SRMP, 2014) and the full long term strategy has been developed by the partnership and is due to be adopted by local planning authorities on 01 April 2018.

Our programme to establish the England Coast Path is complementary to the Partnership's strategy; it seeks to enable responsible access to the Solent coast and inform visitors about the ecological sensitivities. Through meetings and a series of workshops we have developed our proposals in close liaison with Bird Aware Solent and have fully considered the Bird Aware Solent evidence base and both the interim and definitive mitigation strategy. Both strategies rely heavily on coastal rangers educating and informing coastal visitors about the wintering bird sensitivities and how to enjoy the site, whilst avoiding disturbing the feeding and roosting birds. The definitive strategy aims to widen the range of mitigation from the interim strategy through providing on-the-ground access management projects specific to each site, including measures such as interpretation panels. Although a definitive list of these projects has yet to be finalised, Bird Aware Solent and Natural England colleagues have liaised to identify the likely projects that would be effective to reduce recreational disturbance in the Solent based on evidence.

Representatives of the ECP team have provided updates on the proposals to Bird Aware Solent meetings. These sessions have generated useful feedback which we have used in developing our proposals. This document has been developed in consultation with Natural England's staff involved in Bird Aware Solent.

2.3.3 Solent Wader and Brent Goose Strategy

The Solent Waders and Brent Goose Strategy is a conservation partnership project, which aims to conserve the internationally important Brent Goose and wading bird populations within and around the Special Protection Areas and Ramsar wetlands of the Solent coast (Hampshire, Isle of Wight and West Sussex). The initial Strategy was published in 2002 with an update in 2010, with a further Interim Strategy and maps expected mid 2018.

The partnership steering group members include Hampshire & Isle of Wight Wildlife Trust, Natural England, RSPB, Hampshire County Council and the Eastern Solent Coastal Partnership. Hampshire and Isle of Wight Wildlife Trust lead on the co-ordination of survey work and analysis of data. The Strategy is a non-statutory document presenting evidence, analysis and recommendations to inform decisions relating to strategic planning as well as individual development proposals. The underlying principle of the Strategy is to wherever possible conserve extant sites, and to create new sites, enhancing the quality and extent of the feeding and roosting resource.

The latest Interim Strategy updates the 2010 Strategy with current guidance, significant new survey data and current trends among feeding and roost sites in the Solent. The Interim Strategy includes terrestrial wader and Dark-bellied Brent goose sites located on land that fall outside of the Solent SPAs boundaries. However, as this land is frequently used by SPA species (including qualifying features and assemblage species), it supports the functionality and integrity of the designated sites for these features. This land will contribute to the achievement of the SPAs' conservation objectives and is therefore protected in this context. This land supports the ecological network by providing alternative roosting and foraging sites.

A framework for guidance on mitigation and off-setting requirements has been prepared by the Strategy Steering Group to achieve the long-term protection of the wider Dark Bellied Brent Goose

and wader network of sites. This network is under pressure from the growth planned for the Solent and formal guidance was considered necessary to define an approach for the non-designated sites.

All of the sites identified in the Strategy as being currently used by waders and/or Dark Bellied Brent Geese have been classified in relation to their importance within the regional ecological network of sites used by birds, for further information on these classifications please see Appendix 1. Sites that fell below the benchmarks were classified as “unclassified” to highlight them as needing further survey work to inform their assessment.

Recommendations are set out in order to protect the integrity of this network of important sites

We have used the in-preparation Interim Strategy to assess whether the England Coast Path proposals will lead to a likely significant effect, through increased recreational disturbance, on the qualifying features outside of the boundaries of the Natura 2000 and Ramsar sites.

2.4 Designated features

Features – of the designated sites listed in 2.2	Highcliffe to Milford Cliff SSSI	Hurst Castle & Lymington River SSSI	Lymington River Reedbeds SSSI	Sowley Pond SSSI	Solent Maritime SAC	Solent and Southampton SPA	Solent and Southampton Water RAMSAR	Solent & IOW Lagoon SAC	North Solent SSSI	New Forest SSSI	New Forest SPA	The New Forest SAC	New Forest Ramsar	Solent and Dorset Coast pSPA
Dartford warbler, <i>Sylvia undata</i> - A302 (breeding)										✓	✓			
Nightjar, <i>Caprimulgus europaeus</i> - A224 (breeding)										✓	✓			
Woodlark, <i>Lullula arborea</i> - A246 (breeding)										✓	✓			
Hen harrier, <i>Circus cyaneus</i> - A082 (non-breeding)										✓	✓			
Assemblages of breeding birds - Lowland heath										✓				
Common tern, <i>Sterna hirundo</i> - A193 (breeding)		✓				✓					✓			✓
Little tern, <i>Sterna albifrons</i> - A195 (breeding)		✓				✓					✓			✓
Black-headed gull, <i>Larus ridibundus</i> – (breeding)		✓							✓					
Black-tailed godwit, <i>Limosa limosa islandica</i> - A616 (non-breeding)		✓				✓	✓							
Dark-Bellied B goose, <i>Branta bernicla bernicla</i> - A675 (non-breeding)		✓				✓	✓							
Non-Breeding Waterbird Assemblage		✓				✓	✓		✓					
Oystercatcher, <i>Haematopus ostralegus</i> (breeding)									✓					
Ringed plover, <i>Charadrius hiaticula</i> - A137 (breeding)							✓		✓					
Spotted redshank, <i>Tringa erythropus</i> (non-breeding)									✓					

Features – of the designated sites listed in 2.2	Highcliffe to Milford Cliff SSSI	Hurst Castle & Lymington River SSSI	Lymington River Reedbeds SSSI	Sowley Pond SSSI	Solent Maritime SAC	Solent and Southampton SPA	Solent and Southampton Water RAMSAR	Solent & IOW Lagoon SAC	North Solent SSSI	New Forest SSSI	New Forest SPA	The New Forest SAC	New Forest Ramsar	Solent and Dorset Coast pSPA
Assemblages of breeding birds - Lowland damp grasslands									✓					
Assemblages of breeding birds - Mixed: Saltmarshes, Sand-dunes									✓					
Grey heron, <i>Ardea cinerea</i> (breeding)				✓										
Eurasian teal, <i>Anas crecca</i> - A704 (non-breeding)				✓		✓	✓							
Ringed plover, <i>Charadrius hiaticula</i> - A137 (non-breeding)						✓	✓							
Mediterranean gull, <i>Larus melanocephalus</i> - A176 (breeding)						✓								
Sandwich tern, <i>Sterna sandvicensis</i> - A191 (breeding)						✓					✓			✓
Roseate tern, <i>Sterna dougallii</i> - A192 (breeding)						✓								
European honey-buzzard, <i>Pernis apivorus</i> - A072 (breeding)											✓			
Eurasian hobby, <i>Falco subbuteo</i> - A099 (breeding)											✓			
Wood warbler, <i>Phylloscopus sibilatrix</i> - A314 (breeding)											✓			
Aggregations of non-breeding birds - variety of wintering species							✓		✓					
Lowland mire grassland and rush pasture									✓					
Lowland meadows									✓					
Lowland neutral grassland (MG5)									✓					
Lowland wet neutral grassland (MG11, MG13)			✓						✓					
<i>Calluna vulgaris</i> - Ulex minor heath (H2)										✓				

Features – of the designated sites listed in 2.2	Highcliffe to Milford Cliff SSSI	Hurst Castle & Lymington River SSSI	Lymington River Reedbeds SSSI	Sowley Pond SSSI	Solent Maritime SAC	Solent and Southampton SPA	Solent and Southampton Water RAMSAR	Solent & IOW Lagoon SAC	North Solent SSSI	New Forest SSSI	New Forest SPA	The New Forest SAC	New Forest Ramsar	Solent and Dorset Coast pSPA
Chamomile, <i>Chamaemelum nobile</i>										✓				
- <i>Ludwigia palustris</i> , Hampshire purslane,										✓				
Vascular plant assemblage - associated with littoral, supralittoral, neutral grassland, coastal environs		✓					✓		✓					
Vascular plant assemblage - associated with woodland, heathland, bog, fen, mire, acid grassland									✓	✓				
H1110 Sandbanks which are slightly covered by sea water all the time					✓		✓		✓					
H1130 Estuaries					✓		✓		✓					
H4020 Temperate Atlantic wet heaths with <i>Erica ciliaris</i> and <i>Erica tetralix</i>										✓				
H1140 Mudflats and sandflats not covered by seawater at low tide		✓			✓		✓		✓					
H1210 Annual vegetation of drift lines		✓			✓				✓					
H1220 Perennial vegetation of stony banks		✓			✓				✓					
H1310 <i>Salicornia</i> and other annuals colonising mud and sand		✓			✓				✓					
H1320 <i>Spartina</i> swards (<i>Spartinion maritimae</i>)		✓			✓				✓					
H1150 Coastal lagoons		✓			✓		✓	✓	✓					
H1330 Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>)		✓			✓				✓					
IA - Coastal Geomorphology		✓												
IA - Saltmarsh Morphology		✓												
SM4-28 - Saltmarsh		✓					✓							
H2120 Shifting dunes along shoreline with <i>Ammophila arenaria</i> ('white dunes')					✓				✓					

Features – of the designated sites listed in 2.2	Highcliffe to Milford Cliff SSSI	Hurst Castle & Lymington River SSSI	Lymington River Reedbeds SSSI	Sowley Pond SSSI	Solent Maritime SAC	Solent and Southampton SPA	Solent and Southampton Water RAMSAR	Solent & IOW Lagoon SAC	North Solent SSSI	New Forest SSSI	New Forest SPA	The New Forest SAC	New Forest Ramsar	Solent and Dorset Coast pSPA
H3110 Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>)										✓		✓		
H3130 Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoëto-Nanojuncetea</i>										✓		✓		
H4010 Northern Atlantic wet heaths with <i>Erica tetralix</i>										✓		✓		
H4030 European dry heaths										✓		✓		
Coastal vegetated shingle (SD1-3)		✓							✓					
Littoral sediment		✓							✓					
Soft maritime cliff and slope									✓					
Valley fen (lowland)									✓					
Floodplain fen (lowland)			✓											
Waterfringe fen (lowland)			✓											
IA - Fluvial Geomorphology										✓				
Lowland beech and yew woodland										✓				
Lowland dry acid grassland (U1b,c,d,f)										✓				
Lowland dry acid grassland (U4)										✓				
Lowland dry acid grassland (U5/U6)										✓				
Lowland dry heath									✓	✓				
Lowland mire grassland and rush pasture										✓				
Lowland mixed deciduous woodland										✓				
Lowland neutral grassland (MG5)										✓				
Lowland wet heath										✓			✓	

Features – of the designated sites listed in 2.2	Highcliffe to Milford Cliff SSSI	Hurst Castle & Lymington River SSSI	Lymington River Reedbeds SSSI	Sowley Pond SSSI	Solent Maritime SAC	Solent and Southampton SPA	Solent and Southampton Water RAMSAR	Solent & IOW Lagoon SAC	North Solent SSSI	New Forest SSSI	New Forest SPA	The New Forest SAC	New Forest Ramsar	Solent and Dorset Coast pSPA
Lowland wetland including basin fen, valley fen, floodplain fen, waterfringe fen, spring/flush fen and raised bog lagg										✓			✓	
Ponds										✓				
<i>Lobelia urens</i> , Heath Lobelia										✓			✓	
<i>Hericium erinaceum</i> , Hedgehog fungus										✓			✓	
<i>Catillaria laureri</i> , Laurer's Catillaria										✓			✓	
<i>Parmelia minarum</i> , New Forest Parmelia										✓			✓	
<i>Eriophorum gracile</i> , Slender Cottongrass										✓			✓	
<i>Gladiolus illyricus</i> , Wild Gladiolus										✓			✓	
<i>Pulicaria vulgaris</i> , Lesser Fleabane										✓			✓	
Rivers and Streams										✓			✓	
Standing waters										✓				
H6410 <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>)										✓		✓		
H7140 Transition mires and quaking bogs										✓		✓	✓	
H7150 Depressions on peat substrates of the <i>Rhynchosporion</i>										✓		✓		
H7230 Alkaline fens										✓		✓		
H9120 Atlantic acidophilous beech forests with <i>Ilex</i> and sometimes also <i>Taxus</i> in the shrublayer (<i>Quercion robori-petraeae</i> or <i>Illici-Fagenion</i>)										✓		✓		
H9130 <i>Asperulo-Fagetum</i> beech forests										✓		✓		

Features – of the designated sites listed in 2.2	Highcliffe to Milford Cliff SSSI	Hurst Castle & Lymington River SSSI	Lymington River Reedbeds SSSI	Sowley Pond SSSI	Solent Maritime SAC	Solent and Southampton SPA	Solent and Southampton Water RAMSAR	Solent & IOW Lagoon SAC	North Solent SSSI	New Forest SSSI	New Forest SPA	The New Forest SAC	New Forest Ramsar	Solent and Dorset Coast pSPA
<i>Chirocephalus diaphanus</i> , a freshwater fairy shrimp										✓				
<i>Triops cancriformis</i> , Tadpole Shrimp										✓				
S1044 Southern damselfly, <i>Coenagrion mercuriale</i>										✓				
S1083 Stag beetle, <i>Lucanus cervus</i>										✓				
<i>Argynnis paphia</i> , Silver-washed Fritillary										✓				
<i>Limenitis camilla</i> , White Admiral										✓				
Invertebrate assemblage A1 arboreal canopy										✓				
Invertebrate assemblage A211 heartwood decay										✓				
Invertebrate assemblage A212 bark and sapwood decay										✓				
Invertebrate assemblage A213 fungal fruiting body										✓			✓	
Invertebrate assemblage F001 scrub edge										✓			✓	
Invertebrate assemblage F003 scrub-heath & moorland										✓			✓	
Invertebrate assemblage F111 bare sand & chalk										✓			✓	
Invertebrate assemblage W126 seepage										✓			✓	
Invertebrate assemblage W221 undisturbed fluctuating marsh										✓			✓	
Invertebrate assemblage W313 moss & tussock fen										✓			✓	
Invertebrate assemblage (M311 saltmarsh and transitional brackish marsh)								✓					✓	
Lichen assemblage										✓				
Bryophyte assemblage										✓				

Features – of the designated sites listed in 2.2	Highcliffe to Milford Cliff SSSI	Hurst Castle & Lymington River SSSI	Lymington River Reedbeds SSSI	Sowley Pond SSSI	Solent Maritime SAC	Solent and Southampton SPA	Solent and Southampton Water RAMSAR	Solent & IOW Lagoon SAC	North Solent SSSI	New Forest SSSI	New Forest SPA	The New Forest SAC	New Forest Ramsar	Solent and Dorset Coast pSPA
EC - Aves	✓													
EC - Mesozoic - Tertiary Fish/Amphibia	✓													
EC - Palaeogene	✓													
EC - Quaternary of South Central England	✓							✓	✓					
EC - Tertiary Mammalia	✓													
EC - Tertiary Palaeobotany	✓													
EC - Tertiary Reptilia	✓													
Invertebrate of Soft Cliffs	✓													
EO - Palaeogene										✓				
FB - Palaeogene										✓				
FM - Quaternary of South Central England										✓				

Table 2a Designated Sensitive Features

2.5 Other features about which concerns have been expressed

Feature	Conservation interest
Duke of Burgundy Butterfly	Nationally the Duke of Burgundy butterfly's range is greatly limited. The rides in the woodlands along the east side of the Beaulieu River offer rare suitable habitat for this species. The species is also a BAP Priority species and its European status is currently: Threatened.
Light Crimson Underwing Moth	Nationally the Light Crimson Underwing Moth's range is greatly limited. The rides in the woodlands along the east side of the Beaulieu River offer rare suitable habitat for this species. The species is also a BAP Priority species.
Rides of Sims Wood, Steerley Copse and Spearbed Copse	The shaded rides that run through the woodlands here, offer a unique habitat for a variety of invertebrate and flora. <ul style="list-style-type: none"> - Invertebrate Assemblage - Mixture of flora (especially narrow leaved lungwort)

Table 2b Additional Sensitive Features

3. Baseline conditions and ecological sensitivities

In this part of the document we identify any of the features mentioned above that are potentially sensitive to changes in access, and rule out from further consideration those that are not.

The route crosses a range of coastal and more terrestrial habitats. These two environments have several distinct differences, in respect of this and to better show the status of features relative to their location, we have divided the features this section into the following subsections:

3.1 Coastal Features

- The following designated sites are included in this subsection due to their coastal and estuarine setting along much of the proposed access route.
- Hurst Castle and Lymington River Estuary SSSI, North Solent SSSI, Highcliffe to Milford Cliffs SSSI, Lymington River Reedbeds SSSI, Sowley Pond SSSI, Solent and Southampton Water SPA, North Solent NNR, Solent and Dorset Coasts pSPA, Solent Maritime SAC, Solent and Isle of Wight Lagoons SAC, Solent and Southampton Waters RAMSAR

3.2 New Forest Features

- The following designated sites are included in this subsection due to them having more inland locations set within environments such as heathland, grassland and woodland, along a small section of the proposed access route.
- The New Forest SAC, The New Forest SSSI, New Forest RAMSAR, New Forest SPA

3.1 Coastal Features

3.1.1 Non-Breeding Diving Waterbirds

Composition of feature group
Red-breasted Merganser <i>Mergus serrator</i> Cormorant <i>Phalacrocorax carbo</i> Little Grebe <i>Tachybaptus ruficollis</i> Great Crested Grebe <i>Podiceps cristatus</i>
Current conservation status and use of the site
This feature group uses a range of wetland and aquatic habitats including open water, saline and freshwater lagoons. Wetland Bird Survey (WeBS) Core data shows that the species of interest are present across the area between Hurst Spit and Calshot. Cormorant, Little Grebe, Great Crested Grebe and Red-breasted Merganser are concentrated around Hurst Spit to Lymington. Cormorant, Little Grebe and Great Crested Grebe were also counted in significant numbers at Sowley Pond, Red-breasted Merganser were on the shoreline near Pylewell (Frost <i>et al</i> , 2017). Cormorant, Little Grebe and Great Crested Grebe numbers are at their height between September

to February, whilst Red-breasted Merganser are slightly later with their peak period tending to be October to March.

The WeBS Alerts service carried out by the BTO showed no current Alerts for any of the Feature Group species based on data up to 2010 in the Solent and Southampton Water SPA. Little Grebe, Great Crested Grebe and Cormorant numbers are stable or increasing in the medium to long term. Red-breasted Merganser numbers stabilised in the short term between 2005 to 2010 but were in decline particularly between 2000-2010 (Cook *et al*, 2013).

Ecological sensitivities to changes in access

These species are potentially sensitive to changes in access.

These species rest on the water at times of high tide some distance from the shoreline. Cormorant can also gather at high tide roost sites in trees, sometimes, some distance inland. Feeding groups of birds will regularly gather close to the shoreline (especially during the winter months) and are sensitive to the presence of humans and dogs on the foreshore.

Potential interactions with our proposals for England Coast Path are considered further in Section 4 of this document.

3.1.2 Non-Breeding Dabbling Ducks

Composition of feature group

Teal *Anas crecca*;

Gadwall *Anas strepera*

Shoveler *Anas clypeata*

Pintail *Anas acuta*

Wigeon *Anas penelope*

Mallard *Anas platyrhynchos*

Ecological sensitivities to changes in access

Teal, Pintail, Gadwall, Shoveler, Wigeon and Mallard are present in large numbers during Winter months in the UK. Shallow estuaries, coastal lagoons, marshes, flood plains, ponds, reservoirs and gravel pits are the preferred habitats (RSPB, 1990).

Given that the coastline between Hurst Spit and Calshot has much of the Dabbling Duck feature groups preferred habitat, they are present along much of the coastline here during the Winter months (BTO, 2016; Hampshire Ornithological Society, 2015). Pennington & Keyhaven Marshes, Lymington River, Beaulieu Estuary and Sowley Marshes and Pond are specific sites where large amounts of these species tend to congregate.

These species are present in significant numbers between early September to late March. November-January are the usual peak months (BTO, 2016).

The BTO WeBS Alerts show Teal, Shoveler, Gadwall and Mallard populations have all either been stable or increasing over the medium to long term (up to 2009/2010). These trends match those for both the region and nationally. Consequently no WeBS Alerts have been triggered for these species (Cook *et al* 2013).

A WeBS Alert has been triggered for Pintail due to a short term decrease in its population. This decline is not believed to be due to site-specific causes (which are believed to remain quite favourable) but rather reflects a broad trend in the Pintails population, across the south and perhaps more widely (Cook *et al*, 2013). Despite the decline in numbers it is believed that this site in particular is becoming more important for Pintail.

Numbers of Wigeon over-wintering on Solent and Southampton Water SPA have been decreasing in the short-term having previously been relatively stable. However, changes in numbers have been insufficient to have triggered Alerts for this species

Current conservation status and use of the site

These species are potentially sensitive to changes in access.

With a widespread distribution across different habitats, this sensitivity is generally more spread over a large area, but with key sites at Needs Ore and Pennington marshes. These species can rest on the water at times of high tide some distance from the shoreline, although they can also gather at high tide roost sites on dry land or at the edges of intertidal areas, closer to the shoreline. Feeding groups of several hundred birds will regularly gather close to the shoreline (especially during the winter months) and are sensitive to the presence of humans and dogs on the foreshore. Potential interactions with our proposals for England Coast Path are considered further in Section 4 of this document.

3.1.3 Non-Breeding Waders and Shelduck

Composition of feature group

Ringed plover *Charadrius hiaticula*

Black-tailed godwit *Limosa islandica*

Spotted redshank *Tringa erythropus*

Redshank *Tringa totanus*,

Grey Plover *Pluvialis squatarola*,

Lapwing *Vanellus vanellus*,

Dunlin *Calidris alpina alpina*,

Curlew *Numenius arquata*,

Shelduck *Tadorna tadorna*.

Turnstone *Arenaria interpres*

Oystercatcher *Haematopus ostralegus*

Golden Plover *Pluvialis apricaria*

Snipe *Gallinago gallinago*

Current conservation status and use of the site

The current WeBS Alerts (for Southampton and Solent SPA) (Cook *et al*, 2013) can be summarised as follows:

- Ringed Plover, Curlew, Grey Plover, Golden Plover, Oystercatcher, Turnstone, Spotted Redshank and especially Dunlin have been shown to be in decline within the Solent. It should be noted that WeBS Alerts have not been raised for Grey Plover or Golden Plover, which are experiencing slight declines but not significant enough to warrant an Alert. Additionally Turnstone and Oystercatcher are not part of the WeBS Alerts methodology locally but based on analysis of recent core counts, both species are declining.
- Lapwing are also in decline with Short-term and medium-term Alerts but also more far-reaching decline since designation of the SPA. It is believed that this decline is a result of on-site pressures, as this decline does not reflect the national trends for this species.
- Redshank and Shelduck have stable populations in the short-term having previously had declines in the medium and long term.
- Black-tailed Godwit are stable with no alerts.
- Snipe, although not part of the WeBS Alert service locally, have seen their population fluctuate locally but overall have remained stable across the SPA

(Cook *et al*, 2013)

Key sites for feeding and resting have been mapped as part of the Solent Waders and Brent Goose Strategy. These include areas such as grazing marshes, pasture fields and arable fields across the area, which may not be designated, but provide essential supporting habitat especially as High Tide Roosts. Key sites for waders locally include the intertidal mudflats adjoining Hurst Spit, Pennington & Keyhaven Marshes, the shoreline between Pylewell and Sowley Marshes and Sowley Marshes and Needs Ore.

Numbers of these species swell during the winter months, particularly November to early March, although Ringed Plover tend to peak earlier in September/October. Many of the species also have a considerable passage presence during Spring and the Autumnal passage months (Frost *et al*, 2013).

Shelduck are included in this group as a species that forages at times of low tide on exposed mudflats. Roost sites are less restricted and can include resting on the open water.

Current conservation status and use of the site

Changes in visitor behaviour in sensitive areas can potentially cause increased disturbance to feeding and/or roosting wintering or passage waterbirds using the saltmarsh, mudflats, coastal grazing marsh and fields adjoining the coast. Disturbance events (those where the presence of human activity elicits a behavioural response from birds) can increase the energetic requirements

of these species via reduced feeding rates or by birds taking flight.

Potential interactions with our proposals for England Coast Path are considered further in Section 4 of this document.

3.1.4 Non-Breeding Dark Bellied Brent Geese

Composition of feature group

Dark bellied Brent Geese *Branta Bernicla*

Current conservation status and use of the site

Dark-bellied Brent Geese are mainly present in the area from October to March, and roost on the water overnight. During the day they exhibit sub-population preferences and will roost close to preferred feeding areas. Important roosting sites within the site include Southampton Water, Beaulieu Estuary, Newtown Estuary, and North-West Solent (Frost *et al.*, 2017).

Dark-bellied Brent Geese feed on intertidal mudflats and salt marsh especially where eel-grasses such as *Zostera marina* and *Zostera noltii* are present, but also green seaweeds such as *Enteromorpha* and *Ulva* are also favoured (Batten *et al*, 1990; Underhill-Day J. C., 2015), inland arable and pasture fields are also increasingly used (Hampshire Ornithological Society, 2015; HIOWWT, 2010).

Beyond the SPA boundary there are significant amounts of important functionally linked land including arable and pasture fields but also inland marsh (e.g. Pennington and Black Water Marshes).

Table 3 shows the peak counts of Dark-bellied Brent Geese in the North West Solent and Beaulieu Estuary WeBS sectors (Frost *et al*, 2018).

Species	WeBS Sector	Peak Counts					5 Year Peak Average
		2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	
Brent Goose (Dark-bellied)	North West Solent	1,800	2,195	2,110	2,660	2,691	2,291
	Beaulieu Estuary	689	798	746	842	849	785
	Combined Local	2,489	2,993	2,856	3,502	3,540	3,076

Table 3. Peak Counts for Dark-Bellied Brent Geese collected from the North West Solent and Beaulieu Estuary WeBS Core Sites (Frost *et al*, 2018).

Ecological sensitivities to changes in access

Dark-bellied Brent Geese are primarily Wintering Birds in the Solent and nationally, as such their sensitivity to access is limited to Winter, mainly between late September and mid to late March (BTO, 2016; Hampshire Ornithological Society, 2015; Rowell & Robinson, 2004)

Locally Lily *et al* (2010) showed that Dark bellied Brent Geese tend to be disturbed by recreation such as walkers between 5-178m distance, with the median distance being 51.5m (Liley, Stillman,

& Fearnley, 2010). Nationally disturbance levels of Dark-bellied Brent is usually in the range of 5-200m, (Owens, 1977; Underhill-Day J. C., 2015) though It can be as much as 300m depending on local topography e.g. undulating terrain (Underhill-Day J. C., 2015).

Brent are likely to either be more disturbed or be (Underhill-Day J. C., 2015) affected to a greater degree by disturbance, during late winter (Owens, 1977). At this time their preferred food source, Eel Grass *Zostera*, is dwindling in availability and they can use inland fields to a greater degree during this time.

The Brent Goose and Wader Strategy (BGWS) collates over 1000 surveys of Dark-bellied Brent Geese (and waders) along coastal sites in the Solent, initially between 2006-2009, but recently a new Interim Strategy has updated this with surveys between 2009-2017. The BGWS has developed a series of maps for the Solent coast, defining important sites for Dark-bellied Brent Geese and Waders. These maps form part of the assessment of the trail alignment in respect of Dark-bellied Brent Geese.

In 2003, prior to the creation of the Brent Goose and Wader Strategy, the Wildfowl & Wetlands Trust (WWT) undertook a survey to identify and characterise the inland feeding areas of Dark-bellied Brent Geese around the 19 SPAs in the UK. The Lymington estuary was included in this survey and the findings will be used in this assessment. (Rowell & Robinson, 2004)

The British Trust for Ornithology's (BTO) Wetland Bird Survey (WeBS) conducts monthly High Tide and periodic Low Tide counts in the Solent. Additionally the local BTO group Hampshire Ornithological Society (HOS) also has count data and that derived from its publication; The Hampshire Bird Atlas (Hampshire Ornithological Society, 2015). WeBS and HoS data will also be included in the assessment.

Potential interactions with our proposals for the England Coast Path are considered further in Section 4 of this document.

3.1.5 Non-Breeding Waterbird Assemblage

Composition of feature group

Notable component species of the assemblage:

- Black-Tailed Godwit *Limosa Limosa*
- Dark-Bellied Brent Goose *Branta Bernicla*
- Ringed Plover *Charadrius hiaticula*
- Teal *Anas Crecca*

The non-breeding bird assemblage is considered here, the component species of the assemblage are also included individually in sections 3.1.2, 3.1.3 and 3.1.4.

Current conservation status and use of the site

Recently a Draft Supplementary SPA Advice Package was prepared for the Solent and Southampton Water SPA (Natural England, 2018) which detailed that currently the assemblage has a 5-year average of 43,987 individuals (2009/10-2012/13), down from 51,361 at SPA classification (1992/93-1996/97). The objective states '*Maintain the overall abundance of the assemblage at a level which is above 51,361 whilst avoiding deterioration from its current level as*

indicated by the latest peak mean count or equivalent".

Ecological sensitivities to changes in access

Changes in visitor behaviour in sensitive areas can potentially cause increased disturbance to feeding and/or roosting wintering or passage waterbirds using the saltmarsh, mudflats, coastal grazing marsh and fields adjoining the coast. Disturbance events (those where the presence of human activity elicits a behavioural response from birds) can increase the energetic requirements of these species via reduced feeding rates or by birds taking flight. These responses do not necessarily mean that the birds are adversely impacted in terms of increased likelihood of mortality or reduced fitness. However, the potential for adverse impacts cannot be ruled out at this stage of the appraisal.

Potential interactions with our proposals for England Coast Path are considered further in Section 4 of this document.

3.1.6 Breeding Terns, Ringed Plover, Black-Headed Gull and Mediterranean Gull

Composition of feature group

Sandwich tern, *Sterna sandvicensis*

Common tern, *Sterna hirundo*

Little tern, *Sterna albifrons*

Roseate tern, *Sterna dougallii*

Mediterranean Gull *Larus melanocephalus*

Black-Headed Gull, *Chroicocephalus ridibundus*

Ringed Plover, *Charadrius hiaticula*

Some of these species are also included and considered here as component species in the North Solent SSSI Breeding Bird Assemblage of sand-dunes and salt marshes. For information on other birds included in this feature group please also see sub section 3.1.12

Current conservation status and use of the site

Terns generally arrive in the UK from April to August to breed, and nest in simple shallow 'scrapes' on sand, shingle or within low vegetation. Terns breed at various, predominantly, offshore sites around Lymington and have also bred at various other shoreline locations elsewhere on the stretch. Many of these sites are also adjacent or within Black-Headed Gull and Mediterranean Gull colonies.

Terns breed in the Spring within the Solent, outside of this period they are present as passage migrants. Terns will normally feed in shallow or deeper water depending on the species.

Mediterranean and Black-headed Gulls are present year-round and breed from May to August. They prefer to nest colonially in short to medium swards of vegetation, and sometimes on vegetated shingle islands.

These gull species may often share breeding locations with terns but their feeding habitats are much more varied. Being very opportunistic feeders they will eat a variety of scraps, fish and also

invertebrates. They can travel relatively far inland for food when compared with local tern species.

Recently a Draft Supplementary SPA Advice Package was prepared (NE, 2018) which detailed the below for Tern species:

- **Breeding Common Tern:** Abundance was advised to be restored. Since classification of the SPA Common Tern breeding has declined. In the last 5 years between 2012-2016 there were on average 132 breeding pairs in the SPA, it is advised to restore the target to 267 breeding pairs.
- **Breeding Sandwich Tern:** Abundance was advised to restore the breeding population to a level which is above 231.
- **Breeding Little Tern:** Abundance was advised to be restored. Since classification of the SPA Little Tern breeding has declined. In the last 5 years 36 pairs bred within the SPA.

All Tern Species

Within the area under consideration nests at the Needs Ore area of the North Solent NNR have not been recorded for many years and it is expected that breeding here has ceased or is very low currently. Between Hurst Point and Pitts Deep breeding is stable. Overall breeding conditions are expected to be in a poor condition. This is likely due to human interference and, as a result frequency, of disturbance by human activities is advised to be reduced in the guidance.

Connectivity of Tern breeding sites and food sources is also advised to be maintained.

Supporting habitat conservation measures were advised to be restored. The overall availability of supporting habitat was advised to be maintained.

The Draft SPA Supplementary guidance also provided advice on Mediterranean Gull:

- **Mediterranean Gull:** Abundance of these species is advised to be maintained at the current 2 breeding pairs across the SPA. Connectivity between nesting and foraging areas is advised to be maintained. Current Conservation measures of the breeding sites should be maintained.

Disturbance caused by humans is advised to be reduced. Currently the main roost sites for Mediterranean gull are located between Hurst Castle and Lymington, Newtown Harbour and the North Solent NNR, primarily the Needs Ore / Gull Island area of this.

Supporting Habitat for this species is advised to be restored. Mediterranean Gull feed in shallow waters and particularly in and around salt marsh habitat; the overall Solent coverage of which has been in decline.

Mediterranean Gull are regularly recorded breeding between Hurst Spit and Pylewell shorelines

and make attempts to breed at Gull Island and Warren Shore close to Needs Ore (Durnell, Breeding Waterbird Survey, 2015) (Natural England, 2015).

Black-Headed Gull

Black-Headed Gulls nest on sites in predominantly offshore locations between Hurst Spit and Pitts Deep, particularly close to the mouth of the Lymington River (Durnell, Breeding Waterbird Survey Lymington-Keyhaven, 2016). Gull Island in the North Solent NNR was previously the site of a large colony but currently has low or no use (Natural England, 2015).

Records of gulls and other waders are regularly kept in the Hurst Spit to Pitts Deep area. The number of Black-Headed Gull annual active nests is recorded below:

- **2015:** 4000
- **2014:** 5500
- **2013:** 6950
- **2012:** 2870
- **2011:** 7450

(Durnell, Breeding Waterbird Survey Lymington-Keyhaven, 2016)

Regular breeding surveys are also carried out in the Needs Ore portion of the North Solent NNR with the following results for Black-Headed Gull:

- **2015:**
 - **300-350 breeding pairs at Gull Island and Warren Shore**
 - **Approximately 122 breeding pairs elsewhere**
- **2014**
 - **150-180 breeding pairs at Gull Island and Warren Shore**
 - **Approximately 1 breeding pair elsewhere**
- **2013**
 - **25-30 nests identified in the NNR**

(Natural England, 2015)

Ringed Plover

Ringed Plover nest close to the shoreline in the North Solent SSSI area. They have been recorded regularly nesting across the coastline around the Needs Ore area including Park Shore and Warren Shore and the shoreline near to Cadland house (Jonathan Cox Associates, 2016). A total of 22 pairs were estimated to be breeding between Park Shore and the shoreline by Cadland house in 2016 (Jonathan Cox Associates, 2016).

Ecological sensitivities to changes in access

Breeding tern, Ringed Plover and gull colonies are sensitive to the presence of walkers and dogs. The amount of disturbance will depend on the amount and type of spatial separation between the colony and the people, along with the type of access management measures present.

Direct effects are possible via accidental trampling of nests and eggs.

Indirect effects can occur where adult birds are disturbed off eggs or away from chicks, leaving them more vulnerable to predation or chilling.

Terns forage mainly off-shore and return to the breeding colonies to feed adult partners or chicks. The distances travelled and areas used for foraging will vary between species and stretches, with little tern generally foraging closer to the shore than other terns or using coastal lagoons and wetlands. Common terns can also use coastal or inland wetlands for foraging as well as off-shore.

Connectivity between breeding areas and off-shore foraging areas is also potentially sensitive in that the presence of walkers/dogs in certain locations may disrupt or change normal flight routes.

Potential interactions with our proposals for England Coast Path are considered further in Section 4 of this document.

3.1.7 Breeding Grey Heron *Ardea cinerea*

Current conservation status and use of the site

Grey Heron can be seen throughout the year across both the Stretch and much of coastal and inland Hampshire, breeding sites though are limited to a little over a dozen sites in the county (Hampshire Ornithological Society, 2015). Locally Grey Heron breed at Sowley Pond.

H.2011	H.2012	H.2013	H.2014	H.2015
44	67	51	55	84

The above table shows the total annual counts of Grey Heron across all surveyed sites in South Hampshire between 2011-2015. This shows a slight increase in numbers over the period.

Within the area in question Grey Heron actively breed at Sowley Pond, with between 8-17% of the breeding population using this area between 2010-2016 (BTO, 2016), previously land at Pennington Marshes was also used (Hampshire Ornithological Society, 1993) but this fell out of use during the late 1990's and is now thought to be extinct (BTO, 2016).

Ecological sensitivities to changes in access

This species is potentially vulnerable to changes in access.

Sowley Pond is the only known breeding site along the stretch but other areas such as Sowley Marsh, Pylewell shoreline and Needs Ore are regularly visited by the species. Overall there are only a few sites which Grey Herons choose to use in the area and, as such, a potential increase in disturbance in these areas could have a higher magnitude of impact.

Most heronries are located within or immediately adjacent to bodies of water or wet marshland, due to this it is harder and less desirable for the casual walker to get close enough to a nest to disturb a heron. This may not always be the case and disturbance of a nest could cause the mortality of any eggs or hatched young present.

Potential interactions with our proposals for England Coast Path are considered further in Section 4 of this document.

3.1.8 Breeding Bird Assemblage for Lowland Damp Grassland

Composition of feature group
<p>Notable component species of the assemblage:</p> <ul style="list-style-type: none">▪ Mute Swan, <i>Cygnus olor</i>▪ Redshank, <i>Tringa totanus</i>▪ Lapwing, <i>Vanellus vanellus</i>▪ Reed Bunting, <i>Emberiza schoeniclus</i>▪ Cuckoo, <i>Cuculus canorus</i>▪ Snipe, <i>Gallinago Gallinago</i>▪ Teal, <i>Anas crecca</i>
Current conservation status and use of the site
<p>This feature group tend to breed in grassland areas across the North Solent SSSI, in particular around Needs Ore.</p> <p>Appendix 2 shows the WeBS Core counts between 2011and 2016 for this feature group. Reed Bunting and Cuckoo are not included in the WeBS counts (Frost <i>et al</i> 2018), although the former is regularly recorded as breeding at Needs Ore (Natural England, 2012-2017).</p> <p>The Hampshire Ornithological Society have shown in their Bird Atlas that there has been a contraction in breeding area for several of the species in this assemblage (Hampshire Ornithological Society, 2015).</p>
Ecological sensitivities to changes in access
<p>Several species in this group nest on the ground and as such are vulnerable to being disturbed by walkers and dogs. Nesting birds which are caused to leave the nest could result in the mortality of any eggs or chicks present in a nest.</p> <p>Potential interactions with our proposals for England Coast Path are considered further in Section 4 of this document.</p>

3.1.9 Breeding Bird Assemblage for Lowland Open Waters and their Margins

Composition of feature group
<p>Notable component species of the assemblage:</p> <ul style="list-style-type: none">▪ Little Grebe, <i>Tachybaptus ruficollis</i>▪ Mute Swan, <i>Cygnus olor</i>▪ Shelduck, <i>Tadorna Tadorna</i>▪ Water Rail, <i>Rallus aquaticus</i>▪ Avocet, <i>Recurvirostra</i>▪ Cuckoo, <i>Cuculus canorus</i>▪ Reed Warbler, <i>Acrocephalus scirpaceus</i>

- Bearded Tit, *Panurus biarmicus*
- Reed Bunting, *Emberiza schoeniclus*
- Shoveler, *Anas clypeata*
- Redshank, *Tringa totanus*
- Snipe, *Gallinago Gallinago*
- Sedge Warbler, *Acrocephalus schoenobaenus*

Current conservation status and use of the site

This feature group tend to breed in wet grassland areas across the North Solent SSSI, in particular around Needs Ore.

Appendix 2 shows the WeBS Core counts between 2011-2016 for this some of the sensitive featus in this group (Hampshire Ornithological Society, 2015).

The Hampshire Ornithological Society have shown in their Bird Atlas that there has been a contraction in breeding area for several of the species in this assemblage, Appendix 3 shows the change in territories between the two iterations of the Hampshire Bird Atlas (Hampshire Ornithological Society, 2015)

Ecological sensitivities to changes in access

Several species in this group nest on the ground and as such are vulnerable to being disturbed by walkers and dogs. Nesting birds which are caused to leave the nest could result in the mortality of any eggs or chicks present in a nest.

Potential interactions with our proposals for England Coast Path are considered further in Section 4 of this document.

3.1.10 Breeding Little Grebe, Shoveler, Water Rail and Mute Swan

Composition of feature group

Little Grebe *Tachybaptus ruficollis*
 Mute Swan *Cygnus olor*
 Shoveler *Anas clypeata*
 Water Rail *Rallus aquaticus*

Current conservation status and use of the site

The Hampshire Bird Atlas (Hampshire Ornithological Society, 2015) records the following information for this feature group, including comparison of breeding ranges within the county between 1986-1991 to 2008-2012:

- **Little Grebe** have seen a decline in their breeding range within Hampshire. They have though seen a slight increase in their range across the area between Hurst Spit and Calshot.
- **Mute Swan** breeding range in Hampshire has remained quite stable. They have increased

their presence locally at the Needs Ore portion of the North Solent NNR in particular.

- **Shoveler** have seen an increase in their breeding range. There was no recorded breeding within the North Solent SSSI but they were recorded as present during the breeding season near Needs Ore.
- **Water Rail** have seen a decrease in their breeding range across Hampshire.

Ecological sensitivities to changes in access

Several species in this group nest on the ground and as such are vulnerable to being disturbed by walkers and dogs. Nesting birds which are caused to leave the nest could result in the mortality of any eggs or chicks present in a nest.

Potential interactions with our proposals for England Coast Path are considered further in Section 4 of this document.

3.1.11 Breeding Wetland Birds

Composition of feature group

Sedge Warbler *Acrocephalus schoenobaenus*
Bearded Tit *Panurus biarmicus*
Reed Warbler *Acrocephalus scirpaceus*
Reed Bunting *Emberiza schoeniclus*
Cuckoo *Emberiza schoeniclus*
Linnet *Linaria cannabina*

Current conservation status and use of the site

The Hampshire Bird Atlas (Hampshire Ornithological Society, 2015) records the following information for this feature group, including comparison of breeding ranges within the county between 1986-1991 to 2008-2012:

- Sedge Warbler, Reed Bunting and Cuckoo have seen a significant decline in its breeding range throughout Hampshire.
- Bearded Tit has seen an increase in its breeding range in Hampshire.
- Reed Warbler has seen a fairly large increase in its breeding range in Hampshire.

Linnet have been recorded roosting in numbers of over 50 close to Blackwater in the North Solent NNR (Giddens, 2016, 2017)

Ecological sensitivities to changes in access

Several of these species in this group nest near the ground or in hedgerows and have the potential to be disturbed by walkers and dogs. Nesting birds which are caused to leave the nest could result in the mortality of any eggs or chicks present in a nest.

Potential interactions with our proposals for England Coast Path are considered further in Section 4 of this document.

3.1.12 Breeding Waders and Shelduck

Redshank *Tringa totanus*

Lapwing *Vanellus vanellus*

Shelduck *Tadorna Tadorna*

Oystercatcher *Haematopodidae*

Avocet *Recurvirostra*

Some of these species are also included and considered here as component species in the North Solent SSSI Breeding Bird Assemblage of sand-dunes and salt marshes. For information on other birds included in this feature group please also see sub section 3.1.6

Current conservation status and use of the site

The Hampshire Bird Atlas shows that the breeding distribution of the species in this feature group decreased between 1986-91 and 2008-12 (Hampshire Ornithological Society, 2015,1993).

		2010	2011	2012	2013	2014
Lapwing	Territories	10*	16	28	25	14
	Young fledged	–	8	0-3	–	5
Redshank	Territories	9	17-18	11	10*	10*
	Young fledged	–	–	0	–	6
Oystercatcher	Territories	10*	8-9	9	13*	14
	Young fledged	–	1	0	–	–
Avocets	Territories	15*	12*	21-26	38	28-34
	Young fledged	–	12	8-14	4-5	23-26

* Minimum number of territories

Table 4. Showing Breeding territories and young fledged from the Needs Ore portion of the North Solent NNR (Cox, 2016, Natural England, 2014-2010)

Ecological sensitivities to changes in access

Several species in this group nest on the ground and as such are vulnerable to being disturbed by walkers and dogs. Nesting birds which are caused to leave the nest could result in the mortality of any eggs or chicks present in a nest

Potential interactions with our proposals for England Coast Path are considered further in Section 4 of this document.

3.1.13 Subtidal Aquatic Features

Composition of feature group

H1150. Coastal lagoons

Saline coastal lagoons

H1130. Estuaries

H1110. Sandbanks which are slightly covered by sea water all the time

Current conservation status and use of the site

The Solent Maritime SAC is a complex site encompassing a major estuarine system on the south coast of England. The Solent and its inlets are unique in Britain and Europe for their unusual tidal regime, including double tides and long periods of tidal stand at high and low tide. As a result, the Solent Maritime SAC is a unique suite of functionally linked estuaries and dynamic marine and estuarine habitats.

The site has the largest number of small estuaries in the tightest cluster anywhere in Great Britain; including at Lymington and Beaulieu along the Highcliffe to Calshot Stretch. It is located in one of the only major sheltered channels in Europe, lying between a substantial island (the Isle of Wight) and the mainland.

The Solent Maritime SAC also includes a number of coastal lagoons, including Pennington and Keyhaven marshes which offer several mixed salinity lagoons, within a larger network of ditches and ponds within saltmarsh behind a sea-wall. Between Lymington and the Beaulieu Estuary there are also isolated lagoons such as Lisle Court Lagoon and a breached walled lagoon by Sims Wood.

The lagoons show a range of salinities and substrates, ranging from soft mud to muddy sand with a high proportion of shingle, which support a diverse fauna including large populations of three notable species: the nationally rare foxtail stonewort *Lamprothamnium papulosum*, the nationally scarce lagoon sand shrimp *Gammarus insensibilis*, and the nationally scarce starlet sea anemone *Nematostella vectensis*. Farlington Marshes is an isolated lagoon in marsh pasture that, although separated from the sea by a sea-wall, receives sea water during spring tides. The lagoon holds a well-developed low-medium salinity insect-dominated fauna.

Units within the Hurst Spit and Lymington River SSSI are: Unfavourable - Recovering (70.1%), Favourable (27%) or Unfavourable-declining (2.87%) (Natural England, 2018). Those in unfavourable declining condition are due either to coastal erosion or inappropriate scrub control.

Units within the North Solent SSSI are: Favourable (64%), Unfavourable - Recovering (34.16%), Unfavourable – No Change (0.93%) and Unfavourable – Declining (0.91%) (Natural England, 2018). Those in unfavourable declining condition are due to coastal erosion.

Ecological sensitivities to changes in access

This feature group represents habitats that are difficult or undesirable to access. In addition the habitats are believed to be resilient to public access.

Based on the above this Feature Group will be **ruled out** from further consideration in this appraisal.

3.1.14 Supra littoral Sediment including coastal vegetated shingle communities

Composition of feature group

H1220. Perennial vegetation of stony banks; Coastal shingle vegetation outside the reach of waves

H1210. Annual vegetation of drift lines

SD1 Rumex crispus – Glaucium flavum shingle community

SD2 Honkenya peploides – Cakile maritime strandline community

SD3 Matricaria maritime- Galium aparine strandline community

SD8 Festuca rubra – Galium verum fixed dune grassland

MC8 Festuca rubra – Armeria maritima maritime grassland

MC9 Festuca rubra - Holcus lanatus maritima grassland

Current conservation status and use of the site

Species associated with drift line habitats are present across the Solent in small pockets, often closely linked to salt marsh, shingle or chenier communities. The key area for drift line communities in the Solent is in the eastern Solent (JNCC, 2013) but they are present neighbouring shingle, chenier and salt marsh communities within the area considered.

Vegetated shingle communities SD1-3, MC8-9 and H1220 communities are, present across much of the central, eastern and western, extents of the Solent. Similar to the above the key areas for vegetated shingle communities are in the eastern Solent (JNCC, 2013) but are present across the stretch.

Regarding Supra Littoral sediment there are three key areas: Hurst Spit, Pylewell Shoreline to Needs Ore, Lepe to Calshot, (King, Lake, Day, R., & White, 2013; Natural England, 2010). The below table shows the conditions of the SSSI units with Supra Littoral sediment as the main habitat. The single unit within the North Solent SSSI that is Unfavourable – No Change is Unit 33, on the shoreline west of Lepe Country Park, near Inchmery House.

	<u>Hurst Castle and Lymington River Estuary SSSI</u>	<u>North Solent SSSI</u>
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Favourable	1	5
Unfavourable-Recovering	-	3
Unfavourable-No Change	-	1
Unfavourable-Declining	-	0

Table 5. Unit Conditions for Hurst Castle and Lymington River Estuary SSSI and North Solent SSSI where supralittoral sediment is the main habitat (Natural England, 2018)

Ecological sensitivities to changes in access
<p>This feature group, particularly strandline and vegetated shingle communities can be sensitive to concentrated trampling. (King M. L., 2013)</p> <p>Localised impacts could occur if changes in access lead to more frequent trampling of vegetation in sensitive areas. Increased use of an area by dog walkers could also have an impact on vegetated shingle as a result of eutrophication from dog fouling.</p> <p>Potential interactions with our proposals for England Coast Path are considered further in Section 4 of this document.</p>

3.1.15 Mudflats and sandflats not covered by seawater at low tide

Composition of feature group		
<p>H1140. Mudflats and sandflats not covered by seawater at low tide; Intertidal mudflats and sandflats</p> <p>Littoral Sediment</p>		
Current conservation status and use of the site		
<p>This feature group is present across the stretch and much of the Solent.</p> <p>Most areas with these littoral features present are in favourable or unfavourable recovering condition. One SSSI units was in Unfavourable Declining and one in Unfavourable No Change condition, these conditions resulted from natural erosion or the specific management of sea defences.</p>		
	<u>Hurst Castle and Lymington River Estuary SSSI</u>	<u>North Solent SSSI</u>

Favourable	3	15
Unfavourable-Recovering	4	16
Unfavourable-No Change	-	1
Unfavourable-Declining	1	0

Table 6. Unit Conditions for Hurst Castle and Lymington River Estuary SSSI and North Solent SSSI where littoral sediment is the main habitat (Natural England, 2018)

Ecological sensitivities to changes in access

Mudflats and sandflats are not sensitive to being walked on occasionally, having high resilience to abrasion and disturbance (Marlin, 2018). Our full proposals recommend the establishment of a Section 25A Direction to exclude access over the intertidal mudflats between Hurst Spit and the Beaulieu Estuary, upto Beaulieu village, as they are unsuitable for access (please see Appendix 7 for further details).

Based on the above, mudflats and sandflats not covered by water at high tide will be **ruled out** for further consideration in this appraisal.

3.1.16 Salt Marsh Habitats, Morphology and Atlantic Salt Meadows

Composition of feature group

SM4-28 – Saltmarsh

IA - Saltmarsh Morphology

IA – Coastal Geomorphology

Invert. assemblage M311 saltmarsh and transitional brackish marsh

H1330. Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)

H1320. *Spartina* swards (*Spartinion maritimae*); Cord-grass swards

H1310. *Salicornia* and other annuals colonising mud and sand; Glasswort and other annuals colonising mud and sand

Vascular Plant Assemblage – Littoral, Supralittoral, Neutral Grassland. Notable component species include:

- Little-Robin *Geranium purpureum*
- Dotted Sedge *Carex punctata*
- Galingale *Cyperus longus*
- Golden Samphire *Inula crinthmoides*

Current conservation status and use of the site

Salt marsh and Atlantic Salt Meadow habitats are found across the stretch including along the Beaulieu River, Lymington Estuary and close to Hurst Spit.

- **Atlantic Salt Meadows, Spartina Swards, Salicornia and other annuals colonising mud and sand**

Supplementary Advice created for the Solent Maritime SAC (Natural England, 2017) provided the following management advice:

The majority of attributes for this feature were advised to be maintained, this includes current conservation management measures.

Future extent of these features is advised to be restored to a coverage of 1,095ha (attained at designation) across the SAC from its current level of 990.80ha. Water quality and air quality are also advised to be restored to a level similar to that recorded at certification.

Although distribution is advised to be maintained for Atlantic Salt Meadows and Salicornia, it is advised to be restored for Spartina Swards

- **SM4-28 Salt Marsh Communities**

The below table summarises the current condition of units with salt marsh communities present:

	<u>Hurst Castle and Lymington River Estuary SSSI</u>	<u>North Solent SSSI</u>
Favourable	3	15
Unfavourable-Recovering	4	16
Unfavourable-No Change	-	1
Unfavourable-Declining	1	0

Table 7. Unit Conditions for Hurst Castle and Lymington River Estuary SSSI and North Solent SSSI where Salt Marsh is the main habitat (Natural England, 2018)

- **Salt Marsh Geomorphology and Coastal Geomorphology**

The below table summarises the current condition of units with Salt Marsh Geomorphology as a recorded feature:

	<u>Hurst Castle and Lymington River Estuary SSSI</u>

Favourable	13
Unfavourable-Recovering	5
Unfavourable-No Change	-
Unfavourable-Declining	3

Table 8. Unit Conditions for Hurst Castle and Lymington River Estuary SSSI where salt marsh geomorphology is the main feature (Natural England, 2018)

Those units which are Unfavourable-Declining are as a result of: impact from a local ferry, inappropriate scrub control and the impact of nearby coastal defences.

Ecological sensitivities to changes in access

Established saltmarsh is generally able to withstand people walking on it occasionally, localised damage could though occur if there is repeated trampling. In areas regularly used by dogs there is a risk of eutrophication causing changes in vegetation composition.

Based on these reasons Salt Marsh habitat and associated vegetation are **ruled in** for further consideration in this appraisal.

3.1.17 Dunes

Composition of feature group

H2120. Shifting dunes along the shoreline with *Ammophila arenaria* ("white dunes"); Shifting dunes with marram

Current conservation status and use of the site

Shifting dunes are present in isolated places between Hurst Spit and Calshot along the stretch.

The SAC Supplementary Advice for the Solent Maritime SAC (Natural England, 2017) advises that this habitats current extent, distribution and conservation measures should be maintained.

Ecological sensitivities to changes in access

Shifting Dunes are dominated largely by marram grass, with sand couch grass and sea holly also being present. The mobile sand dune habitats typically transition to strandline shingle vegetation to the seaward side and to fixed dune or dune slack habitat on the landward side (Natural England (NE, 2015;King et al., 2014).

This feature is vulnerable to trampling from increases in access and as such will be considered further.

3.1.18 Woodland

Composition of feature group

Lowland mixed deciduous woodland
Wet Woodland

Current conservation status and use of the site

The North Solent SSSI 22 units associated with this feature group.

The majority of the units are either Favourable or Unfavourable recovering. One unit (98) is Unfavourable-Declining due to both invasive species and coastal erosion.

	North Solent SSSI	
	Wet Woodland	Lowland Mixed Deciduous Woodland
Favourable	2	16
Unfavourable-Recovering	2	5
Unfavourable-No Change		-
Unfavourable-Declining		1

Table 9. Unit Conditions for the North Solent SSSI where Wet Woodland and Lowland Mixed Deciduous Woodland are present (Natural England, 2018)

Ecological sensitivities to changes in access

Walking of routes in woodland have been shown to cause soil erosion and this is often linked to localised habitat degradation through trampling (Marzano & Dandy, 2012; Leung & Marion, 1996) Godefroid and Koedam (2004) although this is not always the case (Rawlinson, 2009; Hall & Kuss, 1989) and the erosion impact has been shown to be limited to focused areas within 2m of the trail (Dale & Weaver, 1974).

Forest floor associated flora and scrub could be affected to some degree by potentially increased use of current path routes, new route establishment and the inclusion of some woodland in spreading room. Due to this the above Woodland notified features are **ruled in** for further consideration in this appraisal.

3.1.19 Desmoulins Whorl Snail

Composition of feature group

S1016. *Vertigo moulinsiana*; Desmoulin`s whorl snail

Current conservation status and use of the site
<p>Desmoulin's whorl snail <i>Vertigo moulinsiana</i>, which is rare in Great Britain and usually occurs within base-rich wetlands where there are long established swamps, fens and marshes, is not found in the New Forest coast area.</p> <p>The SAC Supplementary Advice (Natural England, 2017) advises that the abundance and conservation measures for Desmoulin's Whorl snail should be Restored. All other attributes were set targets of Maintain.</p>
Ecological sensitivities to changes in access
<p>This feature is not sensitive to the access proposal as it is underwater at all states of the tide. Desmoulin's whorl snail does not occur in the part of the site affected by the access proposal and as such is ruled out of further consideration in this appraisal.</p>

3.1.20 Vascular Plant Assemblage – Woodland, Heathland, Acid Grassland, Fen

Composition of feature group
<p>Vascular Plant assemblage associated with woodland, heathland, acid grassland and fen environs. Notable component species:</p> <p>Narrow-leaved Lungwort <i>Pulmonaria longifolia</i></p>
Current conservation status and use of the site
<p>The units within the North Solent SSSI, where this assemblage could be a feature, are all either Favourable or unfavourable-recovering condition (Natural England, 2018).</p>
Ecological sensitivities to changes in access
<p>Ground flora, such as Narrow-leaved Lungwort, are at risk of trampling underfoot and so are ruled in for further consideration.</p> <p>Potential interactions with our proposals for England Coast Path are considered further in Section 4 of this document.</p>

3.1.21 Earth Heritage Coast Cliffs and Foreshore

Composition of feature group
<p>For the Purposes of this assessment the following features have been grouped together:</p> <ul style="list-style-type: none"> • Quaternary of SE England • EC - Aves • EC - Mesozoic - Tertiary Fish/Amphibia • EC - Palaeogene • EC - Quaternary of South Central England

- EC - Tertiary Mammalia
- EC - Tertiary Palaeobotany
- EC - Tertiary Reptilia
- Invertebrate of Soft Cliffs
- IA – Coastal Geomorphology

Current conservation status and use of the site

The Highcliffe to Milford Cliffs SSSI extends for nine kilometres along the cliffs of Christchurch Bay. Its entire length comprises steep coastal slopes and cliffs which are locally dissected by deeply incised 'bunnies' or ravines. This coastal site provides access to the standard succession of the fossil rich Barton Beds and Headon Beds. Various exposures within the site are considered important both in a national and international context.

The invertebrates live in the runnels, pools and open vegetation of the slumped areas of the Highcliffe to Milford cliffs. The invertebrates occur in all areas of slumped cliffs with open vegetation within the SSSI.

The SSSI has 3 Favourable and 4 Unfavourable-No Change units. Those with no change are subject heavy erosion due to either wave action or ground water (Natural England, 2018).

Ecological sensitivities to changes in access

Cliffs and associated geologic features have good resistance to most levels of recreational access and there is no reason to suppose that the proposals for the England Coast Path will have an impact on these here.

Based on this the feature group will not be considered further in this assessment.

3.1.22 Lowland Neutral Grassland

Composition of feature group

Lowland Neutral Grassland

MG11 - Festuca rubra - Agrostis stolonifera - Potentilla anserina grassland

MG13 - Agrostis stolonifera - Alopecurus geniculatus grassland

Current conservation status and use of the site

Neutral grassland is characterised by vegetation dominated by grasses and herbs on a range of circumneutral soils. It includes dry hay meadows and pastures, together with a range of grasslands which are periodically inundated with water or permanently moist. Most of these habitats occur below the level of agriculture enclosure, and are thus considered 'lowlands'.

Of all SSSI Units where Neutral Grassland is the main habitat type the condition is given below:

	<u>Hurst Castle and Lymington River Estuary SSSI</u>	<u>Lymington Reedbeds SSSI</u>	<u>North Solent SSSI</u>
Favourable	7	-	14
Unfavourable-Recovering	5	1	5
Unfavourable-No Change	-	-	-
Unfavourable-Declining	-	-	-

Table 10. Unit Conditions for Hurst Castle and Lymington River Estuary SSSI, Lymington Reedbeds and North Solent SSSI where Neutral Grassland is the main habitat (Natural England, 2018).

Ecological sensitivities to changes in access

The trail is not aligned along any known designated Neutral Grassland habitat.

Due to the trail not being routed through this Feature Group and the belief that any land granted new access rights under Coastal Margin would experience only moderate use, it is not believed that this feature group will be significantly affected by the proposal. Based on this the Feature Group will be **ruled out** from further consideration in this appraisal.

3.1.23 Fen, Marsh, Mire

Composition of feature group

S4 Phragmites australis
 S21 Scirpus maritimus
 S26 Phragmites australis-Urtica dioica
 S28 Phalaris arundinacea
 Valley fen (lowland)
 Floodplain fen (lowland)
 Waterfringe fen (lowland)

Current conservation status and use of the site

Pockets of this feature group are found along and between the estuaries of the Lymington River and Beaulieu River. These habitats are usually totally inundated, close to a watercourse.

The table below shows the condition of SSSI units where these features are recorded.

	<u>Lymington Reedbeds SSSI</u>	<u>North Solent SSSI</u>
Favourable	3	2
Unfavourable- Recovering	1	1
Unfavourable-No Change	-	-
Unfavourable- Declining	-	-

Table 11. Unit Conditions for Lymington Reedbeds SSSI and North Solent SSSI where Fen, Marsh and Mire features exist (Natural England, 2010)

Ecological sensitivities to changes in access

The above feature groups by their very nature are either unsuitable or undesirable to walk on, as a result of either being inundated or saturated regularly.

The route will not be aligned through these areas and although some will be within Coastal Margin most are either difficult to access (due to management or natural scrub) or are a significant distance from the path itself.

Based on the above reasons this Feature Group will be **ruled out** from further consideration in this appraisal.

3.1.24 Duke of Burgundy Butterfly and Light Crimson Underwing Moth

Composition of feature group

Duke of Burgundy Butterfly *Hamearis lucina*
Light Crimson Underwing Moth *Catocala promissa*

Current conservation status and use of the site

Both Sims Wood and Spearbed Copse are within unit 91 of the North Solent SSSI. An assessment of the unit in 2010 outlined the unit as being unfavourable-recovering (Natural England, 2010).

Ecological sensitivities to changes in access

This feature group is not directly sensitive to changes in access. In this area the Duke of Burgundy does depend on the relatively narrow rides within the woodlands on the east side of the Beaulieu

River, as the caterpillars feed on Cowslips and Primrose growing along the rides. These are sensitive to destruction from concentrated trampling.

Light Crimson Underwing uses mature Oak trees for breeding. They will not be affected by the Coastal path proposals.

Potential interactions with our proposals for England Coast Path are considered further in Section 4 of this document.

3.1.25 Rides of Sims Wood, Steerley Copse and Spearbed Copse

Composition of feature group

Rides including the following features

- Associated Invertebrate Assemblage
- Associated Ride flora, in particular narrow leaved lungwort

Current conservation status and use of the site

Both Sims Wood and Spearbed Copse are within unit 91 of the North Solent SSSI. An assessment of the unit in 2010 outlined the unit as being unfavourable-recovering (Natural England, 2010).

Ecological sensitivities to changes in access

The rides through Sims Wood, Steerley Copse and Spearbed provide habitat for a range of ground flora including bluebells, wood sorrel, enchanters nightshade, bugle, betony, wood millet and narrow leaved lungwort, which are vulnerable to trampling.

Potential interactions with our proposals for England Coast Path are considered further in Section 4 of this document.

3.2 New Forest Features

3.2.1 Breeding Eurasian Hobby

Current conservation status and use of the site

There is relatively little information as to the current condition of the Eurasian Hobby within the New Forest. The Hampshire Ornithological Society Bird Atlas (Hampshire Ornithological Society, 2015) does though report that:

- Breeding areas for the species within the New Forest SPA have suffered a decline between 1986-91 to 2008-12. It is though noted that this decline could be due to a lack of available breeding evidence.
- A limited survey of Hobby's between 2012-2013 found a minimum of ten territories.
- The last comprehensive study of Hobby's was in 1981-1982, which found between 12-16 pairs

The current SPA acceptable number is 25 pairs.

Ecological sensitivities to changes in access

Hobby can be found in heathland, edges of woodland and farmland. The hobby usually commandeers crow's nests or squirrel dreys as a nesting site.

Although Hobby will forage throughout the New Forest SPA and adjacent farmland, their nests are usually located high in trees. There is no suitable habitat along the routes of the proposed Coastal Path where Hobby is likely to breed. As such Hobby are **ruled out** from further consideration in this assessment.

3.2.2 Breeding Honey Buzzard

Current conservation status and use of the site

Honey Buzzard are normally present in the New Forest between May and September.

In both 2013 and 2014 six pairs of breeding Honey Buzzard were recorded (Thomas *J pers comms*, 2017). The minimum acceptable number for the New Forest SPA to be said to be in favorable condition is 2 breeding pairs.

Ecological sensitivities to changes in access

The honey buzzard will normally breed in woodland and although hunting birds can travel quite far away from the nest it is not thought that there will be significant interaction with walkers.

The route of the proposed Coastal Path does not go through any known breeding sites for Honey Buzzard, nor does it go through woodlands that are suitable habitat for Honey Buzzard.

Based on the above reasons this Feature Group will be **ruled out** from further consideration in this appraisal.

3.2.3 Breeding Wood Warbler

Current conservation status and use of the site

There is relatively little information as to the current condition of the Wood Warbler within the New Forest. The Hampshire Ornithological Society Bird Atlas (Hampshire Ornithological Society, 2015) does though report that:

- Breeding areas for the species within the New Forest have suffered a significant decline between 1986-91 and 2008-12, with a possible decline of 76%.
- Singing males were recorded between 2009-2011 in a 46 square km area west of Lyndhurst:
 - **2009:** 104
 - **2010:** 87
 - **2011:** 115

Based on these counts it was estimated that there might be 200-250 territorial males within the New Forest.

The current SPA acceptable number is 117 pairs.
Ecological sensitivities to changes in access
The Wood Warbler breeds within predominantly deciduous woodland and due largely to this location is not expected to be overly sensitive to changes in access.
The route of the proposed Coastal Path does not go through any known breeding sites for Wood Warbler, nor does it go through woodlands that are suitable habitat for Wood Warbler.
As such this species is ruled out from further consideration in this assessment.

3.2.4 Breeding Bird Assemblage for Wetland Birds

Composition of feature group																				
Notable component species of the assemblage: <ul style="list-style-type: none"> ▪ Snipe ▪ Curlew ▪ Redshank ▪ Lapwing 																				
Current conservation status and use of the site																				
The assemblage is being maintained at the moment (Thomas <i>Pers Comms</i> , 2017)																				
<table border="1"> <thead> <tr> <th><u>Species</u></th> <th><u>1994</u></th> <th><u>2004</u></th> <th><u>2014</u></th> </tr> </thead> <tbody> <tr> <td>Snipe</td> <td>156</td> <td>111</td> <td>100</td> </tr> <tr> <td>Curlew</td> <td>132</td> <td>99</td> <td>111</td> </tr> <tr> <td>Redshank</td> <td>18</td> <td>14</td> <td>13</td> </tr> <tr> <td>Lapwing</td> <td>85</td> <td>117</td> <td>134</td> </tr> </tbody> </table>	<u>Species</u>	<u>1994</u>	<u>2004</u>	<u>2014</u>	Snipe	156	111	100	Curlew	132	99	111	Redshank	18	14	13	Lapwing	85	117	134
<u>Species</u>	<u>1994</u>	<u>2004</u>	<u>2014</u>																	
Snipe	156	111	100																	
Curlew	132	99	111																	
Redshank	18	14	13																	
Lapwing	85	117	134																	
<p><i>Table 12. Recorded Waders During Breeding Seasons in 1994, 2004 and 2014</i> <i>(Source: New Forest Breeding Waders Survey Report [RPS, 2014] and Natural England Responsible Officer Jennifer Thomas [Thomas Per Comms, 2017])</i></p>																				
Ecological sensitivities to changes in access																				
Birds in this assemblage will frequently nest in grassland, heathland and wetlands. As such nesting birds are potentially vulnerable to walkers and dogs, which could disturb parent birds causing them to leave the nest, increasing the risk of egg or chick mortality.																				
Potential interactions with our proposals for England Coast Path are considered further in Section 4 of this document.																				

3.2.5 Breeding Bird Assemblage for Lowland Heath

Composition of feature group
<p>Notable component species of the assemblage:</p> <ul style="list-style-type: none"> ▪ Cuckoo ▪ Tree Pipit ▪ Whinchat ▪ Stonechat ▪ Wheatear ▪ Grasshopper Warbler ▪ Linnet
Current conservation status and use of the site
<p>This assemblage has the following notable species: cuckoo, tree pipit, whinchat, stonechat, wheatear, grasshopper warbler and linnet.</p> <p>There are limited breeding records for this assemblage but currently the assemblage is being maintained (Thomas <i>pers comms</i>, 2017).</p>
Ecological sensitivities to changes in access
<p>The notable component birds in this assemblage will frequently nest in grassland, heathland, woodland and wetlands. As such nesting birds are potentially vulnerable to walkers and dogs, which could disturb parent birds causing them to leave the nest, increasing the risk of egg or chick mortality.</p> <p>Potential interactions with our proposals for England Coast Path are considered further in Section 4 of this document.</p>

3.2.6 Breeding Heathland Birds

Composition of feature group
<p>Dartford Warbler Nightjar Woodlark</p>
Current conservation status and use of the site
<p>In 2014 there were 268 breeding pairs of Dartford Warbler in the New Forest SPA. The minimum acceptable number is 454 pairs. (RPS, 2014)</p> <p>In 2013 there were 544 breeding pairs of Nightjar in the New Forest SPA. The minimum acceptable number is 300 pairs. (RPS, 2013)</p> <p>In 2013 there were 134 breeding pairs of Woodlark in the New Forest SPA. The minimum acceptable number is 177 pairs. (RPS, 2014)</p>

Ecological sensitivities to changes in access
<p>Birds in this assemblage will frequently nest on the ground or in scrub in grassland, heathland and woodland. As such nesting birds are potentially vulnerable to walkers and dogs, which could disturb parent birds causing them to leave the nest and in turn increasing the risk of egg or chick mortality.</p> <p>Potential interactions with our proposals for England Coast Path are considered further in Section 4 of this document.</p>

3.2.7 Non-Breeding Hen Harrier

Ecological sensitivities to changes in access
<p>Hen Harrier are usually present in the New Forest between September and October to mid-April. A survey of birds in the New Forest between 2015-2016 recorded 7 sightings of Hen Harriers in the New Forest SSSI & SPA (Thomas <i>pers Comms</i>, 2017). A current survey (2017-2018) has so far recorded only 3 sightings (Hampshire Ornithological Society, 2018). The minimum acceptable number should be 15.</p>
Ecological sensitivities to changes in access
<p>Hen Harrier roost on the ground, primarily in Heathland areas. They are susceptible to disturbance by dogs and walkers that have strayed from footpath.</p> <p>Potential interactions with our proposals for England Coast Path are considered further in Section 4 of this document.</p>

3.2.8 Invertebrate

Composition of feature group
<p>Invertebrate Assemblage of woodland, heath and heath environs including:</p> <ul style="list-style-type: none"> ○ A1 arboreal canopy ○ A211 heartwood decay ○ A212 bark and sapwood decay ○ A213 fungal fruiting body ○ F001 scrub edge ○ F003 scrub-heath & moorland ○ F111 bare sand & chalk ○ W126 seepage ○ W221 undisturbed fluctuating marsh ○ W313 moss & tussock fen <p>Southern Damselfly, <i>Coenagrion mercuriale</i> Stag Beetle, <i>Lucanus cervus</i> Silver-washed Fritillary, <i>Argynnis paphia</i> White Admiral, <i>Limenitis camilla</i></p>

Current conservation status and use of the site
<p>The Invertebrate feature group for the New Forest woods and heaths area includes a range of beetles, butterflies, damselflies, dragonflies and other invertebrate species.</p> <p>Please see Appendix 6 for condition tables for features in this group.</p>
Ecological sensitivities to changes in access
<p>This feature groups is resilient to changes in access but the habitat upon which they exist such as heathland and grassland are vulnerable to destruction as a result of significant increases in access and other effects such as eutrophication, as a result of dog fouling.</p> <p>Potential interactions with our proposals for England Coast Path are considered further in Section 4 of this document.</p>

3.2.9 Lowland Dry Heathland and Acid Grassland

Composition of feature group
<p>H2 Calluna vulgaris – Ulex minor heath H3 Ulex minor – Agrostis curtisii heath U1 Festuca ovina – Agrostis capillaris – Rumex acetosella grassland Dry Heathland Lowland wet heathland Lowland dry acid grassland (U1b,c,d,f) Lowland dry acid grassland (U4) Lowland dry acid grassland (U5/U6) Lowland dry heath Lowland neutral grassland (MG5) Lowland wet heath</p>
Current conservation status and use of the site
<p>Please see Appendix 6 for the condition table for features in this group.</p>
Ecological sensitivities to changes in access
<p>Heathland and grassland habitats are vulnerable to localised degradation as a result of trampling by concentrated access.</p> <p>Potential interactions with our proposals for England Coast Path are considered further in Section 4 of this document.</p>

3.2.10 Bats

Composition of feature group
<p>Hibernating populations of bats - Barbastelle, Bechstein's bat, Greater Horseshoe bat, Lesser</p>

Horseshoe bat and mixed assemblages
Maternity colonies of bats - Barbastelle, Barbastella barbastellus and Bechstein's bat, Myotis bechsteinii
Current conservation status and use of the site
Please see Appendix 6 for the condition table for features in this group.
Ecological sensitivities to changes in access
Bat species predominantly roost and hibernate in cracks in trees, crevices in buildings; between roof tiles, cracks in walls and in cavity walls in the New Forest. Bats are also, under normal circumstances, nocturnal and will forage close to or after sun set.
As a result of these roosting and foraging habits, bats do not tend to come in contact with walkers at peak times. Due to the isolation of their roosts and foraging occurring at times when less walkers are present, it is not believed bat species would be unduly affect by the proposals and as such will be ruled out from further consideration.

3.2.11 Amphibian Assemblage

Composition of feature group
Amphibian Assemblage Component species include: <ul style="list-style-type: none"> ○ Common frog ○ Warty newt ○ Smooth newt ○ Palmate newt ○ Common toad ○ Great crested newt
Current conservation status and use of the site
The trail passes through Dwarf Shrub Heath (Unit 411) which is in favourable condition and passes adjacent to Fen, Marsh and Swamp habitat (Unit 424) which is unfavourable- recovering condition (Natural England, 2013). There are two ponds in Unit 411 and one in Unit 424 adjacent to Summer Lane which the path is aligned along and would be suitable habitat for Amphibians.
The local Hampshire Amphibian and Reptile Group (HARG) 2012 Herpetofauna Report outlines that of the Amphibian Assemblage component species, see above, Common Frog and Smooth Newt are present between Moonhills Copse and the route down Summers Lane (HARG, 2012), were present during the 2002-12 period. In addition the survey provided the following counts for Hampshire during the same period: <ul style="list-style-type: none"> - Common Frog: 1139 - Smooth Newt: 484 - Common toad: 597

- Palmate Newt: 443
- Great Crested Newt: 560

Please also see Appendix 6 for the condition table of the features in this group.

Amphibians will have lower activity between late September and mid-October and will begin hibernating between October and November. Amphibians come out of hibernation between late February and April.

Smooth, Palmate and Great Crested Newts outside of the breeding season can use a range of habitats, including marsh, heathland, woods and gardens, during the breeding season ponds, ditches and lake edges.

Common Frogs and Common Toad, outside of the breeding season, stay relatively close to ponds, lakes, marshes and ditches.

Ecological sensitivities to changes in access

The path passes through units 424, 411 and 191 of the New Forest SSSI, none of these units are recorded as having the presence of the amphibian assemblage. The path does though pass through habitat which is suitable for the assemblage and through functionally linked land.

Amphibians use parts of Beaulieu Heath and adjacent functionally linked land such as Moonhills Copse. The access proposals here are almost entirely along existing routes or along roads. Newt, frog and toad species during their active months are either sheltered in holes, woody debris, vegetation or in open standing water. Due to the use of existing routes here and the nature of amphibians to stay by standing water, in water logged areas or hidden, it is considered that there would not be significant disturbance to amphibians here but out of consideration of the proximity and with regard to the precautionary principle we will consider this feature group further in Section 4.

3.2.12 Reptile Assemblage

Composition of feature group

Reptile assemblage

Component species:

- Smooth snake *Coronella austriaca*
- Sand lizard *Lacerta angilis*
- Adder *Vipera berus*
- Grass snake *Natrix natrix*
- Common lizard *Lacerta vivipara*
- Slow worm *Anguis fragilis*.

Current conservation status and use of the site

The reptile assemblage is designated under the New Forest SSSI.

The trail passes through Dwarf Shrub Heath (Unit 411) which is in favourable condition and passes adjacent to Fen, Marsh and Swamp habitat (Unit 424) which is unfavourable- recovering condition (Natural England, 2013).

The local Hampshire Amphibian and Reptile Group (HARG) 2012 Herpetofauna Report outlines that the main component species of the Reptile Assemblage, listed above, were present during the 2002-12 period. In addition the survey provided the following counts for Hampshire during the same period:

- Common Lizard 1102
- Sand Lizard: 149
- Slow Worm: 3126
- Adder: 808
- Grass Snake: 671
- Smooth Snake: 320

(HARG, 2012)

Please also see Appendix 6 for the condition table of the features in this group.

In addition to the HARG report, the New Forest Amphibian and Reptile Monitoring and Survey Partnership (NF-ARMS) collated existing records and undertook new surveys regarding Smooth Snakes in the New Forest. The collated and new surveys have shown Smooth Snakes to be present in the New Forest and specifically near to the trail where it enters Beaulieu Heath, near Moonhills Copse. The following records of smooth snake were recorded;

- 2000-2015: 1228 recorded sightings
- 1990-1999: 28
- 1980-1989: 211

(Limburn & Wilkinson, 2017).

Reptiles in Southern England will frequently be hibernating or have lower activity during the winter. Reptiles are active during Summer and especially during Spring where many will emerge from their hibernation and seek areas to bask in the sun, to raise their body temperatures. April and May are as such normally especially active months for reptiles, as is September, before the commencement of hibernation (Foster, 1999).

Ecological sensitivities to changes in access

The path passes through units 424, 411 and 191 of the New Forest SSSI: only 411 is recorded as having the presence of the reptile assemblage The path does also pass through habitat which is suitable for the assemblage and through functionally linked land.

Reptiles use habitats such as heathland, woodland and grassland, the path passes through these habitats in areas in or near to where the HARG 2012 survey reported all of the main component species of the assemblage being present.

Reptiles could be disturbed from foraging/hunting or basking as a result of changes in access.

Potential interactions with our proposals for England Coast Path are considered further in Section 4 of this document.

3.2.13 Fresh Water Fairy Shrimp

Current conservation status and use of the site
Fairy Shrimp can be found in transient puddles and ponds within the New Forest. An investigative report on the status of Fairy Shrimp and Tadpole Shrimp in the New Forest has recently been carried out (Aquilina, 2014) which found: <ul style="list-style-type: none">- Fairy Shrimp: Hatched in 9 of 28 locations surveyed. Additional locations were added later that may also contain additional breeding grounds for this species Please also see Appendix 6 for the condition table of this feature.
Ecological sensitivities to changes in access
The Fairy Shrimps' unique habitat means that it is located away from the access proposals and as such is ruled out of further consideration in this appraisal.

3.2.14 Tadpole Shrimp

Current conservation status and use of the site
The Tadpole Shrimp's habitat is restricted to transient wetland pools. The Tadpole Shrimp was once widespread in the UK according to historic records. Its decline is linked to the drainage of these naturally occurring temporary wetlands. Until recently the New Forest was one of the only areas thought to be inhabited by this Shrimp. Now other habitats in the UK have been identified. An investigative report on the status of Fairy Shrimp and Tadpole Shrimp in the New Forest has recently been carried out (Aquilina, 2014) which found <ul style="list-style-type: none">- Tadpole Shrimp: Hatched in 3 locations in the survey area.
Ecological sensitivities to changes in access
The Tadpole Shrimp's unique habitat means that it is located away from the access proposals and as such is ruled out of further consideration in this appraisal.

3.2.15 Earth Heritage Coast Cliffs and Foreshore

Composition of feature group
EO - Palaeogene FB - Palaeogene FM - Quaternary of South Central England EC - Quaternary of South Central England Invertebrate of Soft Cliffs
Current conservation status and use of the site
The New Forest SSSI has various Paleogene and Quaternary geologic features, most of these are

located in disused quarries, along stream banks and in woodland.

Please also see Appendix 6 for the condition table of the features in this group.

Ecological sensitivities to changes in access

Cliffs and associated geologic features have good resistance to most levels of recreational access and there is no reason to suppose that the proposals for the England Coast Path will have an impact on these. This feature is therefore **ruled out** from further consideration.

3.2.16 Fen, Marsh, Mire

Composition of feature group

H6410 Molinia meadows on calcareous, peat or clay-silt soil
H7140 Transition mires and quaking bogs
H7150 Depressions on peat substrates of the Rhynchosporion
Fen, Marsh and Swamp
M22 Juncus subnodulosus – Cirsium palustre fen meadow
M23 Juncus acutiflorus-Galium palustre
M25 Molinea caerulea Potentilla erecta mire
M30 Related vegetation of seasonally inundated habitats
S3 Carex paniculata swamp
S4 Phragmites Austalis reedbed
S12 Typha latifolia swamp
S21 Bolboschoenus maritimus swamp
Dwarf shrub heath and associated grassland, bog and mire
Lowland wetland including basin fen, valley fen, floodplain fen, waterfringe fen, spring/flush fen and raised bog
Bryophyte assemblage

Current conservation status and use of the site

Please also see Appendix 6 for the condition table of the features in this group.

Ecological sensitivities to changes in access

The above feature groups by their very nature are either unsuitable or undesirable to walk on, as a result of either being inundated or saturated regularly.

The route will not be aligned through these areas and although some will be within Coastal Margin most are either difficult to access (due to management or natural scrub) or are a significant distance from the path itself.

Based on the above reasons this Feature Group will be **ruled out** from further consideration in this appraisal.

3.2.17 Vascular Plant Assemblage, Rare Plants and Lichen

Composition of feature group

<p>Lichen assemblage</p> <p>Nationally scarce plant - <i>Chamaemelum nobile</i>, Chamomile</p> <p>Population of RDB plant - <i>Lobelia urens</i>, Heath Lobelia</p> <p>Population of RDB plant - <i>Ludwigia palustris</i>, Hampshire Purslane</p> <p>Population of Schedule 8 fungi - <i>Herichium erinaceum</i>, Hedgehog fungus</p> <p>Population of Schedule 8 lichen - <i>Catillaria laureri</i>, Laurer's Catillaria</p> <p>Population of Schedule 8 lichen - <i>Parmelia minarum</i>, New Forest Parmelia</p> <p>Population of Schedule 8 plant - <i>Eriophorum gracile</i>, Slender Cottongrass</p> <p>Population of Schedule 8 plant - <i>Gladiolus illyricus</i>, Wild Gladiolus</p> <p>Population of Schedule 8 plant - <i>Pulicaria vulgaris</i>, Lesser Fleabane</p> <p>Vascular plant assemblage – Woodland, Heathland, Acid Grassland, Fen. Notable species: <i>Baldellia ranunculoides</i>, <i>Carex montana</i>, <i>Cicendia filiformis</i>, <i>Chamaemelum nobile</i>, <i>Crassula tillaea</i>, <i>Deschampsia setacea</i>, <i>Gentiana pneumonanthe</i>, <i>Illecebrum verticillatum</i>, <i>Littorella uniflora</i>, <i>Lotus subbiflorus</i>, <i>Lycopodiella inundata</i>, <i>Melittis melissophyllum</i>, <i>Ophioglossum azoricum</i>, <i>Orobanche rapum-genistae</i>, <i>Pilularia globulifera</i>, <i>Polygonatum odoratum</i>, <i>Polypogon monspeliensis</i>, <i>Pulmonaria longifolia</i>, <i>Rhynchospora fusca</i>, <i>Thelypteris palustris</i>, <i>Trifolium glomeratum</i>, <i>Viola lactea</i>, <i>Vulpia ciliata</i></p>
Current conservation status and use of the site
Please also see Appendix 6 for the condition table of the features in this group.
Ecological sensitivities to changes in access
<p>Plant and lichen species within this feature group are vulnerable to trampling.</p> <p>Potential interactions with our proposals for England Coast Path are considered further in Section 4 of this document.</p>

3.2.18 Woodland

Composition of feature group
<p>H9120. Atlantic acidophilous beech forests with <i>Ilex</i> and sometimes also <i>Taxus</i> in the shrublayer (<i>Quercion robori-petraeae</i> or <i>Ilici-Fagenion</i>); Beech forests on acid soils</p> <p>H9130. <i>Asperulo-Fagetum</i> beech forests; Beech forests on neutral to rich soils</p> <p>H9190. Old acidophilous oak woods with <i>Quercus robur</i> on sandy plains</p> <p>H91D0. Bog woodland*</p> <p>H91E0. Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i>, <i>Alnion incanae</i>, <i>Salicion albae</i>); Alder woodland on floodplains*</p> <p>Wet Woodland</p> <p>Lowland Beech and Yew Woodland</p>
Current conservation status and use of the site
Please see Appendix 6 for the condition table for features in this group.
Ecological sensitivities to changes in access

Walking of routes in woodland have been shown to cause soil erosion and this is often linked to localised habitat degradation through trampling (Marzano & Dandy, 2012; Leung & Marion, 1996) Godefroid and Koedam (2004) although this is not always the case (Rawlinson, 2009; Hall & Kuss, 1989) and the erosion impact has been shown to be limited to focused areas within 2m of the trail (Dale & Weaver, 1974).

Forest floor associated flora and scrub could though be effected to some degree by potentially increased use of adopted current path routes, new route establishment and the inclusion of some woodland in spreading room.

Potential interactions with our proposals for England Coast Path are considered further in Section 4 of this document.

3.2.19 Lowland Neutral Grassland

Composition of feature group	
MG11 - <i>Festuca rubra</i> - <i>Agrostis stolonifera</i> - <i>Potentilla anserina</i> grassland	
MG13 - <i>Agrostis stolonifera</i> - <i>Alopecurus geniculatus</i> grassland	
MG5 <i>Cynosurus cristatus</i> – <i>Centaurea nigra</i> grassland	
MG6 <i>Lolium perenne</i> – <i>Cynosurus cristatus</i> grassland	
MG7 <i>Lolium perenne</i> leys & related grasslands	
MG8 <i>Cynurus cristatus</i> – <i>Caltha palustris</i> grassland	
MG11 <i>Festuca rubra</i> – <i>Agrostis stolonifera</i> – <i>Potentilla anserina</i>	
Lowland Meadows	
Current conservation status and use of the site	
<p>Neutral grassland is characterised by vegetation dominated by grasses and herbs on a range of circumneutral soils. It includes dry hay meadows and pastures, together with a range of grasslands which are periodically inundated with water or permanently moist. Most of these habitats occur below the level of agriculture enclosure, and are thus considered 'lowlands'.</p> <p>MG5 & 6 largely permanent pasture, are widespread in the UK and represent the only two communities locally which are normally on well drained land. MG7, 8, 11 and 13 grass communities are all typified by poorly drained or frequently flooded land, such as floodplains (Jefferson, Smith, & MacKintosh, 2014) and are widespread in much of England.</p> <p>Of all New Forest SSSI Units where Neutral Grassland is the main habitat type the condition is given below:</p>	
	<u>New Forest SSSI</u>
Favourable	21
Unfavourable- Recovering	19

Unfavourable-No Change	5
Unfavourable-Declining	13

Table 13. Unit Conditions for New Forest SSSI where Neutral Grassland is the main habitat (Natural England, 2013)

Those units which are Unfavourable-Declining are either as a result of inappropriate cutting management, weed control and under or overgrazing.

Ecological sensitivities to changes in access

In areas regularly used by dogs there is a risk of eutrophication causing changes in vegetation composition. A significant increase in usage by people and dogs may result in trampling.

Potential interactions with our proposals for England Coast Path are therefore considered further in Section 4 of this document.

4 Potential for interaction

In this part of the document we identify places where sensitive features are present and whether there could, or will not, be an interaction with proposed changes in access. Where we conclude there is potential for interaction between sensitive features and our proposals for England Coast Path at a particular location, in Section 5 of this document we consider the circumstances in more detail. This includes current access provision, how this will be affected by our coastal access proposals, and how use of the site for recreation might change as a consequence.

Our proposals for England Coast Path have two main components:

- Identification and physical establishment of a trail; and,
- Identification of an associated coastal margin.

Trail

A continuous walking trail – the England Coast Path National Trail - will be established by joining up existing coastal routes and creating new sections of path where necessary.

Coastal Margin

An area of land associated with the proposed trail will become coastal margin, including all land seawards of the trail down to mean low water.

Coastal margin is typically subject to new coastal access rights, though there are some obvious exceptions to this. The nature and limitations of the new rights, and the key types of land excepted from them, are explained in more detail in Chapter 2 of our Coastal Access Scheme. Where there are already public or local rights to do other things, these are normally unaffected and will continue to exist in parallel to the new coastal access rights. The exception to this principle is any pre-existing open access rights under Part 1 of the Countryside and Rights of Way Act 2000 (CROW) over land falling within the coastal margin: the new coastal access rights will apply in place of these.

Where public access on foot already takes place on land within the margin without any legal right for people to use the land in this way, the new coastal access rights will secure this existing use legally. Access secured in this way is subject to various national restrictions. It remains open to the owner of the land, should they wish, to continue tolerating other types of established public use not provided for by coastal access rights.

Natural England has powers that mean that we can, where necessary, impose local restrictions or exclusions on the new coastal access rights on grounds set out in the legislation. Such restrictions or exclusions do not apply to public rights of way, or to other types of pre-existing access right other than CROW rights (see above).

The England Coast Path and its associated coastal margin will be displayed on Ordnance Survey maps, on their republication, following commencement of new rights. Information will also be provided on web sites and by printed material from third parties. Information on access restrictions or exclusions will be posted locally and will also be provided on web sites.

4.2 Criteria for assessment

We have designed our proposals for England Coast Path around the Solent to complement the Bird Aware Solent initiative. The main way that our proposal will influence patterns and levels of recreational visits along this stretch is by the alignment we choose for the path. Where possible, we propose to align the England Coast Path along existing, regularly used routes. The benefits of this for managing visitor access are:

- Paths will be maintained to National Trail quality standard ¹
- Providing a high quality access route is a tried and tested technique for managing use of a site by visitors
- Altering existing access routes - or imposing new limitation on access - could cause displacement of existing use to more sensitive locations. This risk is reduced by adopting established routes.

People and birds in close proximity is the current position across much of the Solent coast. We have considered whether there is a risk of an impact on non-breeding waterbirds from increased use of established, regularly used paths. We know that routes, like the Solent Way and Keeping Copse Riverside Walk, in places, pass close to areas that are used by feeding and resting waterbirds, including Dark-bellied Brent geese and waders. There are several factors to consider:

- The degree to which use of the path might increase
- How those new users might behave
- Whether any change in use might interfere with birds use of adjacent habitat
- Whether this might have an adverse impact on those SPA features

We know that at popular and easily accessible locations, the majority of visits to a National Trails are made by people that live or are staying nearby. A survey of visitors to National Trails carried out in 2014 found that 74% of visitors interviewed on a National Trail were either local residents or visitors staying nearby (TSE Research, 2015) Similarly, local visitor and household surveys for the Solent area have established that the main determining factor for the pattern and level of visits to coastal locations is proximity to where people live and convenience. Across the Solent area, it was found that just over half (52%) of visitors travel by car and that half of these journeys are less than 9.5km. 39% of visits were made by foot and half of these visitor's lived within 1km of the site (Fearnley *et al*, 2012).

Another important consideration is whether the behaviour of people using the path might be altered by our proposals. The risk of an impact on wildfowl could be increased if our proposals were to cause a change resulting in visitor behaviour being more disturbing: for example people leaving the path and walking through places where feeding birds are present. We believe that this is unlikely to happen where we adopt an existing, regularly used path because in this situation, any

¹ This means:

- Structures are always safe, comfortable, easy and convenient to use
- Surfaces are in good condition and appropriate to the geology and soils over which the trail passes
- The route is easy to follow with consistent, accurate, unobtrusive way marking and destination signage
- Consistent high quality design, style and use of materials to suit the character of the local landscape with historical features maintained where possible
- Readily passable routes free from undergrowth and overhanging vegetation

(Extract from the National Trail Quality Standards)

new visitors attracted by the England Coast Path designation are likely to be first time or infrequent visitors that have come to the area intent on walking the Coast Path and following the waymarked trail provided. This trail will, in many areas, be better waymarked than is currently the case, making it even easier to stick to the path.

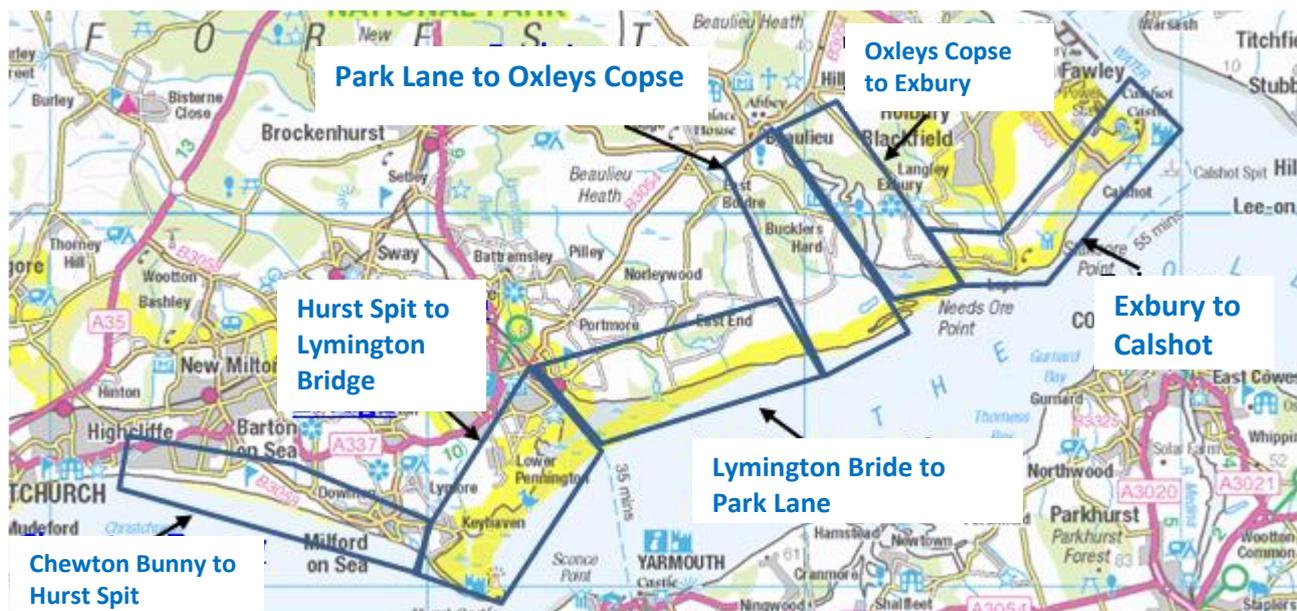
Where England Coast Path follows an existing route, it is reasonable to assume that any increase in disturbance to birds using surrounding habitat will be limited to an extent, or in some cases avoided, by some or all of the following considerations: birds in that location are already accustomed to some disturbance and may be de-sensitised to some degree and the ECP trail improvements, way-marking, signage and in some cases screening, will encourage many users (and particularly new visitors) to stick to the path where they are less likely to generate disturbance.

We have not applied a hard and fast rule to defining when a path is established and regularly used. As a guide, in the context of the Solent, we have considered paths to be 'established' where routes are publicised locally, paths have been clearly surfaced, and/or there is regular signposting/waymarking; and to be 'regularly used' based on the advice of local site managers and consultation with Bird Aware Solent. Where the information is not available or there is doubt about the level of current use, we have erred on the side of caution.

In addition, where the level of risk is greater we have gone on to make a more detailed assessment in Section 5 of the document. We have done this in situations where an existing route passes close to a sensitive area and:

- The existing route is in poor condition as an access route and is not regularly used; our proposals would substantially enhance the route and make it available to wider use and in a place where it could interact.
- That area has been identified as a target for action or there are already management measures in place.

4.3 Areas for Consideration



Map 1. Outline of Chapters in Highcliffe to Calshot Overview

Map 1 outlines the parts of the Highcliffe to Calshot stretch that will be considered here. If you are viewing this document electronically and are interested in a specific area, please click on the name or area that is of interest, this will take you to appropriate page in this section.

4.3.1 Chewton Bunny, Highcliffe to Hurst Spit, Hurst

Outline of changes in access

The route is aligned along existing access and predominantly along the well used E9 European Long Distance Route, Solent Way and the main coastal walking route between Christchurch and Lymington.

The route is mainly aligned close to the coast, except where it deviates inland around the north of Hoburne Naish Holiday Park.

The cliff face between Barton-on-Sea and Milford-on-Sea is eroding and we expect to rollback the route to match this; maintaining these existing routes which people are accustomed to using.

We do not propose to add significant infrastructure to this area. Waymarking, signage and gates will be installed.

Chewton Bunny to Hurst Spit- For further detail on the proposed plans for this area please see the Highcliffe to Calshot Overview and Chapter 1 and maps; 1a,1b,1c,1d,1e.

Potential for interaction (or lack of it)

Potential for interaction with sensitive features is believed to be low.

The proposed route is aligned close to the Highcliffe to Milford Cliffs SSSI, the only designated feature considered here. Although this SSSI is technically within Coastal Margin, the nature of the local topography; sheer cliffs and narrow shoreline along the cliff toe, mean that access onto this SSSI is already greatly restricted due to the natural conditions here.

Our proposals for the England Coast Path follow currently used routes and means of access, which are well founded. We do not propose significant changes in this area but with the Access Authority, will maintain the current coastal route here in its current form. As we are maintaining the existing routes and not proposing other changes in route in this area, we do not expect there to be a noticeable difference in the overall level or pattern of use as a result of our proposals. Therefore, we have concluded that there will be no likely significant effect from the ECP access proposal on the nature conservation features identified in Section 3 within this section of the path.

4.3.2 Hurst Spit to Lymington Bridge

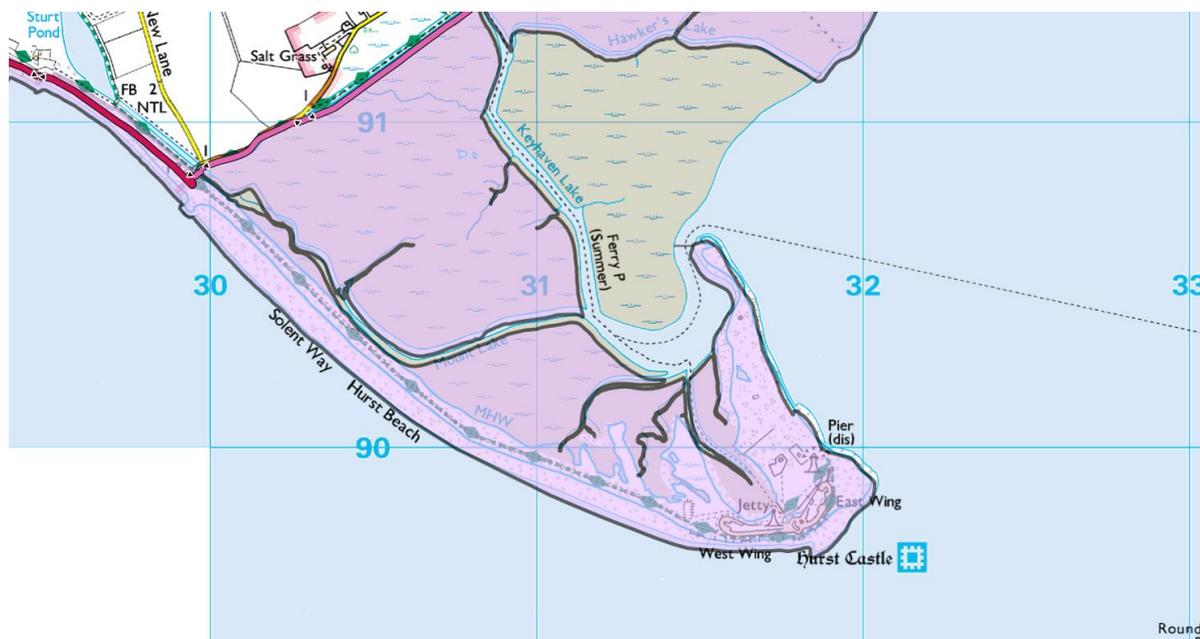
Outline of changes in access

The proposed route almost entirely follows the Solent Way, along a well maintained waterside route between Milford-on-Sea to Lymington Bridge. We will retain the existing surfacing and waymarkers, adding additional signage to help guide people along the route.

We do though propose to alter the route at Eight Acre Pond close to the Pennington Marshes. Currently the Solent Way goes inland here but we propose to align along an existing Public Right of Way following the well used seawall route. This route change has been chosen to reflect that people are already using this more seaward route over the more inland Solent Way at this point.

This Chapter does not add any significant infrastructure or large route changes.

We do not anticipate significant rollback along this section.



Map 2 – Coastal Margin at Hurst Spit and associated intertidal. Coastal Margin shown in violet.

We propose to establish a Section 25A Direction to Exclude access over much of the intertidal within the Coastal Margin here, which is predominantly given over to mudflats and salt marsh, as they are not believed to be suitable terrain for access. For further detail on this please see the Highcliffe to Calshot Overview Map E.

Hurst Spit to Lymington Bridge- For further detail on the proposed plans for this area please see Highcliffe to Calshot Overview and Chapter 2 and maps; 2a,2b,2c,2d,2e.

Potential for interaction (or lack of it)

Potential for interaction with sensitive features is believed to be low.

This is a well accessed area, served by a range of amenities (car parks, tourist attractions, foot ferries). There are several visitor attractions such as Pennington Marshes, Lymington Town and Hurst Spit which have clear and well promoted access routes through them.

The England Coast Path route is set back from Hurst Spit and will encourage people to carry on along the coast here, along easier walking conditions than the uneven nature of the shingle spit. There is no reason to doubt that those accessing the spit will continue to use the well waymarked and longstanding routes down the spit to the popular tourist attraction of Hurst Castle, as they have done for a considerable time.

The Coastal Margin in this area includes Hurst Spit and the intertidal areas between this and Lymington. Due to the following reasons we believe that access within the Coastal Margin is unlikely to change:

- The Coastal Margin across the majority of intertidal mudflats and saltmarshes here, is effectively removed as a result of our proposal to establish a Section 26 Direction to exclude access over these (see Appendix 7). As a result of this addition and the existing well managed access along Pennington and Keyhaven Marshes, we do not believe it likely that there will be a significant interaction between walkers of the trail and the intertidal here.
- Hurst Spit has well established routes along the embankment or by ferry boat to Hurst Castle. We have aligned our route well inland here to allow walkers to enjoy better walking conditions. We do not believe the Coastal Margin on the spit here establishes any new access rights than are already enjoyed by the public and that the existing access patterns are well established and managed. As a result and in combination with the adjacent intertidal Direction to exclude access we do not believe the Coastal Margin constitutes a risk to local sensitive flora or bird species.

Based on these points we believe that the Coastal Margin here will not affect existing access patterns and that access here is already well managed. As a result we will not be considering the Coastal Margin in this area further.

Our proposals for the England Coast Path follow currently used routes and means of access, which are well founded.. As we are maintaining the existing routes, greatly limiting the extent of Coastal Margin and not proposing other changes in route in this area, we do not expect there to be a noticeable difference in the overall level or pattern of use as a result of our proposals. Therefore, we have concluded that there will be no likely significant effect from the England Coast Path access proposal on the nature conservation features identified in Section 3 within this section of the path and as such this area will not be considered further.

4.3.3 Lymington Bridge to Park Lane

Outline of changes in access

The route uses a mixture of existing access such as the Solent Way and Pylewell permissive path and newly created routes at Pitts Deep and near Sowley.

Lisle Court Road to Tanners Lane

We propose to follow the existing walked route here which includes access along the existing Pylewell Permissive path.

The existing trail will be improved through: the addition of self-binding aggregate at key points where the path has become worn and muddy (primarily in the wooded areas), short (<5m) stretches of boardwalk to avoid waterlogged sections again primarily in the wooded areas, signage and interpretation panels detailing the local environment and any nearby restrictions. These upgrades are aimed at maintaining and promoting the trail set back from the coast

Tanners Lane to Browns Lane

We propose to create new access here across arable land, woodland and existing lanes. Most of this access is centred around Pitts Deep Wood.

We propose to add fencing, a viewpoint and interpretation panels to help manage access here.

Browns Lane to Thorns Marsh

We propose to create new access here along lanes and arable land, as well as using some existing access. The access here is aligned close to the periphery of Sowley Marsh and through nearby fields.

We propose to add walked routes through arable farmland, as well as install gates to manage access.

Thorns Marsh to Park Lane

We propose to create new access here along an existing lane.

Throughout the area between Lyminster Bridge and Park Lane we do not expect significant rollback.

We propose to establish a Section 25A Direction to Exclude access over much of the intertidal within the Coastal Margin here, which is predominantly given over to mudflats and salt marsh, as they are not believed to be suitable terrain for access. For further detail on this please see Appendix 7.

Lyminster Bridge to Park Lane- For further detail on the proposed plans for this area please see Highcliffe to Calshot Overview and Chapter 3 and maps; 3a,3b,3c,3d,3e,3f.

Potential for interaction (or lack of it)

There is potential for interaction between the access proposal and the nature conservation features identified in Section 3 at the following locations. Therefore, these sections are assessed further in Section 5 of this document.

- **Pitts Deep** – potential for interaction with the following Features or Feature Groups:
 - Salt Marsh, Supra littoral Sediment,
 - Non-Breeding Dabbling Ducks, Non-Breeding Waders and Shelduck, Non-Breeding Dark Bellied Brent Geese, Non-Breeding Waterbird Assemblage, Breeding Waders and Shelduck, Breeding Terns, Ringed Plover, Black-Headed Gull and Mediterranean Gull
- **Sowley Marsh**
 - Salt Marsh, Supra littoral Sediment,
 - Non-Breeding Dabbling Ducks, Non-Breeding Waders and Shelduck, Non-Breeding Dark Bellied Brent Geese, Non-Breeding Waterbird Assemblage, Breeding Waders and Shelduck, Breeding Terns, Ringed Plover, Black-Headed Gull and Mediterranean Gull, Breeding Grey Heron. Breeding Little Grebe, Shoveler, Water Rail and Mute Swan
- **Sowley Fields**
 - Non-Breeding Waders and Shelduck, Non-Breeding Dark Bellied Brent Geese, Non-Breeding Waterbird Assemblage
- **Thorns Marsh**
 - Salt Marsh, Supra littoral Sediment,
 - Non-Breeding Dabbling Ducks, Non-Breeding Waders and Shelduck, Non-Breeding Dark Bellied Brent Geese, Non-Breeding Waterbird Assemblage, Breeding Waders and Shelduck Breeding Terns, Ringed Plover, Black-Headed Gull and Mediterranean Gull

The remainder of this chapter has been screened out from further assessment. We will be adopting existing routes and do not require any improvements or alterations to the route. These other areas are already well promoted locally, therefore we don't expect a noticeable change in local levels and patterns of use. There could be a small overall increase in people using the route due to its status as a National Trail, thereby attracting walkers from further afield. We consider that the route is already well managed and that the existing measures (clear waymarking, and well-maintained paths) are working. Apart from the aforementioned areas, the remainder of this chapter is ruled out from further consideration.

4.3.4 Park Lane to Oxleys Copse

Outline of changes in access

The route uses predominantly existing access such as the Solent Way and permissive access in Oxleys Copse but there are some new access routes such as those on and close to Park Lane.

Park Lane to St Leonards Barn

We propose to align along a Park Lane here, creating new access and also along the Solent Way, an existing promoted walking route.

We will be creating new access just off Saint Leonards Lane to allow people better long range views of the Solent and Isle of Wight. This access is through pasture fields and woodland.

It should be noted that the following areas: Park Shore, fields near Park Farm and Needs Ore, part of the North Solent NNR, will be included in Coastal Margin, as they lie seaward of the path.

St Leonards Barn to Burnt Oak Copse

We propose to follow the existing Solent Way between St Leonards Barn to Burnt Oak Copse, near Agamemnon Boat Yard.

Burnt Oak Copse and Keeping Copse

We propose to use an existing permissive path along the shoreline here. The path runs adjacent to the Beaulieu River.

The existing boardwalks and signage along this permissive path will be improved so that the route is easier to use and more convenient for people to walk on.

Keeping Copse to Oxleys Copse

This route predominantly follows the existing Solent Way promoted route. It does also include a permissive route along Dock Lane, east of Beaulieu Village.

Throughout the area between Park Lane and Oxleys Copse we do not expect significant rollback.

We propose to establish a Section 25A Direction to Exclude access over much of the intertidal within the Coastal Margin here, which is predominantly given over to mudflats and salt marsh, as they are not believed to be suitable terrain for access. For further detail on this please see Appendix 7.

Park Lane to Oxleys Copse- For further detail on the proposed plans for this area please see Highcliffe to Calshot Overview and Chapter 4 and maps; 4a,4b,4c,4d.

Potential for interaction (or lack of it)

There is potential for interaction between the access proposal and the nature conservation features identified in Section 3 at the following locations. Therefore, these sections are assessed further in Section 5 of this document.

- **Needs Ore, Park Farm and Park Shore**
 - potential for interaction with the following Features or Feature Groups:

- Salt Marsh, Supra littoral Sediment, Shifting dunes along the shoreline with *Ammophila arenaria*, Vascular Plant Assemblage – Woodland, Heathland, Acid Grassland, Fen
 - Non-Breeding Diving Ducks, Non-Breeding Dabbling Ducks, Non-Breeding Waders and Shelduck, Non-Breeding Dark Bellied Brent Geese, Non-Breeding Waterbird Assemblage, Breeding Waders and Shelduck, Breeding Terns, Ringed Plover, Black-Headed Gull and Mediterranean Gull, Assemblage of Breeding Birds for Lowland Damp Grassland, Assemblage of Breeding Birds for Lowland Open Waters and their Margins, Assemblage of Breeding Birds for Sand dunes and Salt Marshes, Breeding Wetland Birds, Breeding Little Grebe, Shoveler and Water Rail.
- **Keeping Copse**
- potential for interaction with the following Features or Feature Groups:
- Salt Marsh, Supra littoral Sediment, Vascular Plant Assemblage – Woodland, Heathland, Acid Grassland, Fen.
 - Non-Breeding Diving Ducks, Non-Breeding Dabbling Ducks, Non-Breeding Waterbird Assemblage, Non-Breeding Waders and Shelduck, Non-Breeding Dark Bellied Brent Geese, Breeding Waders, Shelduck and Snipe, Breeding Terns, Ringed Plover, Black-Headed Gull and Mediterranean Gull, Assemblage of Breeding Birds for Lowland Damp Grassland, Assemblage of Breeding Birds for Lowland Open Waters and their Margins, Assemblage of Breeding Birds for Sand dunes and Salt Marshes, Breeding Wetland Birds, Breeding Little Grebe, Shoveler and Water Rail.

The aforementioned areas, as well as those outlined in section 4.3.7 and 4.3.8, consider the great majority of Coastal Margin within the Beaulieu River and Estuary. Outside of the aforementioned areas we do not believe the remaining Coastal Margin constitutes a risk to local sensitive features due to it either being Excepted Land such as parks, gardens and arable land or being very undesirable to access such as thick woodland or agricultural fields. In addition, the Coastal Margin is effectively removed close to the Beaulieu Estuary as a result of our proposal to establish a Section 26 Direction to exclude access over the great majority of the mudflats and salt marsh in this area (please see Appendix 7 for further details).

The remainder of this chapter has been screened out from further assessment. We will be adopting existing routes and do not require any improvements or alterations to the route. These areas are already well promoted locally and access routes are well established, therefore we don't expect a noticeable change in local levels and patterns of use. There could be a small overall increase in people using the route due to its status as a National Trail, thereby attracting walkers from further afield. We consider that the route is already well managed and that the existing measures (clear waymarking, and well-maintained paths) are working. Apart from the aforementioned areas the remainder of this chapter is ruled out from further consideration.

4.3.5 Oxleys Copse to Exbury

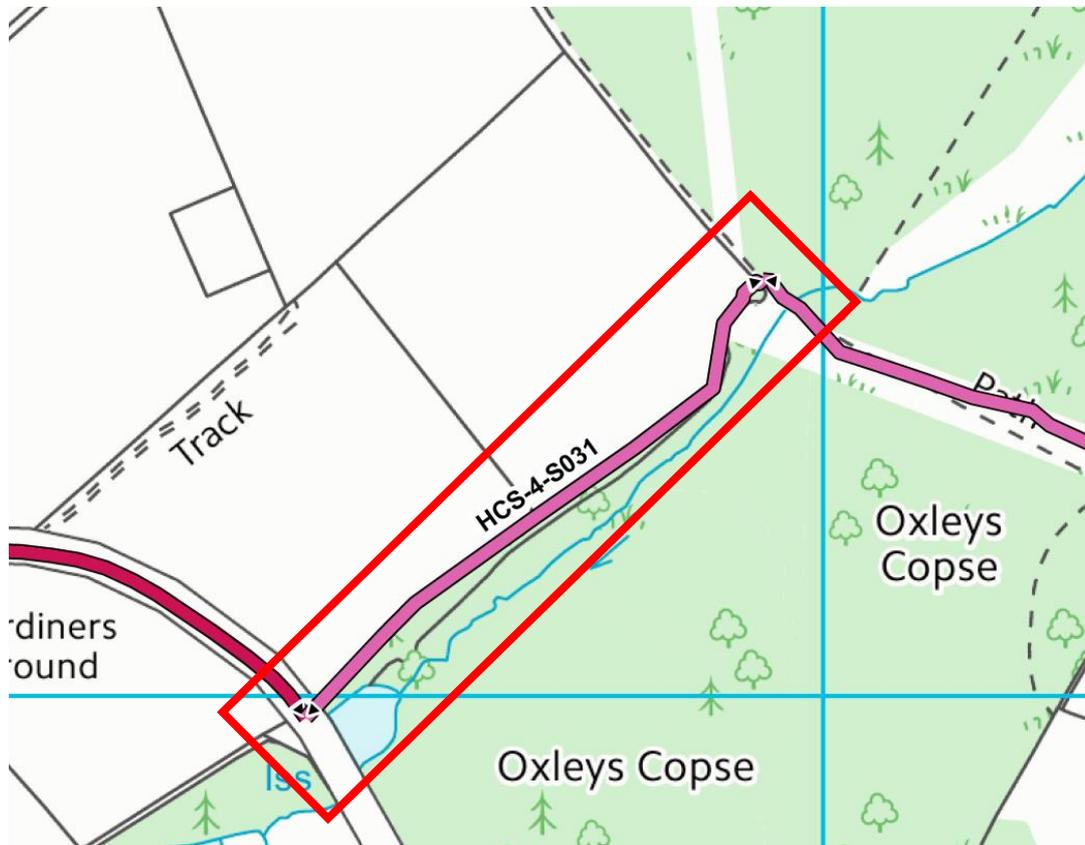
Outline of changes in access

The route is proposed primarily along existing permissive, Open Access and roadside access in this area, with only a small addition of new access within woodland.

Oxleys Copse to Moonhills Copse

The route follows the Beaulieu Estate permissive path along Dock Lane and both Oxleys and Moonhills Copses, as well as passing through an area of Open Access.

New access is proposed just within the western periphery of Oxleys Copse as shown in map 3.



Map 3. Access adjacent to Oxleys Copse, Dock Lane, Beaulieu

Moonhills Copse to Otterwood

We propose to align the route along an existing walked route and Summer Lane.

Otterwood to Exbury, along Summer Lane

We will be routing the trail along Summer Lane until just passed Exbury village.

Coastal margin is entirely seaward of the trail, across a mixture of pasture, paddocks, woodland and Excepted private properties and gardens.

Throughout the area between Oxleys Copse and Exbury we do not expect significant rollback.

We propose to establish a Section 25A Direction to Exclude access over much of the intertidal

within the Coastal Margin here, which is predominantly given over to mudflats and salt marsh, as they are not believed to be suitable terrain for access. For further details please see Appendix 7.

Oxleys Copse to Exbury- For further detail on the proposed plans for this area please see Highcliffe to Calshot Overview and Chapter 4 and maps; 4e,4f,4g,4h.

Potential for interaction (or lack of it)

There is potential for interaction between the access proposal and the nature conservation features identified in Section 3 at the following locations. Therefore the following areas are assessed further in Section 5 of this document:

- **Moonhills**

- potential for interaction with the following Features or Feature Groups:

- Lowland Dry Heathland and Acid Grassland, Vascular Plant Assemblage, Rare Plants and Lichen.
- Breeding Wetland Birds, Breeding Heathland Birds, Assemblage of breeding birds associated with heathland and woodland, Amphibian Assemblage, Reptile Assemblage.

Moonhills is within the New Forest SSSI, SPA, SAC and RAMSAR designations. These designations have numerous sensitive features, it is not anticipated that the access proposals will cause an interaction between the remainder of these features and trail users. The features listed above will be assessed further in Section 5 of this report as there is potential for interaction.

- **East Beaulieu River**

- potential for interaction with the following Features or Feature Groups:

- Salt Marsh, Vascular Plant Assemblage – Woodland, Heathland, Acid Grassland, Fen, Rides of Sims Wood, Steerley Copse and Spearbed Copse, Duke of Burgundy Butterfly and Light Crimson Underwing Moth
- Non-Breeding Dabbling Ducks, Non-Breeding Waders and Shelduck, Non-Breeding Dark Bellied Brent Geese, Non-Breeding Waterbird Assemblage, Breeding Waders, Shelduck and Snipe, Assemblage of Breeding Birds for Lowland Damp Grassland, Assemblage of Breeding Birds for Lowland Open Waters and their Margins, Assemblage of Breeding Birds for Sand dunes and Salt Marshes, Breeding Little Grebe, Shoveler and Water Rail.

The aforementioned areas, as well as those mentioned in section 4.3.6 and 4.3.8, consider the great majority of Coastal Margin within the Beaulieu River and Estuary. Outside of the aforementioned areas we do not believe the remaining Coastal Margin constitutes a risk to local sensitive features due to it either being Excepted Land such as parks, gardens and arable land, being very undesirable to access such as thick woodland or existing walked routes with clear waymarking. In addition, the Coastal Margin is effectively removed close to the Beaulieu Estuary as a result of our proposal to establish a Section 26 Direction to exclude access over the great majority of the mudflats and salt marsh in this area (please see Appendix 7).

The remainder of this chapter has been screened out from further assessment. We will be

adopting existing routes and do not require any improvements or alterations to the route. These areas are already well promoted and waymarked locally, therefore we don't expect a noticeable change in local levels and patterns of use. There could be a small overall increase in people using the route due to its status as a National Trail, thereby attracting walkers from further afield. We consider that the route is already well managed and that the existing measures (clear waymarking, and well-maintained paths) are working.

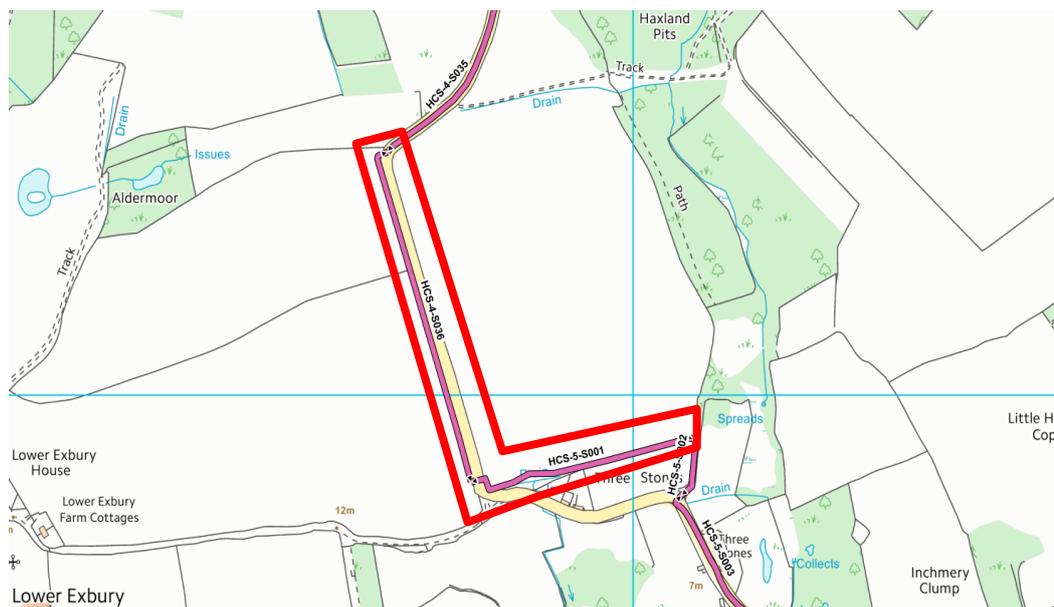
4.3.6 Exbury to Calshot

Outline of changes in access

The route is proposed along existing walked routes and roadside access in this area, as well as new access through some arable and pasture fields

Exbury to Shoreline Cottage

We propose to add the following access: East of Lower Exbury, to take the path off of a road, see Map 4. This route is aligned along the periphery of arable and along parts, will have screening put in place to reduce visual impact on waders, wildfowl and game birds using the fields.



Map 4 New public access proposed south of Exbury

Shoreline Cottage to Lepe

Between Shoreline Cottage and The Watch House we will align our route along the existing public right of way along the shoreline here during low tides and along the road further inland during high tides.

The route along the shoreline will be clearly signposted and waymarked to help create a clearer

route here than exists currently. Where the route passes along the shoreline close to Inchmery House and Unit 33 of the North Solent SSSI we propose to add in guide fencing and educational signage here to help enhance the route here, raise awareness about vegetated shingle and driftline habitats and avoid interaction with sensitive local flora communities.

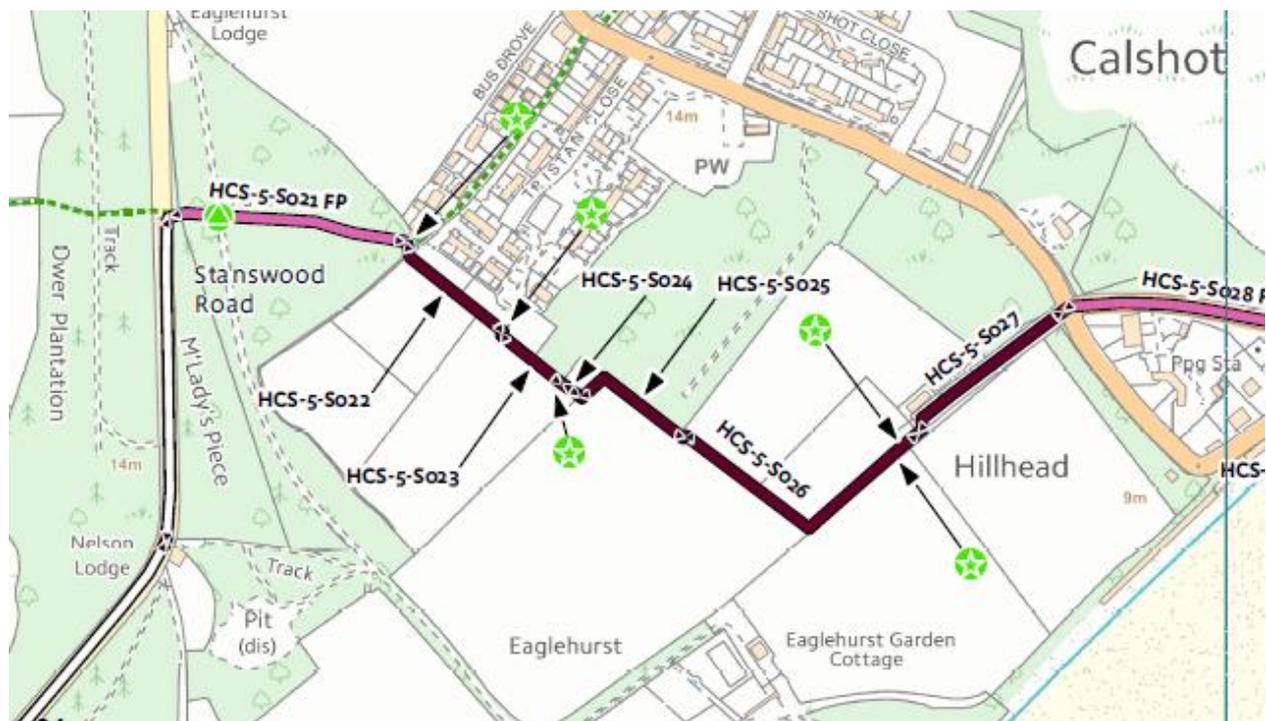
Lepe to footpath beside Elmfield Lane, Calshot Village

We will align through Lepe Countrypark along existing access. We will create new access along Stone Lane.

From Stone Lane we will align along Stanswood Road.

Footpath beside Elmfield Lane, Calshot village to Calshot spit

We propose to add in new access on land between Calshot village and Eaglehurst House, as per Map 5. This route follows on from the existing footpath leading to Tristan Close and Elmfield Lane. The route is aligned along the periphery of arable and pasture farm land and paddocks.



Map 5. Access alongside fields near Calshot.

Throughout the area between Exbury and Calshot we do not expect significant rollback.

We propose to establish a Section 25A Direction to Exclude access over parts of the intertidal within the Coastal Margin here close to the Beaulieu Estuary, which is predominantly mudflat and saltmarsh, as this terrain is not believed to be suitable for access. For further detail on this please see Appendix 7).

Exbury to Calshot- For further detail on the proposed plans for this area please see Highcliffe to Calshot Overview and Chapter 4 and maps; 5a,5b,5c,5d,5e,5f.

Potential for interaction (or lack of it)

There is potential for interaction between the access proposal and the nature conservation features identified in Section 3 at the following locations. Therefore, the following areas are assessed further in Section 5 of this document:

- **Exbury Fields**
 - potential for interaction with the following Features or Feature Groups:
 - Non-Breeding Dabbling Ducks, Non-Breeding Waders and Shelduck, Non-Breeding Dark-Bellied Brent Geese, Non-Breeding Waterbird Assemblage.
- **Cadland**
 - potential for interaction with the following Features or Feature Groups:
 - Non-Breeding Diving Ducks, Non-Breeding Dabbling Ducks, Non-Breeding Waders and Shelduck, Non-Breeding Dark Bellied Brent Geese, Non-Breeding Waterbird Assemblage, Breeding Waders, Shelduck and Snipe, Assemblage of Breeding Birds for Lowland Damp Grassland, Assemblage of Breeding Birds for Lowland Open Waters and their Margins, Assemblage of Breeding Birds for Sand dunes and Salt Marshes, Breeding Wetland Birds, Breeding Little Grebe, Shoveler and Water Rail.
- **Eaglehurst**
 - potential for interaction with the following Features or Feature Groups:
 - Non-Breeding Waders and Shelduck, Non-Breeding Dark-Bellied Brent Geese

The aforementioned areas, as well as those mentioned in section 4.3.6 and 4.3.8, consider the great majority of Coastal Margin between the Beaulieu Estuary and Calshot. Outside of the aforementioned areas we do not believe the remaining Coastal Margin constitutes a risk to local sensitive features due to it being Excepted Land such as parks, gardens and arable land, being very undesirable to access such as thick woodland and agricultural land or due to it being a well-established existing access route. In addition, the Coastal Margin is effectively removed close to the Beaulieu Estuary as a result of our proposal to establish a Section 26 Direction to exclude access over the great majority of the mudflats and salt marsh in this area (see Appendix 7).

The remainder of this chapter has been screened out from further assessment. We will be adopting existing routes and do not require any improvements or alterations to the route. These areas are already well promoted locally, therefore we don't expect a noticeable change in local levels and patterns of use. There could be a small overall increase in people using the route due to its status as a National Trail, thereby attracting walkers from further afield. We consider that the route is already well managed and that the existing measures (clear waymarking, and well-maintained paths) are working.

Exbury to Calshot- For further detail on the proposed plans for this area please see Highcliffe to Calshot Overview and Chapter 5 and maps; 5a,5b,5c,5d,5e,5f.

5 Assessment of any possible adverse impacts and mitigation measures

In this section of the document we look in more detail at sections of coast where there could be an interaction between the access proposal and sensitive features. We discuss possible risks to sensitive features and explain how these have shaped the design of our proposals and/or led to the inclusion of specific mitigation measures.

Map 6 below shows the areas brought forwards for further assessment from Section 4.



Map 6. Location of areas considered in Section 5

5.1 Pitts Deep: Tanners Lane to Browns Lane

5.1.1 Ecological sensitivity

- Non Breeding Waders and Shelduck**
- Non Breeding Dark-Bellied Brent Geese**
- Non Breeding Dabbling Ducks**
- Non-Breeding Waterbird Assemblage**

The arable fields between Tanners Lane and Browns (see Maps 8 and 9) have records of use by Dunlin, Ringed Plover, Dark-bellied Brent Geese and grey plover (Cox & Combridge, Pitts Deep Winter Bird Survey 2016/17, 2017) Oystercatcher, Turnstone and Curlew (Brent Goose and Wader Interim Strategy, 2018) as roost sites during high tide.

The in preparation, Brent Goose and Wader Strategy 2018 (HIOWWT, 2018) classifies potential high tide roosts areas across the Solent in to areas of high to low use by Dark-bellied Brent Geese and Waders, please see Appendix 5 for definitions and map of the Pitts Deep area. The fields surrounding Pitts Deep Copse are classified as follows:

- NF161
 - Primary Support Area
 - Brent Geese, Ringed Plover and Curlew had the highest recorded counts.
- NF162
 - Primary Support Area
 - Brent Geese, Ringed Plover and Lapwing had the highest recorded counts.
- NF165
 - Low Use
 - Lapwing and Redshank had the highest recorded counts

(HIOWWT, 2018)

In the previous iteration of this strategy these fields were considered 'Uncertain' and Dark-bellied Brent Geese were not recorded (HIOWWT, 2010).

The intertidal mudflat and salt marsh, is used by waders and Dark-bellied Brent Geese to feed. Feeding will usually occur up until High Tide. Brent Goose and Wader Strategy (2010) classified NF159 as 'Important' for Brent Geese and 'Uncertain' for waders, this site was not classified in the 2018 version (HIOWWT, 2018).

A recent survey by Cox and Combridge recorded peak counts of 200 Dunlin and Knot, as well as 49 Grey Plover on the intertidal here. Dark-bellied Brent Geese and Wigeon were also present (Cox & Combridge, 2017). There is not much additional information but as the intertidal here is similar to the coast at Pylewell, we would expect the following species to be present: Knot, Dunlin, Curlew, Grey Plover, Wigeon, Turnstone, Gadwall, Bar-tailed Godwit, Ringed Plover and Dark-bellied Brent Geese.

The key periods of activity in this area are primarily between October and March but populations of Ringed Plover and Grey Plover can be present in August and September.

Based on the above it is believed that a range of non-breeding waders and Dark-bellied Brent Geese use the intertidal and fields in this area and these features **will be considered further**.

Breeding Waders and Shelduck

Breeding Terns, Ringed Plover, Black-Headed Gull and Mediterranean Gull

The shoreline and offshore chenier banks are suitable habitat for Oystercatcher, Ringed Plover and Redshank.

Oystercatcher, Redshank and Ringed Plover have been shown to nest on chenier banks and salt marshes between Pylewell and Tanners Lane shorelines. These species, particularly Ringed Plover and Oystercatcher, have also been recorded nesting on the shorelines between Park Shore and Warren Shore further east.

Salt Marsh

The intertidal area between Tanners Lane and Browns Lane is predominantly mudflat, with Salt Marsh habitat concentrated in the intertidal near the bottom of Tanners Lane and in the intertidal southwest of the beach at Pitts Deep.

Along the shoreline between Tanners Lane and the western extent of Pitts Deep beach some salt marsh species have been noted on site visits.

As Salt Marsh habitat is vulnerable to concentrated trampling **this feature group will be considered further in this assessment**

5.1.2 Current access provisions and use of site for recreation

Tanners Lane has a car park which has an estimated 10 available spaces (Davies, A Census of Car Parks Serving the New Forest National Park Coast, 2011) but is only available at low tide, as it is situated below the Mean High Water mark and is thus underwater twice a day. It is not formally managed but does have a dustbin and information board maintained by local residents.

People frequently use this car park to walk westwards along the Pylewell Permissive path, as this is the only place between Lymington Ferry Terminal and Bucklers Hard where people can freely access the coast currently. The permissive path is signposted and maintained by the Pylewell Estate. In 2015 a new footbridge was installed along the Pylewell permissive which has served to further increase access along this path and at Tanners Lane.

Natural England has installed an automated people counter on the permissive path at Pylewell. Visit data from counters are often expressed as the annual average daily total (AADT) which is the average number of times someone walked past the counter per day in a year. For 2017, the AADT at Pylewell was 60 (Ecovisio, 2017).

Tanners Lane itself is a public highway and itself has space for ~32 cars but the majority of this space is located towards the northern and middle parts of the lane, as it narrows considerably in the south. In addition many local residents use these spaces for their own cars, particularly at weekends and outside working hours.

People do walk eastwards from Tanners Lane car park, along the coast at times. Going east along the coast is problematic due to relatively high erosion of the cliff, causing slumping, making walking along the shoreline here arduous and at high tides to access is not possible. People trapped by high tides along this section have been forced to climb up the cliffs and the nearby seawall of a house adjacent to the bottom of Tanners Lane, according to local residents.

Aside from the shoreline, the land between Tanners Lane and Browns Lane has no footpaths leading into it and is maintained as private land, through fencing and signage. Pitts Deep Copse has several vehicle tracks that lead to houses or the beach along the shoreline here. Local residents are believed to access the shoreline at Pitts Deep and Browns Lane. The field between

Pitts Deep Copse and Browns Lane also has a mown route, which is maintained by local residents as a circular walk within the field but also with access to Pitts Deep Copse and Browns Lane via a stile.

The southern end of Shotts Lane and the verge along Sowley lane near to Sowley Pond are also used to park cars but the available spaces are limited to ~7 and ~8 spaces. Both these areas have been observed to receive distinctly less parking access than Tanners Lane.

Browns Lane itself is occasionally accessed by fishermen seeking to access the shoreline at the bottom of the lane and Sowley Pond. This is discouraged by local residents, as the lane is private.

5.1.3 Access proposal



Map 8. Proposed Access at Pitts Deep

Our proposed alignment for the England Coast Path between Tanners Lane and Browns Lane use a combination of new access and existing vehicle tracks.

Between Tanners Lane and Pitts Deep copse the route follows the southern boundary of an arable field and then along a hedged & fenced ridge. The route is then aligned within the treeline through Pitts Deep Copse, running parallel to the shoreline and then bearing northwards, using existing paths and vehicle track to the north-western edge of the copse. The route between Pitts Deep Copse and Browns Lane is aligned through a pasture field, partly using an existing mown path.

The route through Pitts Deep woodland has been chosen so as to both attain good scenic views of the shoreline, Solent and Isle of Wight, whilst still ensuring the path is within the treeline. An existing barbed wire fence will be kept. When the trail meets the vehicle track that cuts north to south through Pitts Deep copse, ECP signage will only indicate the proposed route. However as the

southward tracks falls within Coastal Margin, walkers will have a right of access along the vehicle track, to access the shoreline.

5.1.4 Predicted change in use of site for recreation

We are establishing a new footpath and would predict a large increase of access between Tanners Lane and Pitts Deep on both the trail and the Coastal Margin, as there is currently no access available for the public to use.

We would expect that people using the neighbouring Pylewell permissive path may opt to walk along the new route at Pitts Deep, as it is new access and would be appealing for local walkers.

As Tanners Lane is the only car park in the area, we would expect people to park here and walk eastwards along the route, then return to their car by the same route.

Based on data completed through the Solent Disturbance and Mitigation Project (SDMP) it was found that 97% of people walk 3.1km or less in any one visit (SRMP, 2014). As such we can reasonably expect the majority of people to walk no more than approximately 1.55km before beginning their return journey. This would see most people accessing from Tanners Lane, through Pitts Deep Copse, to the pasture field west of Browns Lane and then turning back on themselves.

The Solent Way runs 1km further inland from the proposed route, therefore we are creating the potential for a circular route, starting and ending at Tanners Lane carpark. This would include both the England Coast Path and Solent Way, with a combined distance of approximately 4.2km.

5.1.5 Possible risks to sensitive features

Non-Breeding Birds

The main risk to non-breeding birds in this area are people and dogs, which birds may interpret as a threat, interrupt feeding or causing birds to expend extra energy to move or fly away from the perceived threat. This disturbance could occur inland or on the intertidal and can be broken down further into:

- Direct disturbance such as dogs running into a flock of birds and causing a flight response
- Indirect line-of-sight disturbance such as people entering a field, some distance from the birds, causing them to stop feeding and move further away.

The chance of these risks occurring along this area are limited to the arable fields and shoreline, where non-breeding birds tend to be located.

Arable fields

As discussed earlier in this section; the arable fields further inland here are used by a variety of waders such as Dunlin, Grey Plover and Ringed Plover. Based on nearby WeBS counts and our knowledge of the local species, the winter months between late September to March are the period in which the fields will see the greatest numbers of waders. Plover numbers usually peak in August and September. The increased numbers of birds during the wintering months, and the more challenging climatic conditions, means that bird numbers will be more susceptible to disturbance from access at this time.

The latter winter months in particular see flora and invertebrate numbers drop on the intertidal and this may cause species like Curlew and Dark-Bellied Brent Geese to use the arable fields in land more frequently.

The route has been purposefully aligned so only the arable field between Tanners Lane and Pitts Deep Copse, 'A' in Map 9 would be vulnerable to disturbance. Arable Fields B and C in Map 9 are further away from the route. The route does run close to field C but the scrub field '3' which it runs through has a relatively high sward height and there is an intervening fence, as such the risk of disturbance is believed to be avoided here.

Field 1 is a pasture field with a low sward height, due to its size and hedging on two sides it is not believed to be used frequently by waders or wildfowl. Walkers and dogs will be kept on the other side of an existing fenceline here and as such any direct disturbance risk is reduced. Field 2 and 3 have relatively high sward heights and are not thought to be suitable for most waders to use for roosting.



Map 9. Outline of fields at Pitts Deep

The route where it enters field A from Tanners Lane to where it enters scrub field 2, is open with fencing facing field 1. This distance is approximately 270m. There is a risk of indirect and long distance disturbance here, primarily from dogs. The following risk will be considered further:

- The risk of both direct and indirect disturbance to birds from new access along the west of field A.



Map 10. Close-up Satellite View of route through field between Tanners Lane and Pitts Deep Copse. Red line related to the proposed route. Green shaded area relates to the scrubland. The black border related to the boundaries of the scrub area, all of which is either fenced or hedged.

The route within scrub field 2 has been setback from field A, so as to benefit from the high grass sward height here. By routing the path further seaward here the risk of indirect line-of-sight disturbance by dogs in particular is greatly reduced. This also has an additional benefit of preventing dogs on the path from seeing birds on field A, meaning the likelihood they will run onto this field or start barking is reduced.

Field 2 is also fenced on all sides, further helping to control the use of dogs in this area. There remains a small risk that due to the relatively narrow strip of land here (scrub field 2) that dogs off the lead might run underneath the fence and out onto field A. The following risk will be considered further:

- The risk of dogs getting underneath or otherwise circumventing the existing fenceline between field A and scrub field 2 and directly disturbing any waders or wildfowl using this field.

Shoreline

The intertidal is used year round here by waterbirds but with significant peaks in use between September-March based on nearby WeBS counts at Pylewell. Plover may though peak earlier in the year between August and September.

Waders will feed on the intertidal salt marsh here and may use the shoreline and further offshore chenier banks, as roosts whilst they wait for tides to recede and feeding to continue. It is at High Tide, that birds are most sensitive to direct disturbance. As the land further back is higher than the shoreline and vegetated or wooded, there is also a risk of people or dogs emerging from these areas and surprising waders, potentially causing a flight response.

The main areas which walkers can access the shoreline and the likely risks associated with each

are:

Tanners Lane informal car park: Although the vast majority of people using this car park or walking in this area currently will use the existing Pylewell Permissive path and head westwards from this point, some do access east from here along the shoreline towards the beach at Pitts Deep Cope.

As we are proposing to establish a promoted route here there is a likelihood that more people will be brought to the area as a result of our proposals. This in turn could increase the amount of people trying to access along the shoreline.

The trail has been aligned away from the coast here to encourage people to use the more inland route through the fields and woodland. Additionally the Section 25A Direction to exclude access over the majority of mudflats and salt marsh habitats in this areas will act to reduce the risk of walkers accessing onto the intertidal. There is though still a remaining risk that people will opt to walk along the shoreline here. As such the following risk will be considered further:

- The risk that an increasing in walkers accessing eastwards from Tanners Lane shoreline could cause birds feeding on the intertidal to cease feeding or cause a flight response.

Access from fields bordering Tanners Lane: As per Map 9, Scrub field 2 borders the shoreline between Tanners Lane and Pitts Deep. The southern side of this field ends in a slope which is 2-4m higher than the shoreline below. The ridge is well vegetated with a treeline and bushes, such as hawthorn, for much of the length and has a barbed wire fence running along much of this.

Although the clifftop is well vegetated and fenced, cliff erosion has meant that there are gaps in the vegetation and that the fenceline has been undercut, at several points along this area. As such there are two main risks which should be considered further:

- Gaps in the vegetation along the raised cliff line would skyline people and dogs, which could cause waders and Dark-bellied Brent Geese on the intertidal (within 20m) to cease feeding or take flight.
- Although the cliff line is high enough to deter walkers from accessing down it, the gaps in the vegetation and fenceline could mean that dogs are able to run down the cliff and onto the shoreline and saltmarsh below, directly disturbing birds.

Pitts Deep Shoreline: The route here has been aligned away from the shoreline to decrease the risk of both indirect line-of-sight disturbance and direct disturbance to birds on the intertidal in front of Pitts Deep Cope shoreline. By keeping the path entirely within the treeline and setback from the shoreline by approximately 5m, people will be partly or wholly obscured from view and dogs will be wholly obscured from view due to woodland floor litter and scrub.

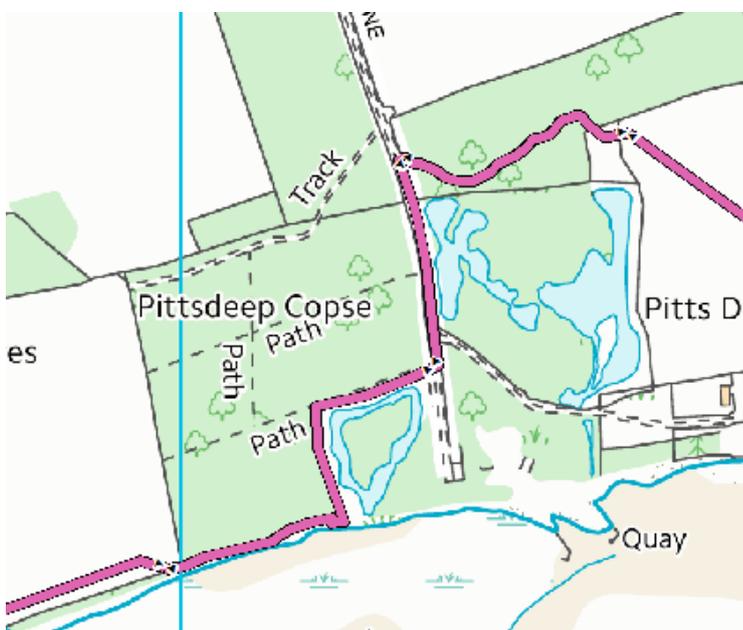
The route, where it runs close to the shoreline, is fenced, helping to prevent people or dogs from going out onto the shoreline at this point. There remains a small risk that dogs may get underneath the current fencing, as such the following risk will be considered further:

- Dogs using the proposed route in the western part of Pitts Deep Cope will circumvent the existing fencing and move onto the beach or intertidal, causing birds to cease feeding or

take flight.

The route going eastwards, is aligned further north away from the coast, along Pitts Deep Lane. . Additionally the Section 25A Direction to exclude access over the majority of mudflats and salt marsh habitats in this areas will act to reduce the risk of walkers accessing onto the intertidal. There is remaining a risk that people will not follow the route at this point but exercise their Coastal Access Rights and head south onto the shoreline. An increase in people accessing onto the shoreline in front of Pitts Deep Copse could cause birds feeding on the intertidal to cease feeding or fly away due to walkers and/or dogs appearing out of the treeline suddenly or dogs running out onto the intertidal here and causing feeding birds to move away or take flight to avoid the threat. As such the following risk will be considered further:

- The risk that Pitts Deep Copse will see more access and as a result bird feeding will see greater interruption due to use of the beach and dogs accessing the intertidal.



Map 11. Route through Pitts Deep Copse

There are paths within Pitts Deep Copse that lead towards the associated arable fields around Pitts Deep Copse. Increased access onto these fields could affect birds, particularly during the winter months. It is not thought that this will occur due to fencing along much of the woodland being maintained and that there is little further inland, to attract people away from the woodland and coast.

Breeding Birds

The main risk to breeding birds are similar to non-breeding birds; people and dogs. Nesting pairs will interpret people as a threat and will either leave the nest or act to protect it from the perceived threat. This reduces the time for which the birds are incubating their eggs, feeding any young or being aware of other threats such as corvids or foxes. This disturbance is limited to the shoreline here and can be broken down into:

- Direct disturbance such as dogs running onto a nest, causing birds to flyaway or

endangering eggs/chicks.

- Indirect line-of-sight disturbance such as people entering onto the beach some distance from the birds, causing them to leave the nest for a period to avoid the threat. This could also endanger the eggs or chicks in the nest.

Repeated Direct or Indirect disturbance to nesting birds can cause nest abandonment. The impact of this can be more pronounced for certain species, such as Oystercatcher, which tend to only have one nest attempt per breeding season.

Breeding birds along this area such as Oystercatcher and Redshank may use the salt marsh and chenier banks further offshore. These banks are set within sinking mud and water channels. The likelihood of people walking out onto this terrain to reach the more stable chenier banks is both undesirable for the normal coastal walker and potentially dangerous. As such it is not believed that breeding birds using the salt marsh and chenier banks away from the shoreline are likely to encounter direct disturbance from humans or dogs. The area above high tide which is most suitable for nesting is between 40-100m from the shoreline, as such the following risk will be considered further:

- Risk of nesting birds being interrupted from foraging or attending the nest due to walkers and dogs using the shoreline between Tanners Lane and Pitts Deep Copse.

As discussed above there is a risk that access directly onto the shoreline from Tanners Lane or Pitts Deep Copse shoreline could increase, without management this could risk the suitability of the habitat for nesting Ringed Plover and Oystercatcher in particular. As such the following risk will be considered further:

- Risk of increased nest disturbance, abandonment or destruction through access along the shoreline

Supralittoral Sediment

There are standline communities present particularly at Pitts Deep shoreline. Continued and repeated trampling of such communities by walkers can destroy the habitat and associated flora.

As the England Coast Path has been routed away from such areas there will not be a continued thoroughfare of people wearing a route along the shoreline here. It is expected that the majority of people will follow the formal route of the path and that although the access onto the beach at Pitts Deep could increase, the access will be limited to the area close to the bottom of Pitts Deep Lane, which does not have a substantial strandline or supralittoral community established. As such the risk of continued walking atop strandline communities and other supralittoral features here is believed to be resolved by routing of the path away from the shoreline and will not be considered further.

5.1.6 Any mitigation measures included in the access proposal and how they address the possible risks

Route Alignment and Infrastructure

Tanners Lane to Pitts Deep Copse

From Tanners Lane, bearing eastward, there will be willow or similar panelled screens of approximately 80cm height, facing into the arable field east of the path. These panelled screens will both screen dogs from the field and ensure they are not allowed to run onto the field.

This infrastructure will also be supported by the addition of a year-round Nature Conservation Direction 26(3)(a) dogs-on-leads restriction, as detailed later in this section. Appropriate signage outlining this restriction will be put in place at entry points.

Within the scrub field east of Tanners Lane, the existing high sward height and routing of the path further landward here, will allow both good dog-level screening and good standoff from the agricultural field to the north, greatly reducing any disturbance from walkers or dogs.

Facing seawards here the existing hedgerow (predominantly hawthorn) will be reinforced through planting of new hedges in the gaps identified through on site inspection. Maintaining and encouraging vegetation here will allow for good screening of people and dogs, whilst still allowing good views of the coast. The vegetation will also act as a physical barrier to any dogs trying to access the shoreline.

The Access Authority, with the support of Natural England, will be responsible for the installation and upkeep of these infills to the existing hedgeline.

The dogs-on-leads restriction will work with the vegetation, panelled screens and sensitive route alignment here to ensure dogs are kept close at all times and are not permitted on to the either the agricultural field or the more sensitive intertidal here.

Pitts Deep Copse and shoreline

The route at Pitts Deep copse was initially proposed to be routed directly on the beach here, as most of the shoreline here is accessible at high tide. A more inland route though was selected instead because of the importance of the adjacent intertidal area for feeding at Low Tide by waders and Dark-bellied Brent Geese. This route as shown in Map 11 is setback within the treeline, so as to use the existing vegetation and lip of the (now 1-0.5m high) cliff line, to screen people from the intertidal area, whilst still allowing them glimpses of the coast and a unique feeling of being “within nature”.

Walkers will desire to have more open views of the coast and as such a viewpoint will be created at the edge of the woodland at Pitts Deep copse. The viewpoint will allow good panoramic views across the shoreline and towards the Isle of Wight. The viewpoint itself will have three, approximately 80cm high, willow or similar screens, to allow walkers to look out but at the same time, screen dogs. This will be a focal point for walkers; signage both at Tanners Lane to the west and Browns Lane to the east will direct people to this point, specifically stating the “great

panoramic views” and that these will be within a “unique wooded setting” .

The viewpoint will have an interpretation panel detailing, with pictures and/or drawings, the variety of waterbird and flora species using the area. This is aimed at educating people but also raising awareness of the local sensitivities and how people should conduct themselves whilst walking in the area to ensure as minimal impact as possible on the local sensitive features. When designing panels, stretch wide, we intend to work with local environmental groups such as the Wildlife Trust and Bird Aware Solent, as well as the New Forest Park Authority, to ensure a high quality and joined-up approach.

It is expected that, due to the car parking spaces at the bottom of Tanners Lane, that the vast majority of people will access this area from the west. As such the viewpoint has been specifically placed 180-200m from the main Pitts Deep offshore High Tide roost to ensure that these people will be well screened up to this point and then allowed to have panoramic views of the coastline, fully enjoying the beauty of this area, whilst still being partly screened by waist height panels. The position of the viewpoint has been specifically chosen as it is prior to the entry point to the beach; people approaching from the west will reach the viewpoint and then be directed away from the beach, deeper into the copse and close to a pond, where they will then be directed out and away from the copse. Walkers will be able to access down to the beach using a vehicle track from the viewpoint, it is though envisioned that since people will have had a vivid experience of the coast at the aforementioned viewpoint, fewer people will access this route than if there was no viewpoint. Those accessing from the east will enter the copse from the northwestern edge and then be directed southwards and towards the viewpoint, as previously mentioned signage will highlight the significant views from the viewpoint and encourage people to proceed along the route to this viewpoint.

It is not envisioned that any infrastructure will be needed on Pitts Deep shoreline itself, people accessing the shoreline will not be able to easily proceed further easts or west from here due to hard walking conditions and sea defences. Due to the ground underfoot being mud and hard to walk on.

Pitts Deep Copse to Browns Lane

Willow or similar panels of approximately 80cm height will be erected where there is currently a 40m gap in the hedgerow (please see Map 11, Section 5.2 for further details) . This will both act to screen dogs but also act as a barrier to prevent walkers and dogs alike from accessing down to the shoreline here.

Directions

We propose to establish the following access restrictions and exclusions to protect the local sensitive features (please also see maps in Appendix 7):

Nature Conservation Section 26(3)(a) Direction for dogs to be kept on leads, year-round, restriction between Tanners Lane to the eastern edge of Pitts Deep Copse as outlined in

Appendix 7.

This restriction will work with our proposed management in the fields between Tanners Lane and at Pitts Deep itself.

Walkers will be asked to keep their dogs on leads whilst at both the entrance off Tanners Lane and on the eastern side of Pitts Deep Copse.

Nature Conservation Section 26(3)(a) Direction to exclude access, year-round, along the shoreline between Tanners Lane and Pitts Deep Copse as outlined in Appendix 7.

This access exclusion has been created to protect the shoreline and offshore chenier/shingle bank here for non-breeding and breeding birds.

5.1.7 Conclusion

Taking account of proposed mitigation measures, we consider that the risk of our proposals having an impact on sensitive features at this location are minimal. Non-significant effects are considered further in Section 7.

5.2 Sowley Marsh and Shoreline

5.2.1 Ecological sensitivity

Non Breeding Waders and Shelduck

Non Breeding Dark-bellied Brent Geese

Non Breeding Dabbling Ducks

The Solent Waders and Brent Goose Strategy 2018 (Hampshire Ornithological Society, 2018) does not classify the importance of Sowley Marsh or the intertidal here and does not give recent counts unfortunately (please see Appendix 5 for maps). The site can be broadly compared with the Park Farm Webs Sector further east. Here relatively high counts of Lapwing and Curlew are recorded (Frost *et al.*, 2018). Grey Plover and Dunlin are also recorded as using fields by Tanners Lane by the local WeBS Coordinator (Cox & Combridge, 2017) although noted that these are usually during very high tides.

The key periods of activity in this area are primarily between October and March. Populations of Grey Plover may also be present in August and September (Frost *et al.*, 2016).

Sowley shoreline and Sowley Marsh were both surveyed in 2012-13, 2010-11 and 2008-09 at low tide by the Wetland Bird Survey, see table 1. Both areas are well used by dabbling duck species such as Teal and Wigeon, with Dark-bellied Brent Geese also being present in both areas. Gadwall and Shelduck were counted more frequently along the shoreline, whilst Black-Headed Gulls and

Knot and Turnstone were found predominantly within the marsh. Other waders including Ringed and Grey Plover are also recorded in the area.

A report by Cox Associates in 2011 also contains information which indicates that Dunlin may use the area in sizeable numbers and that Turnstone may also use the shoreline. (Cox, 2011).

	Sowley Shoreline			Sowley Marshes		
	2008-2009	2010-2011	2012-2013	2008-2009	2010-2011	2012-2013
Black-headed Gull		65	60	270	300	150
Brent Goose (Dark-bellied)		188		71	200	300
Gadwall	25	4	100		26	6
Knot	0	0	0	72	20	
Oystercatcher		2		41	20	10
Red-breasted Merganser		9		14	3	8
Ringed Plover		16		15	20	2
Shelduck	19	42	11	7	17	
Teal	90	14	200	90	70	
Turnstone		4		12	42	10
Wigeon	50	320	31	80	195	340

Table 13. Waterbird counts along Sowley Shoreline and Marsh (Cox, 2011)

Low Tide

Sowley Marsh and most of the shoreline is recorded as 'Uncertain' for use by Waders and no recorded use by Dark-bellied Brent Geese in 2010 Solent Wader and Brent Goose Strategy (HIOWWT, 2010), the same area is recorded as 'Low Use' in the latest version (HIOWWT, 2018). A small portion of the eastern shoreline is though also indicated as 'Uncertain' for Dark-bellied Brent Geese (HIOWWT, 2010).

A range of wildfowl, waders and gulls use the shoreline and marshes at Sowley. As such these features listed above **will be considered further**.

Breeding Waders and Shelduck

Breeding Terns, Ringed Plover, Black-Headed Gull and Mediterranean Gull

Breeding Grey Heron

Breeding Little Grebe, Shoveler, Water Rail and Mute Swan

The shingle bank at Sowley and small grassland fields on both the Browns Lane and Sandpit Lane sides, offer potential nesting habitat for waders such as Ringed Plover and Oystercatcher. These species have been recorded in the area (Frost *et al*, 2018, Cox, 2011), though there is no known confirmed nesting in the area.

Common Tern and Little Tern have been recorded here during the breeding season in 2015 (HOS, 2015). Large amounts of Black-Headed Gulls and a presence of Mediterranean Gulls and Sandwich terns have also been recorded in the area. Although these species have been recorded in the area, there is no known recent confirmed sightings of breeding attempts in the area.

It is unclear with the available data whether waders or seabirds are nesting on the shingle bank or marsh further towards the lagoon proper. There is though suitable habitat for Ringed Plover, Oystercatcher and both terns and gulls to use for nesting.

Locally heron nest in the woodlands surrounding Sowley Pond (BTO, 2016). Although they are recorded using Sowley Marsh, they have not been recorded breeding there, as the habitat is unsuitable

Little Grebe and Shoveler may also breed within Sowley Marsh (Hampshire Ornithological Society, 2015).

Based on the good availability of suitable habitat, the private and sheltered nature of the area and good food sources for waders in particular, the above breeding bird features **will be considered further**.

Supralittoral Sediment

The shingle bar at Sowley Marsh moves frequently, sometimes rapidly after a storm event. This can leave one to two outlets to appear or for the shingle to shift and seal off these, forming a complete and continuous ridge across the bottom of Sowley Marsh. This ever changing habitat will affect the type of flora species on the shingle bank and adjacent area. Based on a survey by King *et al* in 2013 the shingle was split with *Atriplex prostrata* A1 community on the western half of the bar and SD1a *Rumex crispus-Glaucium flavum* shingle community, typical sub-community on the east. The description by King *et al* gives a good description of vegetated shingle distribution: "... shingle ridge has grazed *Atriplex* with scattered *Glaucium* grading into a more extensive flatter area of more stable shingle with *Tripleurospermum*, *Rumex crispus*, *Honkenya*, *Silene*, *Crithmum*, *Senecio*, *Plantago coronopus* and then further back sparse grassland with *Aira caryophyllea*, *Festuca*, *Sedum* and *Cladonia*... shingle feature and its vegetation disappear eastwards before Colgrims where there is no beach..." (King *et al*, 2013)

Vegetated shingle communities are susceptible to damage by trampling, due to their location along the shoreline here they **will be considered further**.

5.2.2 Current access provisions and use of site for recreation

There are no formal or informal car parks in close proximity to Sowley Marsh with Tanners Lane being the closest over 1.5km further west. Sowley Lane has some spaces, approximately 15 in close proximity to Browns Lane and Sandpit Lane. These are though predominantly part of driveways owned and maintained by nearby landowners and roadside passing places.

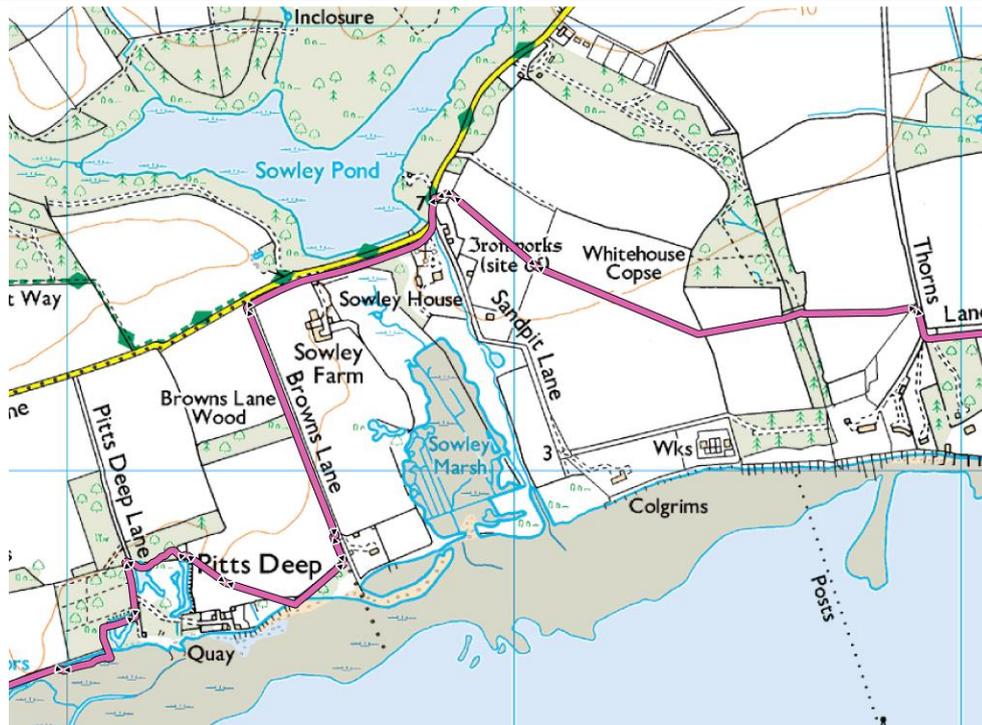
People have been observed using roadside spaces close to Sowley Pond, so it is reasonable to expect some people to access down to the marsh along Browns Lane.

The area of Sowley Marsh is not well served by footpaths. The Solent Way promoted route runs north of the marsh, along a road close to Sowley Pond. Browns Lane and Sandpit Lane are private lanes and access down both is discouraged through signs and gates. It has been noted by local people that there are attempts to access down Browns Lane onto the shoreline, using an existing private access path to the shoreline that leads south from the southern end of Browns lane. People local to Sowley are believed to use this access to get onto the western side of Sowley shoreline and shingle bar.

There is also a private access at the bottom of Sandpit Lane. The lane runs down to an area of scrub to the east of the shingle bar at Sowley Marsh. This is gated and either formally or informally local people are believed to access across onto Sowley shoreline and marsh from here. Further up the lane is a small park maintained for the enjoyment of the Sandpit Lane and nearby residents, there is a private footpath from here that leads on to the north eastern part of the marsh.

Aside from the private access points at Browns Lane and Sandpit Lane there are no other known access points. The shoreline east and west have sea defences such as rock armour and groynes, which make it undesirable or hazardous to walk along, additionally these abut the high tide mark in most cases. The fields and private properties surround the marsh are well fenced and mostly well hedged as well, meaning views in towards the marsh from Sowley Lane and even Browns Lane and Sandpit Lane are quite limited.

5.2.3 Proposed improvements to accessibility



Map 12. Route through Sowley Marsh area

The route near to Sowley Marsh is set back and routed along the Browns Lane and Sowley Lane, as per Map 12.

The route along Browns Lane is hedged and fenced, following an existing private vehicle track to the houses at the bottom of Browns Lane. The route along Sowley lane is along the road itself, which receives relatively low vehicle traffic. There are views of Sowley Pond to the north at this point. The route then proceeds eastward into fields east of Sandpit Lane.

This route has been chosen in respect of both the sensitive features at Sowley Marsh and shoreline, as well as the privacy of nearby residents.

Coastal Margin includes the marsh and shoreline. There are several homes and gardens in this area, which are all Excepted land categories and not subject to Coastal Access Rights. The field immediately to the east of Browns Lane is arable and is also considered Excepted.

The route will include two gates; one on Sowley Lane and another on Thorns Lane. Waymarking of the route will be added at appropriate intervals.

5.2.4 Predicted change in use of site for recreation

Where we are adopting Browns Lane, we would expect a large increase in use of the trail, as there is currently no legal right of access to this private lane. Where we are adopting the Solent Way we can expect only a small increase in use, as this is a well-known and promoted route.

We would expect to see people predominantly walking to this area from Pitts Deep in the West. As there are a good amount of parking spaces there (please see Section 5.1 for details) we would expect people to park here and walk further east. Although this is beyond the expected normal distance walked by an average walker locally (SRMP, 2014), the picturesque beach here could prompt people to walk further than usual. The Solent Way and England Coast Path crossover in this area and as such could interact to see more people using both routes. Most likely, since the England Coast Path is new in this area, we could expect people to walk away from the Solent Way towards areas they have previously not been able to access.

The limited roadside spaces along this part of Sowley lane may see an increase as there are no other nearby immediate parking alternatives...

The Coastal Margin here could see a large increase in access as access is currently mainly limited to local people, and it is also a picturesque and unique marsh, with a considerable amount of fauna and flora species using it year round. This would all add to an increase in the amount of people seeking to access down onto Sowley Marsh and associated shoreline.

The marsh itself is often waterlogged we would expect people to access along the shoreline. The shoreline will easily be accessed from the west by Browns Lane, which will be adopted by the England Coast Path. On Sandpit Lane there is less convenient access to the shoreline, as although the lane will be adopted, the existing access management (gate and signage) will remain. This would see most people accessing along the west of the shoreline.

At certain tides and dependant on the state of the shingle bar at Sowley, the entire shoreline is accessible and people could walk the entire shoreline between Browns Lane and Sandpit Lane. We expect this to be particularly attractive to people interested in the local natural environment, who have not previously had access to the shoreline and marsh here.

We would not expect many people to use the private garden and pond area on Sandpit Lane. This is well fenced and gated, giving the strong impression that it is private land.

5.2.5 Possible adverse impacts to sensitive features

Non-Breeding Birds

The main risk to non-breeding birds in this area are people and dogs, which birds may interpret as a threat, interrupting feeding or causing birds to expend extra energy to move or fly away from the perceived threat. This disturbance could occur inland or on the intertidal and can be broken down further into:

- Direct disturbance such as dogs running into a flock of birds and causing a flight response
- Indirect line-of-sight disturbance such as people entering a field, some distance from the birds, causing them to stop feeding and move further away.

Sowley Marsh

The risk of people or dogs walking out onto Sowley Marsh has been greatly reduced by the following:

- i) **Landward alignment of the route:** By ensuring the route does not guide people down to the marsh itself, people will be encouraged to walk away from the coast. Walkers following the route, rather than going down to the coast will benefit from view points to the west at Pitts Deep and longer range views from the fields east of Sowley, as such walkers accessing from the east and west will gain an appreciation of the coast from these areas.

A more landward alignment of the path helps to ensure indirect visual disturbance of birds is reduced; by increasing the separation distance between birds and walkers, potential stress is reduced. This alignment also benefits from reduced line of sight to the marsh with walkers entirely or partly screened from view by intervening hedgerows and other vegetation.

- ii) **Section 25A Direction to exclude access** (please see Appendix 7): Due to the hazardous nature of the mudflats and salt marshes in and around Sowley Marsh, these will be excluded from Coastal Access rights year-round. This is primarily to ensure walkers are able to enjoy the coastal scheme appropriately but here there is a secondary benefit that these habitats, as per section 5.2.1 are used by a range of dabbling ducks, Dark-Bellied Brent Geese and waders, an access exclusion here will further help to reduce the risk of direct disturbance; of people walking out onto the marshes and causing birds to cease feeding or take flight.

Due to the above points we believe the risk that people will walk out onto Sowley Marsh has been avoided and mitigated and there is now a very low likelihood of people accessing the marsh.

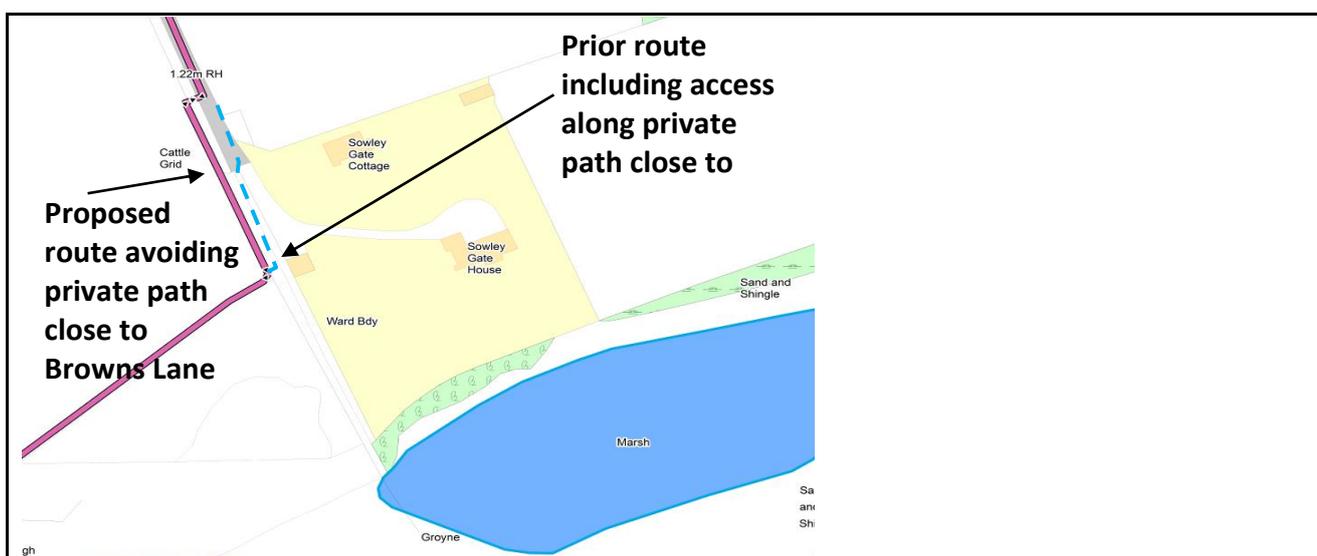
There remains a risk of people accessing the shoreline, walking along the shingle bar and being skylined to most of the southern and central parts of the marsh.

Shoreline

The risk of people accessing the shoreline has been reduced through:

1. Landward alignment of the route by routing the path further landward here; waymarkers and signage will guide people away from the shoreline.

As well as large-scale routing of the route further north here, there were also very small scale alterations of the route at specific places. One of these was at the junction of where the route from Pitts Deep meets Browns Lane (see Map 12). The access onto Browns Lane was moved a short distance further north here, to move people onto the Lane proper rather than the footpath which leads down to the coast.



Map 13. Changes to the route alignment close to Sowley shoreline.

The year-round Section 25A Direction to exclude access reduces the chance of people walking onto Sowley shoreline from the east and west, this will be promoted through local signage. Primarily though, the 25A Direction on the mudflats around the shoreline, acts to reduce the magnitude or extent of the risk here; by helping to keep people away from the intertidal mudflats, on which waders and Dark-bellied Brent Geese feed.

The shoreline at Sowley is very attractive and although walkers may be able to appreciate this coast from afar, along other parts of the route, this could have the converse effect of encouraging people down to this area. Browns Lane and Sandpit Lane are the main access points to the shoreline. It is at these easterly and westerly points that people might emerge onto the shoreline. Both areas are above the shoreline by between 1-2m and as such any walkers would be skylined to the mudflats and any birds feeding there, the same affect would occur if they walked further along onto the shingle bar but at this point walkers would also be skylined to those birds using Sowley Marsh. Direct disturbance could also occur due to dogs running out onto intertidal here.

Based on this the following risks will be considered further:

- Visual disturbance of birds feeding on the intertidal, causing them to stop feeding or take flight, from skylining of people accessing the shoreline at Sowley
- Visual disturbance of birds roosting or feeding on Sowley Marsh, causing them to stop feeding or take flight, from skylining of people accessing the shoreline at Sowley
- Direct disturbance of birds due to dogs walking out onto the Intertidal, causing birds to stop feeding and/or take flight.

These risks are considered further in section 5.2.6.

Breeding Birds

There is suitable habitat for Oystercatcher and Ringed Plover to nest on the shoreline at Sowley. The most suitable areas are towards the east and west edges of the shingle bar, where the shingle

is succeeded by a variety of grassland species. Therefore the location of breeding waders here would most likely be close to the main access points to the shoreline of Browns Lane and Sandpit Lane, which would increase the risk of breeding pairs being disturbed or nests being inadvertently destroyed by walkers or dogs occurring.

Common and Little Tern have also been recorded in the area during the breeding season, there is suitable habitat for both across the shoreline and in parts of the marsh close to the shingle bar.

Due to lack of surveying the exact breeding activity of waders in this area is not known. Based on the available habitat, the low level of public access and records of species such as Ringed Plover and Oystercatcher being present during the breeding season, we believe that the area has a high potential to host breeding waders. There is also potential for breeding terns to be present along the shoreline. As such the following risk will be considered further:

- Disturbance of breeding pairs or destruction of nest as a result of direct disturbance by walkers or dogs
- Indirect disturbance of breeding pairs through presence of walkers and dogs close to nests.

These risks are considered further in section 5.2.7.

Black-Headed Gulls are known to breed on offshore chenier banks in the area, they have also been recorded in and around Sowley. From local breeding surveys it is believed that gulls have established colonies further away from Sowley, this is not to say that Sowley Marsh might be suitable for nesting Black-Headed Gulls as well as Mediterranean Gulls. It is thought that there may be breeding attempts made by these species here but that these would likely be confined to areas offshore or on areas within Sowley Marsh that are hard to access. As such although there could be a presence of breeding gulls here, it is not thought that the current access proposals would pose a risk to nests and as such impact on Black-Headed Gulls will not be considered further.

Supralittoral Sediment

There are vegetated shingle communities present along the shoreline at Sowley. Consistent and repeated trampling of such communities by walkers can destroy the habitat and associated flora.

As the England Coast Path has been routed away from such areas there will not be a continued thoroughfare of people wearing a route along the shoreline here. It is expected that the majority of people will follow the formal route of the path and that although the access onto the shoreline at Sowley will increase, the access will be limited to the area close to the bottom of Browns Lane. This area is populated by grassland and woodland species at the more landward extent. It is thought that people would likely congregate here as it offers the best views and desirable walking conditions, whereas the shingle proper further south and east from this point is less stable. It is likely some people would walk further along the shingle at this point but it is not thought that this would represent consistent footfall.

The access point onto the shoreline at Sandpit Lane is expected to receive considerably less access

than at Browns Lane. In addition there is a similar area of grassland here which is away from the feature. We would expect people to use this area in preference to accessing along the more unstable shingle further west and south.

As the route is not aligned along the shingle area here and access will be concentrated to an area which is away from the feature in question, the risk of trampling and destruction of vegetated shingle communities is believed to be low. This being said there is still a small risk of access along the vegetated shingle here, as such the following risk will be considered further:

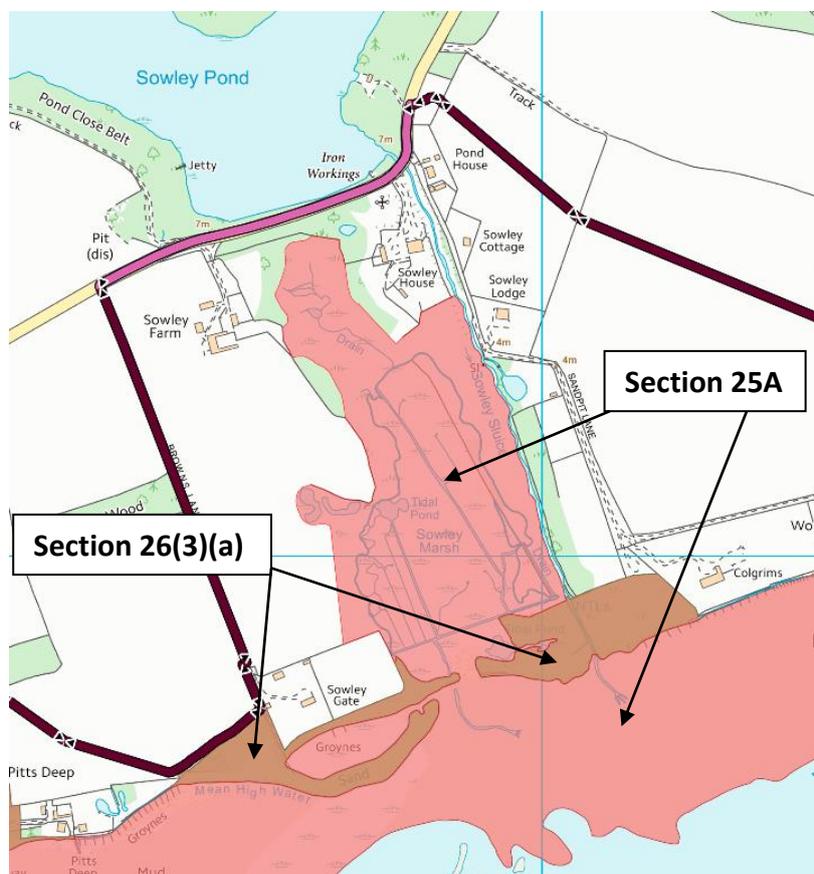
- A risk of degradation of the vegetated shingle habitat as a result of concentrated trampling.

This risk is considered further in section 5.2.6.

5.2.6 Any mitigation measures included in the access proposal to address possible impacts

As detailed in previous section 5.2.5 the primary risks from the access proposal are towards bird species both breeding and non-breeding, as well as concentrated trampling of the vegetated shingle habitat. We have taken the following precautions to mitigate for these risks identified:

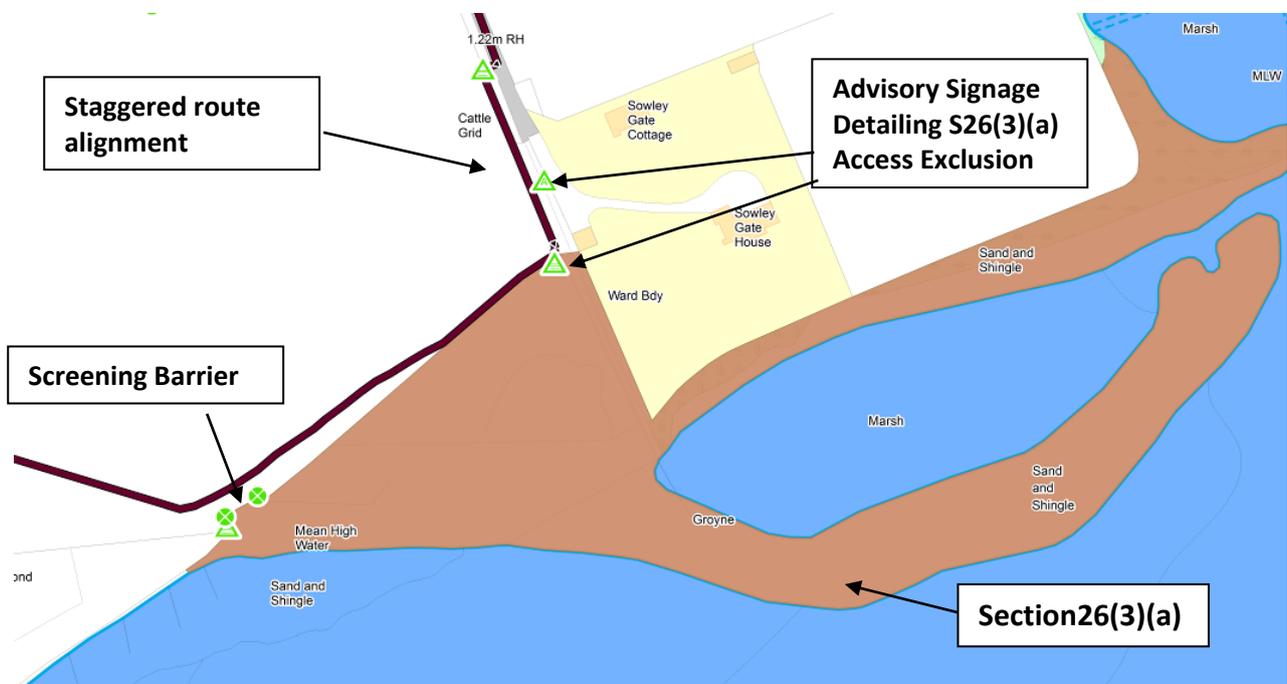
- **Nature Conservation Direction 26(3)(a):** We will exclude access across the shingle bank and associated adjoining areas of grassland, as shown in Map 14.



Map 14. Section 26(3)(a) Nature Conservation Direction to exclude access and Section 25A Inappropriate Access Direction to exclude access at Sowley Marsh.

Together with the Section 25A Direction to exclude access, also shown in Map 14 and outlined in Section 5.2.6, access rights to the shoreline and marsh area have been removed. With a dedicated 26(3)(a) nature conservation exclusion, as well as the Section 25A inappropriate access exclusion in place, people will not be able to walk down the private path at the southern end of Browns Lane or into the field at the bottom of Sandpit Lane.

- **Signage at Browns Lane:** The route has been realigned to avoid access onto the private path close to Browns Lane, as per Map 15. Although this has been done the shoreline at Browns Lane is offers great views of the coast and would be desirable to access down. As such two-field waymarking of the route and signage panels will be added here to outline i) the access exclusion in place across Sowley Marsh and ii) the access exclusion in place across the intertidal areas here.



Map 15. Signage and Screening Barrier close to the shoreline at Sowley Marsh.

The sign will be added in front of the current entry to the private path, at the southern end of Browns Lane. This is a doorway, which we believe with a formal sign added will act as a sufficient deterrent to access.

- **Screening:** Screening of 80cm in height will be added to ensure i) a gap in the vegetated fence line here will not disturb birds feeding in the intertidal, ii) to allow a suitably high barrier to screen out dogs from visibility in the intertidal and iii) to create a barrier which helps to prevent people accessing the shoreline.

Through addition of access exclusions over the intertidal and marsh area, signage outlining these, enhancement of existing natural screening and landward alignment of the trail, we believe that the mitigation here adequately manages the risks raised in 5.2.6.

5.2.7 Conclusion

Taking account of proposed mitigation measures, we consider that the risk of our proposals having an impact on sensitive features at this location are minimal. Non-significant effects are considered further in Section 7.

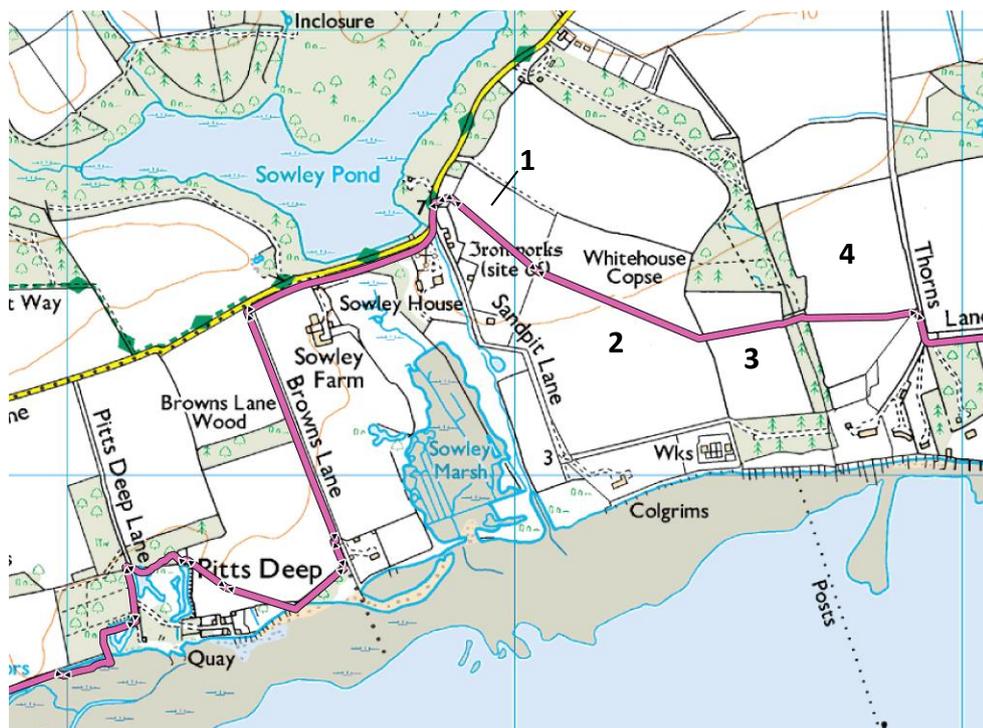
5.3 Sowley Fields

5.3.1 Ecological sensitivity

Non Breeding Dark-bellied Brent Geese

Non Breeding Waders and Shelduck

Non-Breeding Waterbird Assemblage



Map 16. Route through Sowley Fields area and numbered fields 1-4

The fields east of Sandpit Lane and west of Thorns Lane, are here referred to collectively as 'Sowley Fields'.

Survey records and observations for Sowley fields are scarce, this is likely to be because there is no current public access to these fields or associated woodlands. The fields are not surveyed as part of the Solent Waders and Brent Goose Strategy has outlined Sowley Fields as having 'No Recorded Use' (HIOWWT, 2010).

Information for the fields is low but based on their location, close to food sources, it is believed the fields will have some usage at High Tide by Lapwing, Curlew and potentially Dunlin, primarily in the Winter.

Although not on the site specifically; Dunlin, Grey Plover and Turnstone use fields by Tanners Lane 2km further west as High Tide roosts (Cox & Combridge, 2017). Additionally Lapwing and Curlew also use fields ~3km further east at Park Farm, for foraging and as High Tide roosts (Frost, et al., 2016). On site itself the Brent Goose and Wader Strategy 2010 does not outline these fields as being important for Waders in either Current Use Maps or Future Use Maps, the latter relating to the future potential of the habitat at Sowley Fields (HIOWWT, 2010).

There are no records of Dark-bellied Brent Geese have using this site and there are more considerable food sources for them at Sowley Marsh and shoreline. Dark-bellied Brent Geese may occasionally use Sowley Fields but it is not thought likely that they depend on them. Based on this Dark-bellied Brent Geese will not be considered further here.

Field 1, 3 and 4 have hedgerows and treelines along their boundaries, except the west side of field 3 which has a ditch. This combined with their relatively small size, makes them less likely to support the aforementioned wader species.

Field 2 is much more open than Fields 1, 3 and 4 (see Map 16). Field 2 could potentially provide suitable habitat for Waders to use as a High Tide Roost or to feed on.

Lapwing, Curlew and Dunlin may use Field 2 during Winter. As such these features **will be considered further**.

5.3.2 Current access provisions and use of site for recreation

There are no formal or informal car parks in close proximity to Sowley Fields with Tanners Lane being the closest over 1.9km further west and Bucklers Hard near Beaulieu, over 5km further northeast. Sowley Lane has some spaces, approximately 15 in close proximity to Browns Land and Sandpit Lane, these are predominantly part of driveways owned and maintained by nearby landowners and roadside passing places. The roadside near St Leonards Barn, approximately 2.9km northeast, also has 4-6 spaces.

Thorns Lane is entirely private, even with the England Coast Path routed along this lane there is no right to drive or park cars along this. The lane has been managed as a private lane for a considerable amount of time.

There is a permit-based car park with 6-9 spaces close to the existing Park Shore permissive path but only people who have paid for the right to use this car park are able to park here.

We would expect the majority of people to access from the west as both Tanners Lane car park and the roadside spaces along Sowley Lane are in this direction. Walkers would have to walk at

least 2.9km from the nearest viable spaces if they approached from the east.

This area is not well served by footpaths. It does have the Solent Way promoted route running adjacent to the northwest of the fields, along a road close to Sowley Pond. There are no other paths, formal or informal in this area. Sandpit Lane and Thorns Lane are currently inaccessible to the public and used only by local residents.

The fields to the north of Field 1-2 and Whitehouse copse are used for game shoots.

5.3.3 Proposed improvements to accessibility

The route between Sowley Lane and Thorns Lane is through four fields east of Sandpit Lane. A small section of Whitehouse copse is also accessed through.

The route here has been moved back from the coast in respect of both features at Sowley Marsh and shoreline, as well as to prevent impacts on privacy to nearby houses. However the route still provides coastal views. Other options were also considered here, please refer to Chapter 3 of Highcliffe to Calshot proposal for details on these.

The route is aligned through fields 1-4 as per Map 16. Field 1 is accessed by an existing gate from Sowley Lane. Field 2 is accessed through an existing gateway, the field is farmed and an access strip will be left unploughed here.. The woodland between Fields 3-4 will have brush cleared. Field 4 has an existing gate which allows access onto Thorns Lane. A sleeper bridge will be added between Field 2 and 3. Waymarkers will be added at regular intervals.

Coastal Margin is very limited here, as fields 1-4 are arable and therefore Excepted. Properties along Sandpit Lane and Thorns Lane are also Excepted.

5.3.4 Predicted change in use of site for recreation

The site currently has no known access; as such introducing access here will generate a large increase in access along the path. Due to the significant distance of the trail to any car parks and its isolated location, we would only expect a moderate number of actual walkers.

The route is aligned across arable fields which are regularly ploughed and planted, as such we would expect people to keep to the set route, as the walking conditions will be much more even and easier to walk on..

The limited roadside spaces along this part of Sowley lane will likely see similar use as they do currently. As they are not designated parking spaces we wouldn't expect people, especially those from visiting the New Forest from further away, to want to park on the roadside.

5.3.5 Possible adverse impacts to sensitive features

Non-Breeding Birds

The main risk to non-breeding birds in this area are people and dogs, which birds may interpret as a threat, interrupting feeding or causing birds to expend extra energy to move or fly away from the perceived threat. This disturbance can be broken down further into:

- Direct disturbance such as dogs running into a flock of birds and causing a flight response
- Indirect line-of-sight disturbance such as people entering a field, some distance from the birds, causing them to stop feeding and move further away.

Lapwing, Curlew and Dunlin are thought to use the field 2 at certain times during the Winter. There is currently only very limited access by the farmer of the field and additional noise created by the nearby Shoot.

A new access route through the field could cause the following risks:

- Disturbance through dogs running out into Field 2 and causing birds to move further away in the field or take flight to avoid the perceived threat.

It is not thought likely that walkers will stray off the path to a considerable degree here as the walking conditions, away from the path, are not desirable and the fields are excepted so walkers will be instructed to stick to the path.

There will also be indirect disturbance to birds using Field 2 from people entering the field. There is though a considerable area of the field still available south of the route available for birds to use away from the path. The alignment of the route, relatively low amount of footfall expected here and limited use of waders, would mean that the impact of this would be low.

5.3.6 Any mitigation measures included in the access proposal to address possible impacts

The main risk here is disturbance to birds in Field 2 by people accessing into the field or dogs running out onto the field.

To reduce the risk of dogs running out onto the field we will add additional signage at the entry points to Sowley Fields, at Sowley Lane and Thorns Lane, asking people to keep their dogs under control and reminding them that public access here only extends to the route itself.

5.3.7 Conclusion

Taking account of proposed mitigation measures, we consider that the risk of our proposals having an impact on sensitive features at this location are minimal. Non-significant effects are considered

further in Section 7.

5.4 Thorns Marsh

5.4.1 Ecological sensitivity

Non-Breeding Dabbling Ducks

Non-Breeding Waders and Shelduck

Non-Breeding Dark-bellied Brent Geese

Non-Breeding Waterbird Assemblage

Available survey information for bird species is relatively scarce for Thorns Marsh. A recent survey counted Teal on Thorns Marsh, whilst Dark-bellied Brent Geese, Redshank, Curlew, Red-Breasted Merganser, Redshank, Turnstone, Little Egret, Shelduck, were counted on the shoreline immediately east and west of Thorns Marsh seafront (Cox, 2017; ECOSA, 2014).

Breeding Terns, Ringed Plover, Black-Headed Gull and Mediterranean Gull

Breeding Waders and Shelduck

The shoreline is believed to be suitable habitat for nesting Ringed Plover and Oystercatcher, likely on or adjacent to the sea wall.

The marshes further inland here could potentially provide breeding habitat for the waders and shelduck feature group, although there is no known specific survey data for this.

Supralittoral Sediment including coastal vegetated shingle communities

Salt Marsh Habits, Morphology and Atlantic Salt Meadows

Lowland Wet Neutral Grassland

This marshland has both freshwater and saline influences, creating a mix of grassland and salt marsh communities. As per a survey by Bealey *et al* in 2006 found MG11 and SM16 species were present (Bealey, Cox, & Markham, 2006) and a subsequent survey by King *et al* found SM9 species were also present along the shoreline (King, Lake, Day, R., & White, 2013).

5.4.2 Current access provisions and use of site for recreation

Thorns Lane is a private lane used by residents only and currently has no formal public access

along the lane, Thorns Marsh or the adjacent shoreline.

There are no points for the public to access Thorns Marsh; there is currently a barbed wire fence preventing people from accessing on to the site from the lane. Access along the shoreline from Park Shore is possible but very limited due to a series of numerous groynes.

5.4.3 Proposed improvements to accessibility

There is no proposed access onto Thorns Marsh or improvements to access. The trail will be aligned on a vehicle track, Thorns Lane, that runs parallel to Thorns Marsh but there will be no landward coastal margin, only seaward.

The route along Thorns Lane will be appropriately waymarked to guide people along it.

5.4.4 Predicted change in use of site for recreation

This is a new promoted route and with only local residents currently accessing this area we would expect a large increase in access.

Although the area would be opened up to new access; thus causing a large increase in use based on the existing no public usage, this is unlikely to equate to a large number of people visiting the area. This site is one of the most isolated parts of the HCS stretch and is over 4km to the nearest informal car park at Tanners Lane and approximately 5km to the nearest formal public car park at Bucklers Hard.

The existing informal management; barbed wire fencing and series of groynes, prevents access or greatly restricts access to the coastal margin. Access onto the marsh currently are believed to be very low.

The site is marshland, as such it is frequently waterlogged and not desirable to access.

Based on existing management and the undesirability of the site for access, we would expect a negligible or low increase in access to the margin.

5.4.5 Possible adverse impacts to sensitive features

There has been little surveying of the site for breeding or non-breeding birds. We do though know that Teal are present on site and several waterbird species feeding on the intertidal.

There is some screening along Thorns Lane towards the southern portion of Thorns Marsh. There

is an intervening barbed wire fence but there could be some disturbance caused to birds feeding on the grazing marsh.

Access on to Thorns Marsh could cause disturbance to Waders and Brent Geese using it during High Tide or on the shoreline which is ~250m from the path.

Nesting Ringed Plover and Oystercatcher could use the area but most likely along the shingle bank towards the southern extent of Thorns Marsh. Walkers and dogs could inadvertently disturb nesting birds if they access the site.

5.4.6 Any mitigation measures included in the access proposal to address possible impacts

It is believed that an existing barbed wire fence and hedgerow, along the adjacent Thorns Lane, would provide sufficient deterrent and obstacles to access onto Thorns Marsh.

Waymarkers will be present along this part of Thorns Lane to clearly show the route of the England Coast Path. This is believed to be suitable in an area of relatively low footfall and low risk of access on to the Thorns Marsh and associated shoreline.

5.4.7 Conclusion

Taking account of the routing of the path here and existing barriers to entry we consider that the risk of our proposals having an impact on sensitive features at this location are minimal. Non-significant effects are considered further in Section 7.

5.5 Needs Ore, Park Farm Fields and Park Shore

5.5.1 Ecological sensitivity

Non Breeding Waders and Shelduck
Non Breeding Dark-bellied Brent Geese
Non Breeding Dabbling Ducks
Non Breeding Diving Waterbirds
Non-Breeding Waterbird Assemblage

The area around Needs Ore is a complex mix of habitats including: saline lagoons, reedbeds, coastal salt marsh, mudflats, grazing marsh, woodlands and pasture fields. Due to the good range of habitats in close proximity here, there is a corresponding variety of waders, wildfowl and seabirds.

- The pasture fields such as those close to Park Farm, as well as those to the north of Black Water are used as high tide roosts by Curlew, Lapwing, Dunlin, Redshank and Oystercatcher in particular but also by Black-Tailed Godwit, Dark-bellied Brent Geese, Grey Plover, Ringed Plover, Knot and Avocet.

These fields are almost all recorded as 'uncertain' under the original Brent Goose and Wader Strategy for waders (HLOWWT, 2010) but the latest version outlines the southern fields as being Core, the fields further north as Secondary Support Area and the other more northern fields being Low Use. A Core site is the highest level of importance within the latest version of the strategy (HLOWWT, 2018).

- Within the inner-area of Needs Ore the saline lagoons, reedbeds and associated marshes of: Black Water, Great Marsh and Gravelly Marsh, as well as the intervening grazing marshes, see large numbers of Teal, Wigeon, Pintail, Gadwall, Avocet, Black-Tailed Godwit, Dark-bellied Brent Geese, Coot, Canada Geese, Curlew, Dunlin, Heron, Oystercatcher, Shelduck, Spotted Redshank, Golden Plover, Snipe, Lapwing. Although these numbers do swell in the winter there are significant populations of Oystercatcher, Avocet, Canada Geese and Coot throughout the year. The majority of this area around the marshes is recorded as at least 'Uncertain' for waders. Black Water and Great Marsh are recorded as 'Important' for both Waders and Dark-bellied Brent Geese, with the grazing marsh around the former also being either 'Important' or 'Uncertain' for Dark-bellied Brent Geese (HLOWWT, 2010). This area is not recorded under the latest version of the Solent Wader and Brent Goose Survey (HLOWWT, 2018).
- Along the intertidal salt marshes and mudflats here are large flocks of Dunlin and Dark-bellied Brent Geese, as well as numerous Teal, Grey Plover, Wigeon, Turnstone, Ringed Plover and Curlew. Although the Brent Goose and Wader Strategy focuses on high tide roost areas above the intertidal, the shoreline is shown as 'Uncertain' for waders across Needs Ore except near to Great Marsh where it is shown as 'Important' for both Waders and Dark-bellied Brent Geese and east of Black Water where it is also either 'Uncertain' or 'Important' for Dark-Bellied Brent Geese (HLOWWT, 2010). This area is not recorded under the latest version of the Dark-Bellied Brent Goose and Wader Strategy (HLOWWT, 2018).

Overall wader and wildfowl populations swell during the late Autumn and Winter months but there are a large numbers of passage and resident species present here during the Spring and Summer months.

Based on the above it is believed that a range of non-breeding waders and Dark-bellied Brent Geese use the intertidal and fields in this area, as such these features **will be considered further**.

Breeding Terns, Ringed Plover, Black-Headed Gull and Mediterranean Gull
Breeding Bird Assemblage for Lowland Damp Grassland

Breeding Bird Assemblage for Lowland Open Waters and their Margins

Breeding Waders and Shelduck Breeding Bird Assemblage for Lowland Damp Grassland

Breeding Bird Assemblage for Lowland Open Water and their Margins

Breeding Little Grebe, Shoveler, Water Rail and Mute Swan

Breeding Wetland Birds

Due to the unique collection of habitats such as Saline Lagoons, pasture, grazing marsh and a coastline with salt marsh, mudflats and vegetated shingle present, there are many species of waders, passerine and wildfowl that choose to use this area for breeding.

Inland the breeding is concentrated at: **Black Water, Great Marsh and Gravelly Marsh**, as well as **associated grazed fields** in close proximity including at Park Farm and Gins Farm. Redshank, Lapwing, Oystercatcher, Skylark, Meadow Pipit, Reed Bunting, Avocet, Shelduck, Gadwall, Nightingale, Dartford Warbler, Linnet and Snipe nest on the fields, in scrub and closer to the marshes where the vegetation is thicker (Natural England, 2016). There is though interaction between these sites though where the young can be moved between sites, as is common to occur with Avocet on site in particular (Natural England, 2016).

Map 17 shows four areas currently managed through the Countryside Stewardship scheme for breeding birds; specifically Redshank, Lapwing and Oystercatcher. The reserve team promote breeding habitat throughout the nature reserve as a whole.

Along the shoreline the breeding is concentrated at:

Warren Shore & Gull Island

- Oystercatcher, Mediterranean Gull, Black-Headed Gull and Ringed Plover nest on the shingle shoreline and islands here (Natural England 2012-2017).
- Tern species have in the past nested here and may make future attempts to do so again.

Park Shore

- Oystercatcher and Ringed Plover nest here (Natural England, 2012-2017, Cox, 2016)

Eastern Bank, by the Beaulieu River.

- Oystercatcher, Redshank and occasional Lapwing nest all along the bank here.

The breeding season is predominately between March and July.

Although some species will make several attempts to nest, other species such as Oystercatcher, will usually only have one attempt.

Birds such as Avocet may relocate their reared chicks periodically between the marshes and vegetation, meaning that they can traverse much of the Reserve (Natural England, 2016).



Map 17. Red and Yellow areas have specific Countryside Stewardship agreements to promote habitats suitable for breeding birds.

Based on the above it is believed that a range of breeding waders, wildfowl and seabirds use the intertidal and fields in this area, as such these features **will be considered further**.

Supralittoral Sediment

Shifting dunes along the shoreline with *Ammophila arenaria*

Vegetated Shingle and Strandline communities are present across the southern shores of the Reserve in particular.

Park Shore has species such as *Honkenya*, *Salsola*, *Atriplex laciniata*, *Glaucium*, *Tripleurospermum*, *Beta* and *Crambe*, present (King et al, 2013).

Warrenshore to Gull Island, have a wider variety of species, with the prior species at Park Shore all being present as well as; *Elytrigia atherica*, *Silene uniflora*, *Armeria maritima*, *Atriplex glabriuscula*, *Senecio viscosus*, *Atriplex prostrata*, *Atriplex littoralis*, *Euphorbia paralias*, *Leymus arenarius* and *Polygonum oxyspermum* (King et al, 2013).

There is also a good successional range of habitat here with shingle grading into grassland. SD2 and A1 Strandline communities and SD1a Shingle community present along this stretch.

These communities are present above the high tide mark along this stretch of coastline. Those species most seaward are on more consolidated land and could be more susceptible to damage

from trampling or other processes.

Currently grazing occurs along Park Shore, whilst further east there is considerably less.

Vascular Plant Assemblage – Woodland, Heathland, Acid Grassland, Fen

The road verges have been included predominately as part of the local verges along Saint Leonards Lane to the north of Park Farm Fields, where the assemblage is present.

5.5.2 Current access provisions and use of site for recreation

This area can be broken down into three distinct areas; Needs Ore, Park Farm Fields and Park Shore. Please see Map 18.



Map 18. Distinct areas in the Needs Ore area of the Beaulieu Estuary. The green bordered area relates to Park Farm Fields, the orange to Needs Ore and the blue to Park Shore.

Needs Ore: has no public access but does have a private permit system in place: Through purchase of a permit from the Beaulieu Estate, people are allowed to drive (but not walk) from Saint Leonards Lane, down Warren Lane, to the car park adjacent to Beaulieu River Sailing Club, with an estimated 36 spaces and also a much smaller layby on the verge of Warren Lane, with an estimated 6 spaces (Davies, 2011). The permit allows for car access to these specific car parks, visitors are then able to access hides at Blackwater, by following a set route, Warren Lane and close to the aforementioned club house.

The Royal Southampton Yacht Club, is accessed by Gins Lane and has a relatively large carpark with an estimated 40 spaces for paying members and a club house (Davies, 2011). Members are believed to be permitted to walk on only the grounds around the club house and not directly into the Nature Reserve to the north or south, which is fenced. The yacht club has an array of dinghies and other light craft which it uses along the Beaulieu River and estuary.

Park Farm Fields: have no public access and are a mix of pasture and arable. There are no formal public car parks locally.

Park Shore: Access is at the bottom of the private Park Lane. Access is allowed onto the shoreline at Park Shore through a small permissive footpath branching off eastwards, from where Park Lane meets Thorns Lane. There is a footpath sign by the entrance and a request to keep dogs on leads. This track is fenced on either side and leads approximately 330m to the shoreline itself.

On the shoreline there is a predominately shingle beach, with a raised bank landward. Walkers currently tend to walk on or behind the bank or the upper beach. The area is contained with both fencing and a ditch along the northern periphery of the shoreline. Along the very eastern extent there is a fence, gate and wooden piles into the intertidal, to prevent any access further east. Signs also outline areas which people are not allowed to access..

Currently the Beaulieu Estate operate a year-round permit system for a small carpark (approximately 5-6 spaces). This is only for those who pay the permit. There are no public carparks in the area and both Park Lane and Thorns Lane are private lanes, which do not allow access or permit parking of non-resident or non-permit cars.



The area at large does not have any Public Rights of Way but the Solent Way is routed along St

Leonards Lane, running along the outside of the northern extent of the Reserve.

5.5.3 Access proposal



Map 19. Proposed route through the Needs Ore area

Our proposed alignment for the England Coast Path between Park Lane and St Leonards is proposed along both new and existing routes, setback somewhat from the coast to ensure the most sensitive areas are avoided.

At the eastern end of Thorns Lane, where the path is approximately 180m from the coast, we propose to turn inland due north along the existing unmetalled Park Lane, avoiding the coast within the main area of the Needs Ore portion of the North Solent National Nature Reserve. This represents new public access along a private lane used solely by local residents and those using a private permit car park.

The more landward route chosen here, means Coastal Margin will extend across Needs Ore from Park Shore in the southwest, to Gull Island in the east and to the edge of Salternshill Copse in the North.

5.5.4 Predicted change in use of site for recreation

We predict a large increase in access along the route following Park Lane as this is a new footpath route and has no prior public use. This increase in access wouldn't necessarily equate to large numbers of walkers, as there are no formal car parks or other visitor amenities close to the site.

We would expect a medium to high increase in access within some areas of the Coastal Margin. However, the level of access is somewhat reduced due to i) the proposed more inland route of this part of the trail reducing the overall extent and number of walkers accessing away from the trail and ii) the existing nature reserve management which promotes access routes to a small number of people (permit holders or residents) in certain areas (e.g. near Black Water, Park Shore) which would be maintained after establishment.

Those accessing on to the Coastal Margin would likely do so through either Gins Lane or Warren Lane, as these are the only roads/tracks that lead into the site. At Park Shore there is a track that runs into the site but this is heavily fenced; at one point by a wooden palisade wall that continues from the shore into the intertidal, gated and with ditches; as such we wouldn't expect walkers to go further at that point. The current no access/permit holders only signs will remain and act as a strong deterrent to walkers of the England Coast Path. Behaviour of local walkers is not expected to alter as they are used to this area being restricted.

We would expect more people to access along the road from the North due to the large car park at Bucklers Hard (2.5km). As a result without management we would expect access onto the site close to Gins Lane and Warren Lane, close to St Leonards Barn.

The Solent Way does run along part of the route here, there may be some additional use of the Solent Way as a result of our proposals.

5.5.5 Possible adverse impacts to sensitive features

Non-Breeding Birds

The main risk to non-breeding birds in this area are people and dogs, which birds may interpret as a threat, interrupting feeding or causing birds to expend extra energy to move or fly away from the perceived threat. This disturbance could occur inland or on the intertidal and can be broken down further into:

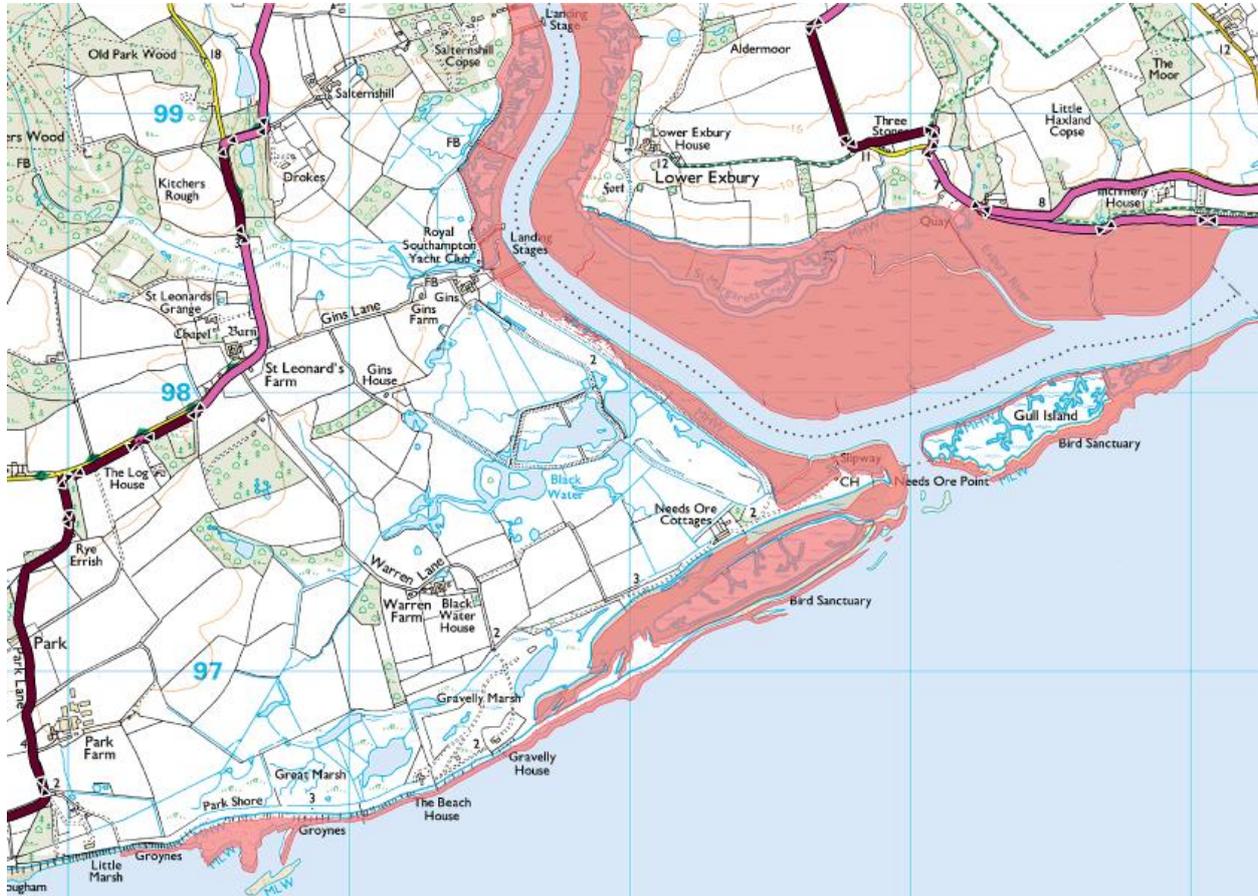
- Direct disturbance such as dogs running into a flock of birds and causing a flight response

- Indirect line-of-sight disturbance such as people entering a field, some distance from the birds, causing them to stop feeding and move further away.

Disturbance could have a greater magnitude of impact where there is currently no or very low access such as Black Water, Great Marsh, Gravelly Marsh, Warren Shore, Gull Island and Park Farm Fields. Park Shore and the area around the yacht club could be impacted but do already have some level of background disturbance.

Numerous route options were considered in this area but the final alignment was pulled back to Park Lane and St Leonards Lane, in acknowledgement that routing the England Coast Path through the main portion of Needs Ore would generate unacceptable levels of bird disturbance. By having the path setback by a minimum of 350m and a maximum of 1.3km from the coast, behind a predominantly hedged and fenced route the risk of disturbing bird species either directly or indirectly, has been greatly reduced.

The establishment of a Section 25A Direction to exclude access over mudflats and salt marshes, although primarily to remove these areas from coastal access rights, as they are unsuitable for access, does greatly reduce the risk of people disturbing birds feeding in the intertidal in this area. Map 20 and Appendix 7 shows the extent of this restriction here.



Map 20 Section 25A Direction to exclude access over mudflats and salt marshes at Needs Ore.

The routing of the path and also associated waymarking will reduce the risk to non-breeding birds greatly here but not wholly, as such the following risks will be considered further:

- The risk that people will use the Coastal Margin to access onto Needs Ore, Park Farm fields and Park Shore, causing direct and indirect disturbance to birds.
- The risk that people will not adequately control their dogs and as a result could disturb birds

Breeding Birds

The main risk to breeding birds are similar to non-breeding birds; people and dogs. Nesting pairs will interpret people as a threat and will either leave the nest or act to protect it from the perceived threat. This acts to reduce the time which the birds are incubating their eggs, feeding any young or being aware of other threats such as corvids or foxes. Disturbance can be broken down into:

- Direct disturbance such as dogs running onto a nest, causing birds to flyaway or endangering eggs/chicks.
- Indirect line-of-sight disturbance such as people entering onto the beach some distance from the birds, causing them to leave the nest for a period to avoid the threat. This could again endanger the eggs or chicks in the nest.

Park Shore already has a well contained permissive route, which is fenced in and has signage for people to keep dogs on leads. With an increase in visitors though, there could be an increased risk of nesting Ringed Plover and Oystercatcher being disturbed by walkers and in particular by dogs. As such the following risk will be considered further:

- The risk that there will be an increase in direct disturbance to nesting Ringed Plover and Oystercatcher along Park Shore, primarily by dogs.

The southern area of Park Farm fields is suitable and previously managed for breeding birds such as Redshank, Oystercatcher and Lapwing, as well as others previously mentioned. Although there are no specific attractors for people to access the fields at Park Farm, walkers may cross them to get closer to the more central areas of Needs Ore or the marshes close to Park Shore and Warren Shore. As such the following risk will be considered further:

- Walkers and dogs accessing through Park Farm fields could cause parent birds to cease foraging due to proximity to nests or cause nest abandonment or destruction as a result of direct disturbance.

As the path is routed well away from i) Black Water and ii) the marshland north of Gins Lane the risk of disturbing breeding birds or causing the nest to be abandoned is reduced. Due to the higher density of breeding birds in this area there is a greater chance of walkers encountering nesting birds, as such the following will risks will be considered further.

- Walkers and dogs accessing land in and around Black Water could cause parent birds to cease foraging due to proximity to nests or cause nest abandonment or destruction as a result of direct disturbance.
- Walkers and dogs accessing on marshland north of Gins Lane could cause parent birds to cease foraging due to proximity to nests or cause nest abandonment or destruction as a result of direct disturbance.

Gull Island is connected to the mainland by a spit running from Warren Shore. Due to the stand-off of over 2.5km from the nearest section of path, it is believed that the risk of access from foot onto the island has been reduced to nil or negligible levels. This is in respect of both the offsetting of the path a considerable distance away from the coastline and the difficulty in accessing this area across existing intervening fencing (such as the existing large wooden post fence line that divides park shore from Warren Shore).

There remains a risk of people sailing to the island and accessing onto the island by this means. Although the proposed Section 25A Direction to exclude access (see Appendix 7) over the intertidal, coupled with the existing management such as signage and wardening to prevent access

here, greatly reduce the risk of people accessing onto the Island, they do not wholly remove the risk. As such the following risk will be considered further:

- The risk that boat users will access onto Gull Island and cause parent birds to cease foraging due to proximity to nests or cause nest abandonment or destruction as a result of direct disturbance.

Supralittoral Sediment

Vegetated shingle and drift line communities are susceptible to continued direct footfall from walkers at most times of the year. The England Coast Path route is well away from most areas of the Reserve but at Park Shore where there is currently a permissive footpath, there is potential to increase footfall along the shoreline here. Increased footfall over vegetated shingle could cause a loss of vegetation cover and/or a reduction in the variety of species present.

This risk has though been reduced significantly by the rerouting of the path further inland along Park Lane and along the road towards Bucklers Hard. This has not though removed the risk entirely and as such the following risk will be considered further for Park Shore and Warren Shore:

- The risk that increased access by walkers will cause destruction of vegetated shingle and strandline communities.

Vascular Plant Assemblage – Woodland, Heathland, Acid Grassland, Fen

There is a risk of increased trampling of the assemblage specifically along the verge on the southern side of Saint Leonards road.

From an onsite inspection we have identified that the species occurring at the places where we are crossing the verge, are common and widespread species. Due to the specific choice of access across these areas of lesser importance we believe that there is no risk to the plant assemblage as a whole

5.5.6 Any mitigation measures included in the access proposal to address possible impacts

The England Coast Path route has been aligned a considerable distance away from the sensitive features in this area but the Coastal Margin and associated Spreading Room, could mean increased disturbance to bird species and supralittoral communities across the Reserve.

Due to the vulnerability of bird species to disturbance and the existing management which strictly controls access to the area, we have decided through discussion with local stakeholders and Natural England staff, to maintain and further enhance the existing management already in place. This will be done by:

- applying a suite of CROW Directions to exclude or restrict access in certain places

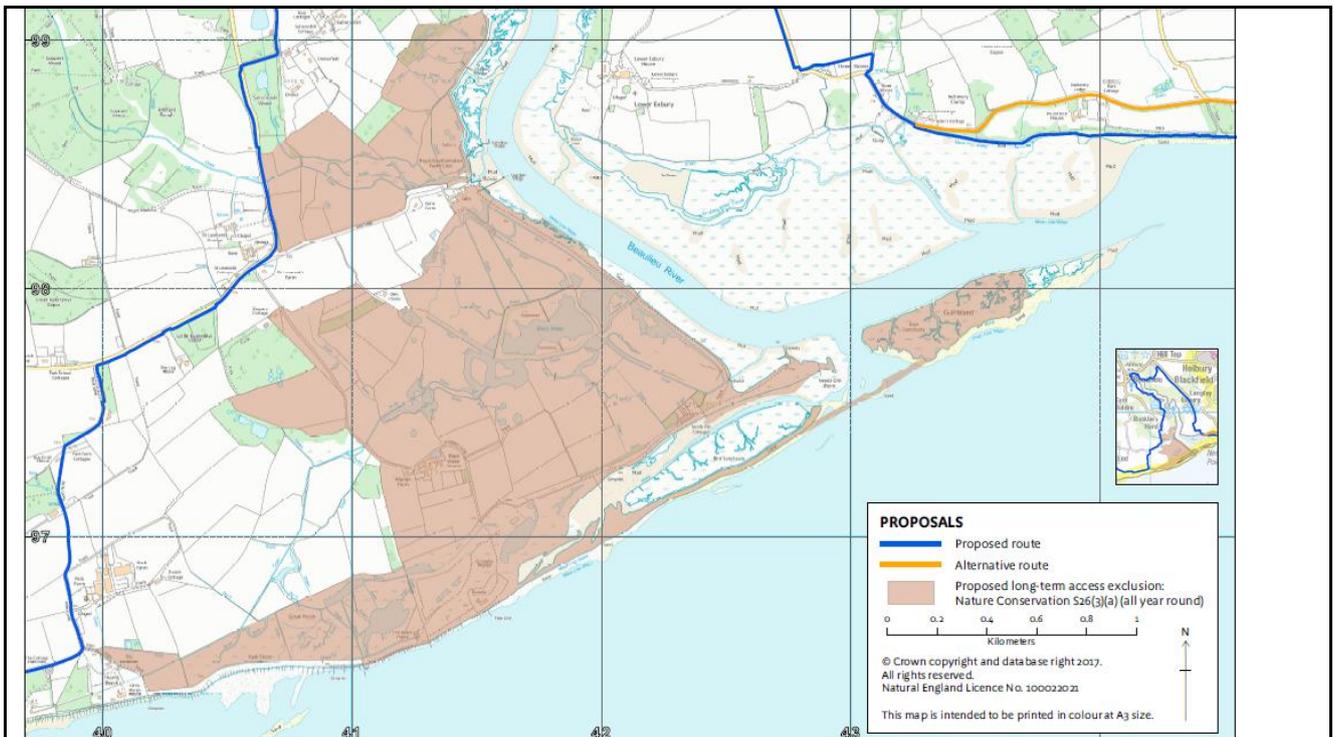
- installing new education panels and signage to promote good access management
- adding fencing to help keep dogs to the route

The proposed mitigation will be considered for Needs Ore, Park Farm fields and Park Shore:

Needs Ore (including Gull Island):

The following directions will be put in place across Needs Ore:

- **Needs Ore (Centre including Gull Island):** A year-round Section 26(3)(a) Nature Conservation Direction to Exclude public access across the majority of the Nature Reserve will be put in place with our proposals, please see Map 21. This combined with the existing management of the site will remove coastal access rights from this area and mitigate for the following risks identified in 5.5.5:
 - **Breeding and Non-Breeding Birds**
 - Walkers and dogs accessing on land in and around Black Water could cause parent birds to cease foraging due to proximity to nests or cause nest abandonment or destruction as a result of direct disturbance.
 - Walkers and dogs accessing on marshland north of Gins Lane could cause parent birds to cease foraging due to proximity to nests or cause nest abandonment or destruction as a result of direct disturbance.
 - The risk that people will use the Coastal Margin to access onto Needs Ore and disturb birds directly or indirectly across the Reserve both inland and along the coast
 - The risk that people will not adequately control their dogs and as a result could disturb birds



Map 21. Proposed year-round Section 26(3)(a) Direction to Exclude Access at Needs Ore

This direction will also apply to Gull Island and will help to remove the risk of boat users landing on the island. This addresses the following risk:

- The risk that boat users will access onto Gull Island and cause parent birds to cease foraging due to proximity to nests or cause nest abandonment or destruction as a result of direct disturbance.
- The risk that increased access by walkers will cause destruction of vegetated shingle and strandline communities.

Park Farm fields

A seasonal Section 26(3)(a) Nature Conservation Direction to Exclude public access from the northern part of Park Farm fields during their most sensitive time will be put in place between September 1st to March 15th, please see Map 22.

Dog proof fencing will also be added where the path runs adjacent to the lane north of the fields, to prevent dogs accessing the wider field. The rest of the route down Park Lane has existing fences and gates facing towards Park Farm fields.

Signs requesting that people stay off the fields here will also be added in along Park Lane, to both promote the aforementioned access exclusion but also to safeguard the area year-round. We believe education as to how bird species use the fields here, will encourage people to stay away from the fields. We will also work closely with regional groups such as Bird Aware Solent, the Hampshire and Isle of Wight Wildlife Trust and New Forest National Park Authority to ensure the wording and presentation here, and across the stretch, is to a coordinated and engaging to the public. There will be a series of these signs running along the lane here. In addition to the signage

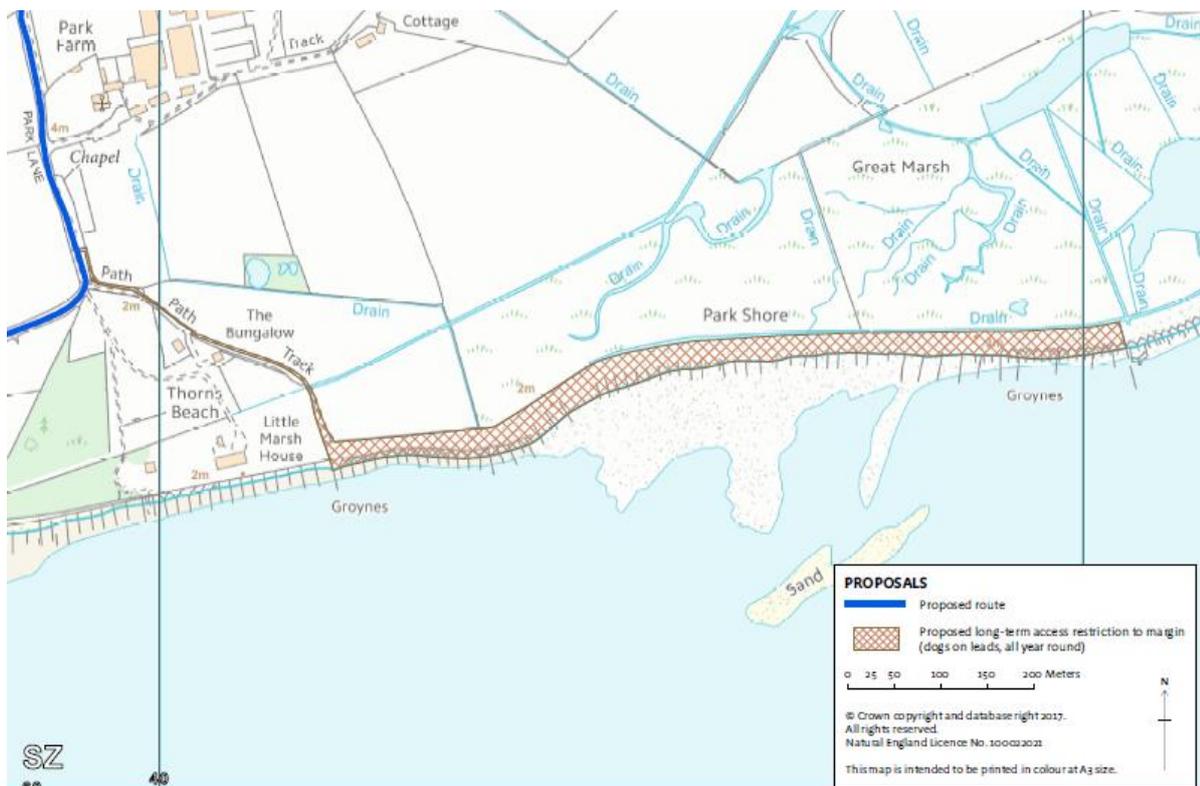
Park Shore

Relative to the Reserve as a whole, the permissive area at Park Shore offers an enjoyable area to walk, good coastal views of the Solent and Isle of Wight and a taste of the wider Reserve. We would like to maintain and support the current management here.

By “gifting” this area to people we intend for walkers to appreciate the value of the Reserve and value the small amount of access they have been allowed. This will help us to ensure people appreciate the area they are allowed to access in and encourage them to stay within it.

We propose:

- To establish a year-round CROW Section 26(3)(a) Nature Conservation Direction for dog owners to have their dogs on leads whilst using the Park Shore area, please see Map 23.
- To reinforce the dogs-on-leads Direction with signage reminding people, at intervals, to keep dogs on leads. To explain, near to the beginning of the Park Shore area, why people need to put their dogs on leads.
- To add an interpretation panel detailing the local bird and supralittoral species local to the area and explain how people should act around them.



Map 23. Proposed year-round Section 26(3)(a) Direction for dogs-on-leads

By maintaining the existing dogs-on-leads management here that has been in use for many years and adding in interpretation, we will reduce the risk of disturbance to nesting birds as well as trampling of the vegetated shingle by new users.

During the Breeding season between April 1st and 31st July we will ask people to be vigilant for nesting birds, giving pictures of Ringed Plover and Oystercatcher specifically and ask them to give the nests a wide berth. In addition we will ask people during this period to not walk on the beach but keep further on top or behind the ridge, which is where the current users of the area prefer to walk, as it is easier terrain than the beach.

We will not promote the route from the path itself but will position interpretation panels further down the permissive path, away from view of the main proposed route, beside the gate used to enter onto the Park Shore area proper.

5.5.7 Conclusion

Taking account of proposed mitigation measures, we consider that the risk of our proposals having an impact on sensitive features at this location are minimal. Non-significant effects are considered further in Section 7.

5.6 Keeping Copse

5.6.1 Ecological sensitivity

Non Breeding Dark bellied Brent Geese

Non Breeding Waders and Shelduck

Non-Breeding Dabbling Ducks

Non-Breeding Waterbird Assemblage

Keeping Copse and Burnt Oak Copse are close to Bucklers Hard. These woods are mixed but predominantly deciduous and grade eastwards into the salt marshes and mudflats of the Beaulieu River. Keeping Marsh, a saline lagoon lined with reeds and scrub is adjacent to Burnt Oak Copse.

The saltmarsh and mudflats in front of the copses is predominantly used by Teal, Wigeon and Lapwing (Frost *et al*, 2018) with Redshank, Curlew and Shelduck also present (Cox & Ravenscroft, 2009). Keeping Marsh is also predominantly used by Teal and Wigeon, but also by Dark-bellied Brent Geese and Black-Headed Gulls. Redshank, Curlew, Shelduck and Lapwing are also present in sizeable populations during Winter (Frost *et al* 2018)

Wader and Wildfowl populations peak in the winter months between October and February. Waders and wildfowl will be seen feeding on the intertidal at all tides. The banks around Keeping Marsh and the west and east banks, lined with upper salt marsh in many cases, are used as high tide roosts.

A number of bird species use the intertidal and shoreline here on a regular basis during Winter. As these features are close to the England Coast Path proposed route they **will be considered**

further.

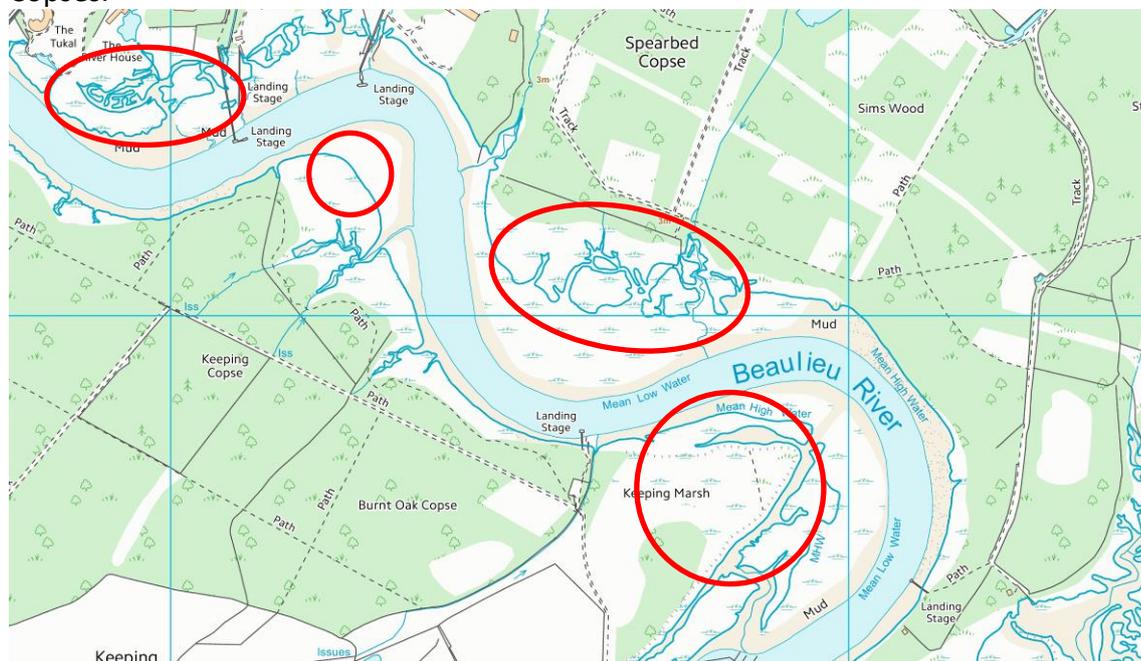
Breeding Waders and Shelduck

The Upper Salt Marsh and banks along the river between Bucklers Hard and Beaulieu Village are used by several breeding waders.

Curlew, Redshank, Oystercatcher, Little Egret, Shelduck and Lapwing are known to breed in the area.

The shoreline in front of the copses here has records of breeding attempts by Curlew and Redshank (Cox, 2016). Keeping Marsh has records of Curlew, Redshank, Little Egret, Shelduck and Oystercatcher.

Map 24 outlines the areas of viable breeding habitat for waders close to Keeping and Burnt Oak Copses.



Map 24. Outline of main areas used by breeding waders close to Keeping Copse

Most viable nest sites are well away from the proposed route of the England Coast Path in this area but some sites lie within the Coastal Margin.

Salt Marsh

Salt Marsh habitat is present particularly in front of Keeping Copse. There is a grading of woodland, into upper salt marsh and then into both mudflats and salt marsh below the high tide mark.

A recent study of the area in question by Jonathan Cox Associates (Cox, 2016) found the following salt marsh National Vegetation Communities (NVC) present:

- SM13 *Puccinellia maritima* Saltmarsh
- SM14 *Halimione portulacoides* Saltmarsh
- SM24 *Elytrigia atherica* upper Saltmarsh

This feature is vulnerable to trampling and eutrophication and **will be considered further**, due to proximity of the England Coast Path proposed route.

Vascular Plant Assemblage – Woodland, Heathland, Acid Grassland, Fen

There are no known specific studies on the ground flora within Keeping Copse but it does provide the correct habitat for the associated assemblage. Ground flora are vulnerable to i) trampling underfoot primarily by walkers and ii) possible eutrophication from dog walkers who do not pick up dog waste.

As the route runs through the associated habitat for this assemblage it **will be considered further** in this assessment.

5.6.2 Current access provisions and use of site for recreation

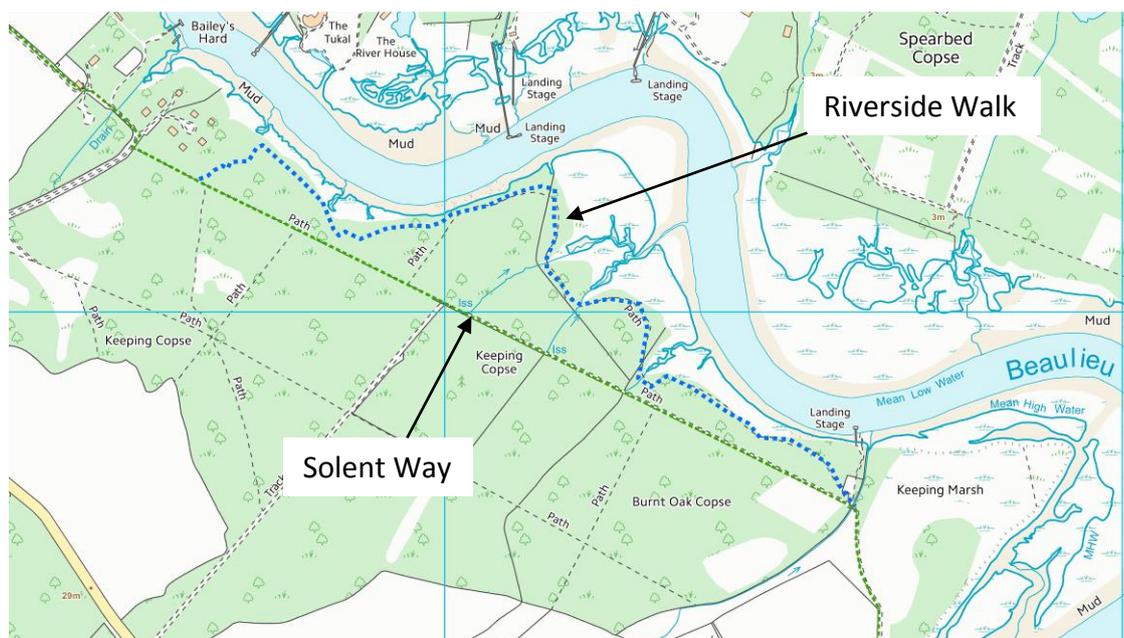
Current Walked Routes

Keeping Copse has the following, well-used, walking routes through it:

- The Solent Way: a well maintained bridleway running through Keeping Copse and Burnt Oak Copse, connecting Beaulieu Village to Bucklers Hard

Riverside Walk: A permissive route maintained by the Beaulieu Estate. This route allows people to go in closer proximity to the Beaulieu River and view it from the route and at set points. This route includes several board walks and bridges to help people navigate the area which can become waterlogged. This route also has interpretation boards providing information on the local habitats and species in the area.

These routes are promoted by the New Forest National Park Authority and local businesses, on websites & phone apps, as well as directly on site.



Map 25. Route of Solent Way (green dashed line) and the Riverside Walk (blue dashed line) at Keeping and Burnt Oak Copses

There are also some shorter routes, both maintained and de facto, connecting the Solent Way and Riverside walk through Keeping Copse and Burnt Oak Copse.

Keeping Copse and Burnt Oak Copse have more paths further inland but these are not currently accessible by the general public. Walkers have been seen to use these to create a circular route, between the Riverside Walk and the Solent Way, particularly if they have parked at Bucklers Hard.

Local Amenities and Attractions

Within 2 kilometres of the area in question there are the following amenities and attractions:

- Bucklers Hard Maritime Museum
- The Master Builders Pub
- Agamemnon Marina
- Beaulieu Village High Street; which has a variety of shops and cafes
- The Montagu Arms Hotel
- Beaulieu Abbey
- Beaulieu National Motor Museum

Also within the same distance, but on the other side of the Beaulieu River, are Exbury House and Gardens with associated café, shop and miniature railway.. Though this is relatively far to walk, this is another very popular attraction drawing people to the area.

From Bucklers Hard you can take a seasonal river cruise between Easter and October (in 2017 8th April to 29th October), with several departures daily. There is also an outdoor recreation centre offering kayaking and canoeing trips onto the Beaulieu River, located at the western end of Keeping Copse, near Baileys Hard.

The wider area has a range of local events throughout the year and is a focus for visitor activity within the New Forest.

Car Park Provision

Local car parks are predominantly clustered around Bucklers Hard and Beaulieu Village. At Bucklers Hard the private and paid-for parking is located at: i) Bucklers Hard Maritime Museum, approximately 132 spaces, this is a paid for carpark with a ticket booth at the entrance, ii) the Master Builders Pub has approximately 60 spaces for paying customers, iii) Agamemnon Marina has approximately 80-100 spaces for members of the marina. There are also limited informal parking space on Bucklers Hard Road with between 60-80 potential roadside spaces, these are not maintained as car park spaces but people have been observed using the road here.

Beaulieu village has the following approximate private and paid-for car parks: i) Village Hall Car Park, 50-55 spaces ii) Montagu Inn, 1-3 spaces iii) Montagu Arms, for paying customers 41 spaces iii) Fairweather Garden Centre, for paying customers 70 spaces. Cars also park on Beaulieu High Street for free, this has approximately 35-45 spaces.

It should also be noted that there are additional private parking spaces in and around Keeping Copse and Burnt Oak Copse, these are not for the general public and are solely used by local residents, patrons of local businesses such as a local outdoor activity centre and by boat users who keep boats close to the southern entrance of Burnt Oak Copse. From visits to the area we believe these to be between 60-80 spaces.

Further north, Beaulieu Motor Museum has considerable capacity for visitors with an upper capacity of 1000 spaces (Davies, 2011).

Summary

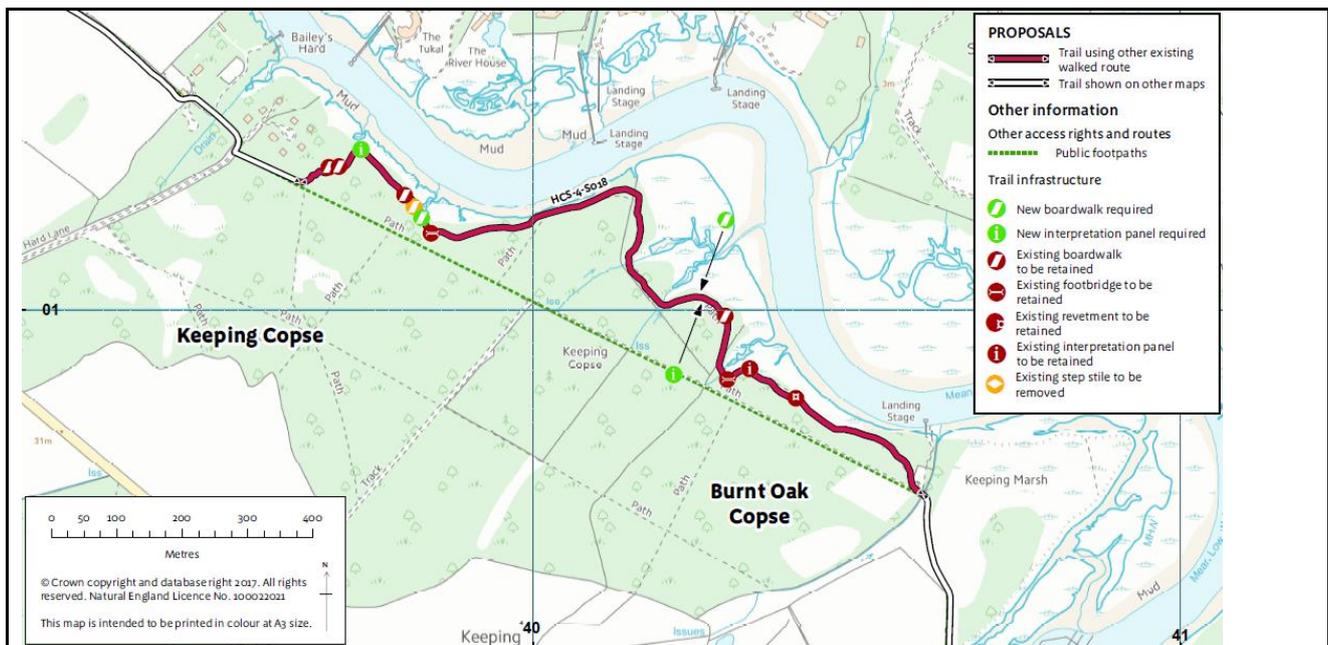
The area in question has a high level of existing access as a result of the great variety of local attractions, amenities and picturesque scenery. Combined these attract hundreds of thousands of visitors to the area annually.

The local parking capacity is expected to be at least 589 spaces (excluding Beaulieu National Motor Museum) (Davies, 2011) but during local events when additional local fields are used the parking capacity is expected to exceed 1666 spaces.

The good provision of parking spaces allows people convenient access points at Beaulieu Village and Bucklers Hard to the Solent Way and Riverside Walk at Keeping Copse.

5.6.3 Proposed improvements to accessibility

The England Coast Path route through Keeping Copse and Burnt Oak Copse is aligned along the existing Riverside Walk.



Map 26. Proposed route through Keeping and Burnt Oak Copses

A seaward route was chosen here based on the enjoyable estuarine and woodland views, existing promoted access and the current good provision of infrastructure here such as board walks, viewing areas and educational information boards.

The route is clearly defined along much of its course by existing signage and boardwalks, which help to waymark and define where people should walk. Due to areas of the route becoming waterlogged and to help guide people in key areas we are proposing to add in the following infrastructure as per Map 26:

- Two new board walks and guardrails, close to existing board walks
- Two new interpretation panels, to help educate people about the local wildlife here

We will also remove a stile here, to enable more people to access along this area.

Those people who do not wish to use the Riverside Walk may choose to use the more landward Solent Way instead.

Coastal Margin landward of the path includes areas of woodland within Keeping and Burnt Oak Copses. Seaward Coastal Margin extends to mean low water which is relatively close to the shoreline here.

5.6.4 Predicted change in use of site for recreation

The site currently has high access as a result of local attractions, existing promoted routes and a variety of amenities such as cafes, parking facilities and toilets. This is reflected in the findings of an access report completed by The Solent Disturbance and Mitigation Project in 2011 which put the area between Bucklers Hard and Beaulieu River as receiving between 101,000 – 169,000 visits

to the coast annually. (Fearnley *et al*, 2010). We would expect that the amount of visits has increased here since 2011. Based on the good standard of provision for walkers and associated high background access, we would expect that the addition of the England Coast Path would see a low or very low increase in visitors here, both along the route and in the Coastal Margin.

Although volume of access is increasing, the patterns of use will remain similar. There are well managed and defined areas where people can and cannot access. Walked routes are clearly defined with signage and surfacing. Areas of private woodland, property and reserves such as that at Keeping Marsh, are managed to prevent people from accessing them, through fences, locked gates and signage. From our observations this management is currently effective and we would expect it to be so into the future and that people will continue to use this area in much the same way they have done for many years.

5.6.5 Possible adverse impacts to sensitive features

Non-Breeding Birds

There are several wader, duck and wildfowl species using the shoreline along Keeping Copse and Burnt Oak Copse, as well as Keeping Marsh. The England Coast Path proposal raises several risks to these species:

- A risk that the England Coast Path will increase the visual disturbance to bird species feeding on and roosting along the shoreline by Keeping Copse and Burnt Oak Copse.

There is already a high volume of footfall along this area currently and we would only expect this proposal to have a low or very low increase in footfall to the area. Over time birds are able to habituate to access and along the Riverside Walk bird species have experienced humans and dogs here for a considerable amount of time. We do not believe adding a small increase in footfall to the existing high background level of access here, will cause an undue impact on feeding birds.

Similarly roosting birds choose quieter areas, such as Keeping Marsh and the associated banks here, to roost at high tide, away from the Riverside Walk, we would expect this to continue.

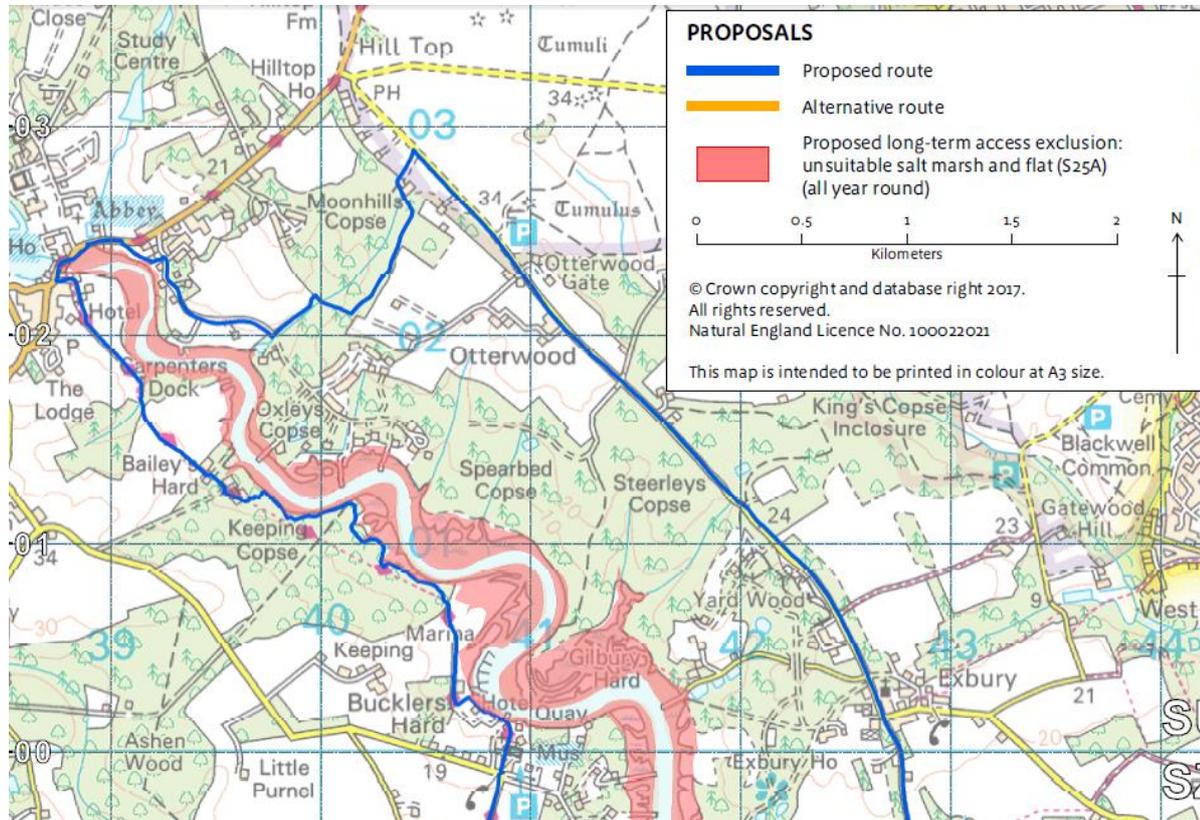
- A risk that dogs will run out onto the intertidal, causing birds to move away or fly away from the perceived threat.

The Riverside Walk is well defined with a route made clear through surfacing, board walks, set viewing areas and signage. By further supporting this through addition of two new board walks, guardrails, interpretation panels and waymarkers, we believe the proposals will encourage people and dogs to keep to the path..

We will create a Section 25A Direction to exclude access across the salt marsh and mudflats here (see Map 27) (please see Appendix 7), due to their hazardous nature, particularly when the tides are changing. This Direction's purpose is to ensure people are safe and use the area in the appropriate way. In this case though it has a secondary benefit; adding to the existing

management here by legally preventing people from accessing across the salt marsh and mudflats, which support feeding and roosting waders.

We believe the design of the path and Section 25A Direction on the intertidal to exclude access, although not specifically for nature conservation reasons, will act to encourage people to stay on the path, reducing the risk of people disturbing birds on the intertidal.



Map 27. Proposed route from Bucklers Hard to Exbury and Section 25A Exclusion

We believe that the existing management of the path here and the difficult intervening terrain will act to prevent the great majority of walkers and dog walkers from accessing onto the intertidal close to Keeping Copse. We do though appreciate that this does not fully manage the risk of dogs causing disturbance to birds here and as such we will consider this area further in the following subsection. A risk that people will enter Keeping Marsh reserve and lagoon, causing birds to cease feeding and potentially take flight.

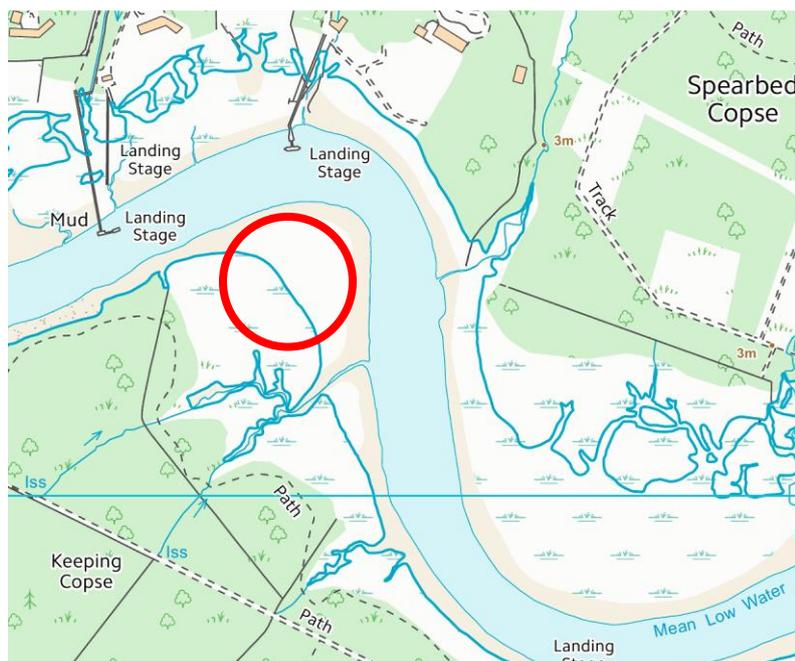
The only access for the general public onto Keeping Marsh is along a screened board walk to a hide. It would be quite hard to access the main part of Keeping Marsh from the existing Solent Way route or from the Riverside Walk further northwest, due to fencing and thick scrub between the path and the central area of the lagoon.

Additionally the central and eastern parts of Keeping Marsh will be covered by the Direction 25A to exclude access. The remaining area of the Marsh includes the hide and an area of thick scrub and reedbeds.

Based on the existing management coupled with our Section 25A Direction to exclude access along the Beaulieu River and Estuary, we believe that the risk of people accessing onto Keeping Marsh has been adequately addressed.

Breeding Birds

Map 28 shows where Curlew and Redshank have attempted to breed in the area, based on findings by Jonathan Cox Associates in breeding bird surveys conducted in 2015 and 2016 (Cox, 2016).



Map 28. Recorded breeding area for Curlew and Redshank close to Keeping Copse, west bank of Beaulieu River.

Based on our proposals there are the following risks to breeding birds here:

- A risk that dogs will scare away breeding pairs potentially causing the nest to be abandoned or reduce the chances of survival of any chicks present.
- A risk that humans will scare away breeding pairs potentially causing the nest to be abandoned or reduce the chances of survival of any chicks present.

As mentioned previously in this section, we believe that the well managed route here encourages walkers and dog walkers to stay on the existing Riverside Walk. Our additional infrastructure including boardwalks and interpretation panels will support this management.

A Section 25A Direction will cover the area where Curlew and Redshank have been recorded nesting, circled in red in Map 28. This Direction is intended to safeguard path users but will have a secondary benefit of legally obliging people to not access the salt marsh, where Curlew, Redshank and potentially other bird species may be nesting.

We appreciate that breeding birds are, in general, more vulnerable to disturbance than non-breeding birds, as a breeding pair will have to maintain not only themselves but also any hatched chicks. As such, although the risk of this occurring has been greatly reduced through our design and restriction of the path and Coastal Margin here, we will consider these risks further based on the heightened magnitude to Breeding birds.

- A risk that dogs will scare away breeding pairs using the shoreline in front of Keeping Marsh potentially causing the nest to be abandoned or reduce the chances of survival of any chicks present.
- A risk that humans will scare away breeding pairs using the shoreline in front of Keeping Marsh potentially causing the nest to be abandoned or reduce the chances of survival of any chicks present.

As mentioned previously we believe that the existing management of the path here and the difficult intervening terrain will act to prevent the great majority of walkers and dog walkers from accessing the intertidal area besides Keeping Copse. We do though appreciate that this does not fully manage the risk to bird disturbance here and as such we will consider this area further in the following subsection.

Salt marsh

- A risk that the England Coast Path will increase footfall over the salt marsh along Keeping Copse and Burnt Oak Copse shorelines

The Riverside Walk runs alongside the upper salt marsh at several points. Boardwalks and viewing points help encourage people to stay close to the walked route, further addition to these will help keep people on the route.

The improvements will also help the overall condition of the route, as although it is well maintained there are areas which become waterlogged and muddy, causing people to step aside from the route and over time this can cause wear, potentially on the salt marsh.

The Direction 25A will act to protect the salt marsh here as it is overlain over the habitat along Keeping Copse and Burnt Oak Copse.

Based on enhancing the current management through the addition of infrastructure and the additional protection a Section 25A Direction to exclude access will have here, which will help to improve the current situation, we believe that the risk is low. We do appreciate the existing issue of recreational pressure on the Salt Marsh here though, based on a recent survey (Cox, 2016) and as such will **consider this further** in determining how to further reduce the risk.

- A risk that the proposals will cause an increase in eutrophication over the Salt Marsh

The current walk runs alongside Salt Marsh habitat. The existing board walk route here is well established and helps to encourage walkers and dog walkers to stay on the route. Additionally the Salt Marsh terrain is frequently waterlogged or inundated naturally and as such does not offer good walking terrain. As a result this helps to reduce aforementioned risk but does not wholly resolve it and as such we will consider this further in the next section.

Vascular Plant Assemblage – Woodland, Heathland, Acid Grassland, Fen

The current Riverside Walk through Keeping Copse is well signposted and waymarked, additionally the boardwalks help to channel people along the route. There are though the following risks associated with our proposal:

- A risk of increased trampling of ground flora within the woodland areas here
- A risk of eutrophication of the environment as a result of dog fouling

The creation of a waymarked route, will reduce the above risks but not wholly and as such these will be considered further in this assessment.

5.6.6 Any mitigation measures included in the access proposal to address possible impacts

Sign close to sensitive area

The area circled in Map 28 is where Curlew and Redshank have been recorded nesting, it is also an area of accessible upper salt marsh which people have been observed accessing before. By adding a sign close to the path here outlining both the bird and flora sensitivities here, we will bolster awareness of these features and how they can be vulnerable to access.

The 25A Direction to exclude access would also be mentioned on this sign, to further underline the area as not being publically accessible.

Interpretation panel wording and presentation

The interpretation panels here will detail the following:

- How the area is used by birds during Winter, Passage and Breeding
- What species of Salt Marsh and woodland flora are present
- How to act when close to these fauna and flora features so as not to harm them
- Ask people to pick up after their dogs

By creating engaging information we will raise awareness of how precious and delicate the local flora and fauna are and we believe this will encourage people to act respectfully whilst walking in area. We intend to work with local and regional organisations, including but not limited to: the New Forest National Park Authority, Bird Aware Solent and the local NNR team, to ensure this wording is engaging and meets regional standards.

Maps of the routes and areas which cannot be accessed, will also be added to the interpretation panels to further define the route here.

Dog Management

To better manage dogs walking along the Riverside Walk we propose to add the following:

- Advisory notices at the main entry points to the walk that request walkers keep their dogs-on-leads by highlighting the threats posed by dogs to bird species that may be feeding or attempting to nest within the Salt Marsh habitat.
- Clearly outline at the main entry points the inland areas closer to the Solent Way, where dogs can be allowed off their leads.
- An inclusion in all interpretation that dog fouling should be picked up and appropriately disposed of by owners.

We believe that a clear and well explained request, rather than demand, to dog walkers will be more effective at enforcing appropriate dog control here. Targeted signs at the main entry points to the Riverside Walk will help to ensure dog walkers are aware of the local sensitivities.

Promoting areas further inland, along existing routes, will further help to reduce the risk of disturbance and clearly outline the areas where dogs can be let off the lead, helping to further encourage adherence to these controls.

Board walk maintenance, extensions and addition of guard rails

We propose to further enhance the existing series of boardwalks within this area, to both enhance the enjoyment for walkers but also to help further improve the management of people walking along the waterside walk here.

The start and end points of some of the board walks in this area have become waterlogged and as a result some people walk off the trail here. By adding additional boardwalk we hope to avoid these wet areas and reduce the risk of people walking off the trail.

We will also add guard rails at specific points along the board walk, putting in place a physical barrier between the walked route and intertidal area. These rails will also act to further channel and guide people along the route here.

Through establishment of the above management: focused signage, raising awareness through interpretation panels and extension of the existing board walk, we believe that all the risks identified in 3.5.5 have been reduced to negligible levels and adequately addressed.

5.6.7 Conclusion

Taking account of proposed mitigation measures, we consider that the risk of our proposals having

an impact on sensitive features at this location are minimal. Non-significant effects are considered further in Section 7.

5.7 Moonhills Copse

5.7.1 Ecological sensitivity

Breeding Wetland Birds

Non-Breeding Hen Harrier

The following reports have helped build up an understanding of territories used by birds in this feature group:

- New Forest Breeding Bird Survey 2014
- New Forest Dartford Warbler Survey 2014
- New Forest Woodlark Survey Report 2014
- New Forest Survey of Nightjar 2013

These reports show that there are territories for all species relatively close (<1km) to the proposed route.

These species will nest within or on the edges of hedges & grassland shrub but also in the open. As such they could be susceptible to disturbance from walkers and dogs.

There is considerably less information pertaining to Hen Harriers in this part of the New Forest. This being said the area under consideration offers suitable habitat for this species and we believe they are present in this part of the New Forest.

This species overwinters in heathland and as such they could be susceptible to disturbance from walkers and dogs

As such these features will be considered further here.

Breeding Heathland Birds

Assemblage of breeding birds associated with heathland and woodland

There is little site-specific or regional surveying for this feature group. It is though expected that due to the availability of suitable habitat (heathland, grassland, woodland and wetland) that these species are likely to be breeding in and around the site

As such these breeding bird feature groups will be considered further here.

Lowland Dry Heathland and Acid Grassland Vascular Plant Assemblage, Rare Plants and Lichen

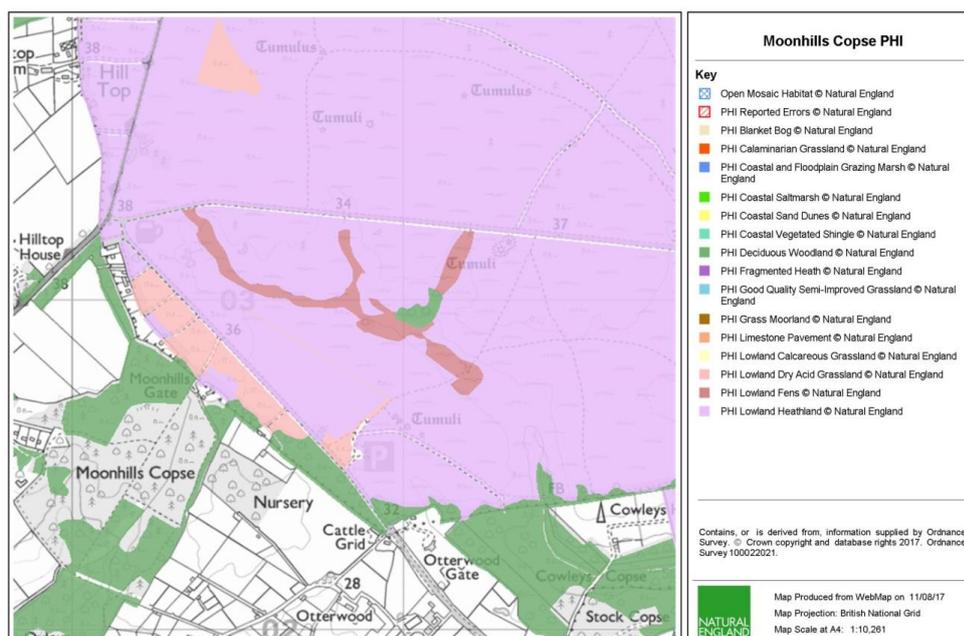
Map 29 shows habitats local to this area. Lowland Dry Acid Grassland and Lowland Heathland are present close to the proposed route here.

The Lowland Heathland here, as with much of the New Forest, transitions between wet and dry heathland types throughout the area. The following types of wet and dry heathland can be found in the New Forest:

- M16 *Erica tetralix* – *Sphagnum compactum*
- M14 *Schoenus nigricans* – *Narthecium ossifragum*
- H2 *Calluna vulgaris* – *Ulex minor*
- H3 *Ulex minor* – *Agrostis curtisii*

These habitat types are relatively resilient to occasional footfall by walkers but continued use can cause areas of bare earth to develop, where there are fewer and less varied flora present. These habitat types, in particular the Lowland Heathland, are under pressure from recreational use.

These features **will be considered further** in this report.



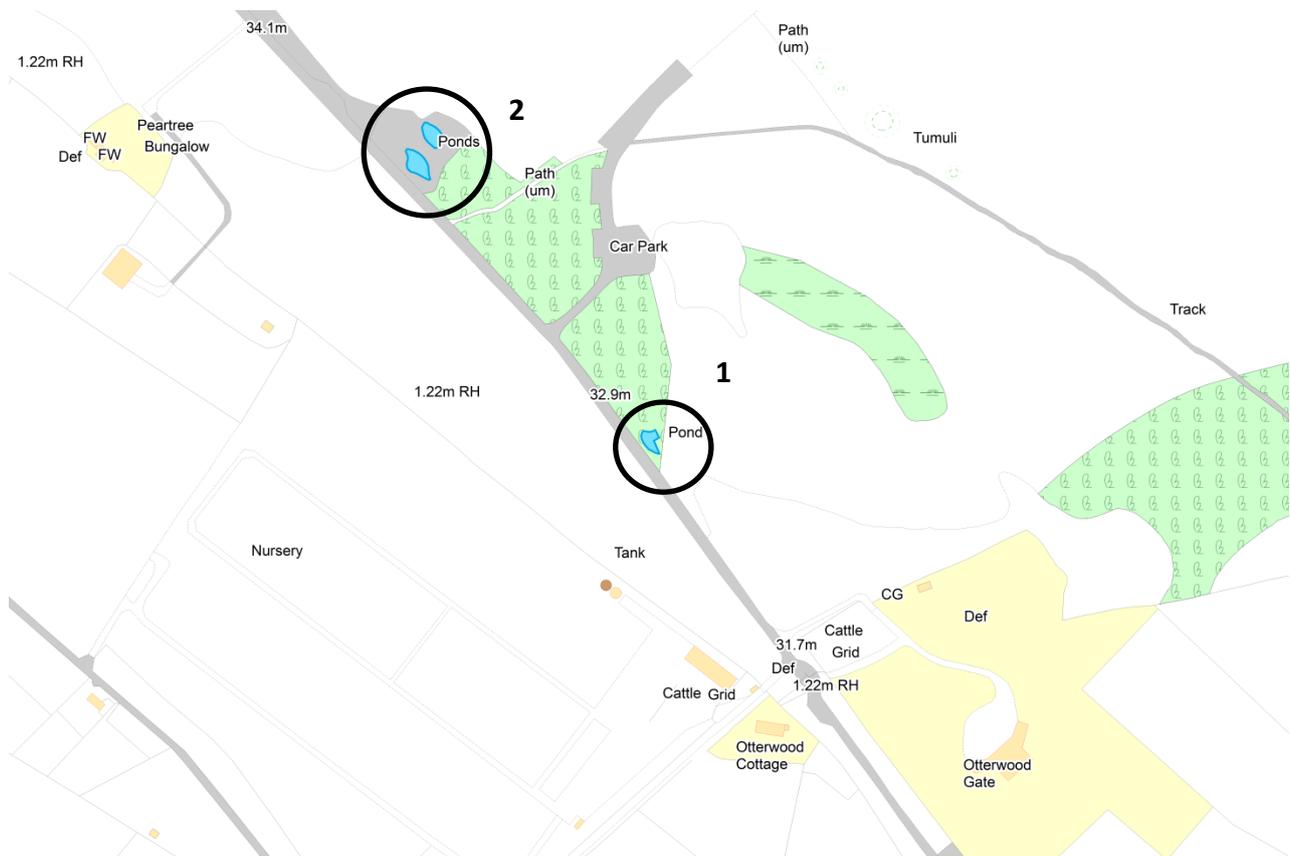
Map 29. Types of habitat in the Moonhills area

Amphibian Assemblage

Ponds indicated in Map 30 are likely to contain a range of newts and frogs.

Pond group 1, on Map 30, is approximately 145m north of the trail, with Pond group 2 approximately 345m northwest of the trail.

These Ponds could support hibernating and breeding amphibians but it is expected that they will be most active between late February and late September.



Map 30. Ponds close to Moonhills Carpark

Reptile Assemblage

As per Map 29 the route here runs adjacent to Acid Grassland and Lowland Heathland. These are both habitat types where reptiles may be present.

The area close to the proposed route also include some wet woodland which may offer suitable habitat for lizards and slow worms.

5.7.2 Current access provisions and use of site for recreation

Current Walked Routes

Beaulieu Heaths, located adjacent to the route here, is Open Access land which allows full public access.. As a result of this there are numerous desire lines that extend further north and east deeper into the heathland. Map 28 has been modified to highlight some of the main routes from Moonhills car park. The numerous walked routes here, highlights how well accessed the area is currently.



Map 28: Walked areas from Moonhills carpark. Image Date: 2015 Google Earth

Moonhills Copse has a permissive route that runs from the north eastern part of the woodland, south into Oxleys Copse and then northwest along Docks Lane towards Beaulieu. This route is a promoted route but only through on site signage of the route, at places such as the western end of Docks Lane.

The Solent Way promoted route runs along Beaulieu Road approximately 500m northwest from the proposed England Coast Path route.

Local Amenities and Attractions

The immediate area has relatively few attractions and amenities with only the Royal Oak Pub close to the junction between Summers Lane and Beaulieu Road, approximately 500m west from the proposed route present.

The area is within 2km of Beaulieu Motor Museum, Exbury Park and Gardens and the amenities within Beaulieu Village, detailed in section 5.6.

Car Park Provision

Close to the route is Moonhills Car Park which has approximately 68 spaces (Davies, 2011). This is currently a no charge carpark.

The Royal Oak Pub has approximately 28 spaces for paying customers (Davies, 2011).

Further north in the wider Beaulieu Heath area there are several other carparks on Beaulieu Road (2.6km north), North Lane (2.9km northwest) and the nearby Village of Holbury (2km east).

Summary

The picturesque Beaulieu Heaths attracts a large number of people for walking, road cycling and picnicking. The considerable number of defacto routes which spread out from Moonhills car park and the Royal Oak Pub, further highlight both the significant access this area receives and the pattern of access.

The area in question has few immediate amenities for visitors but is set within a wider area that provides a good variety of places to park, eat and activities such as museums and parks.

5.7.3 Proposed improvements to accessibility

The route through Beaulieu Heath between Moonhills Copse and the hamlet of Otterwood, on Summers Lane, is along existing walked routes and road.

A landward route was chosen here as it was felt it struck the best balanced route, based on the following reasons:

- To protect the species and habitats along the eastern edges of the Beaulieu River, which currently are managed to have no or very low access.
- In consideration of how a more seaward route could affect the privacy of properties at The Hummicks, Otterwood and the eastern end of Docks Lane.
- In consideration of how a more seaward route could impact on local businesses such as stables and horse and pony paddocks, as well as the shoot within Spearbed Copse, Sims Wood and Steerley Copse.

The chosen route is discussed further in Chapter 4 of our Highcliffe to Calshot proposal report. The sensitive features of this area are discussed in the following section 5.7.4.

The route uses a gravel vehicle track from Moonhills Copse and then is routed atop Summers Lane southwest.

The following infrastructure will be added along the route:

- Improvements to an existing pedestrian gateway in Moonhills Copse
- Interpretation Panels will be added at i) Moonhills Copse and ii) Summers Lane by

Otterwood, outside of the Beaulieu Heath area, detailing the route.

- Waymarkers will be added within Moonhills Copse and outside on Summers Lane at Otterwood.

No waymarkers, signage or interpretation panels will be added within the Beaulieu Heath as these are strictly controlled within the area and it has been determined that any addition of these would have visual impact that would detract from the beauty of the landscape. As such we have positioned this infrastructure as close to the border of this area as is practical.

There is no landward coastal margin here. Seaward coastal margin includes Oxleys Copse, Spearbed Copse, Sims wood and the pasture fields around Otterwood and The Hummicks. Private homes and gardens in this area are Excluded from coastal access rights. Moonhills Copse has a very small amount of coastal margin close to the route.

5.7.4 Predicted change in use of site for recreation

The site currently has high levels of access due to the picturesque natural environment here and the freedom to roam provided by the Open Access land here. This combined with parking spaces on site and some local amenities, allow people to go on circular walks and also have food or play games. The wider area has many attractions and other car parks, drawing people from further afield for daytrips.

There is little survey information as to exactly how many people visit the area but we do know that the area is well accessed from consultation with local people. The satellite image in Map 28 also infers a high level of access; with numerous routes leading into and away from the area around Moonhills Carpark and Summers Lane.

Based on the existing high background access, good provision of amenities and location away from the coast, we would expect only a low level of increased access here.

Without additional measures we would expect a slight change in behaviour for people visiting this area:

- Movement into Moonhills Copse: This area currently has a permissive route running through the woodland to Beaulieu but it is not obviously promoted beyond onsite signage. Through alignment of a National Trail here we will create a more formal and promoted walking route. This will act to attract people away from the heathland area and into Moonhills Copse because of i) highlighting a new area of access ii) providing a set route towards an area with more amenities (Beaulieu Village) iii) providing a route which provides added variety; including heathland, woodland and riverside walking.
- Moonhills Car Park: There are quite few formal car parks in the area and only Moonhills car park is completely free, as such we would expect people to use Moonhills car park as a

means to park their car and begin their journey on the England Coast Path.

- Movement towards Exbury: There is currently little access provision towards the village of Exbury, with the establishment of the England Coast Path on Summers Lane we would expect more people to walk southwest from Moonhills car park towards Exbury village and Exbury Gardens.

Overall we believe the England Coast Path will i) encourage people to move away from Beaulieu Heath area, towards the coast at Beaulieu and Exbury, ii) see an increase in the use of Moonhills car park.

5.7.5 Possible adverse impacts to sensitive features

Breeding and Non-Breeding Birds

Based on our proposals there are the following risks to birds here:

- **Breeding Birds:**
 - A risk that dogs could cause breeding birds nesting in the heathland around Summers Lane and Moonhills car park, to be startled and leave the nest potentially reducing the chances of survival of any chicks present or causing the nest to be abandoned.
 - A risk that walkers could cause breeding birds nesting in the heathland around Summers Lane and Moonhills car park, to be startled and leave the nest potentially reducing the chances of survival of any chicks present or causing the nest to be abandoned.
- **Non-breeding birds:**
 - A risk the dogs could cause birds roosting or loafing on the ground in the heathland around Summers Lane and Moonhills car park, to be disturbed and potentially reducing their chances of survival.

We would expect the above risks to be reduced based on the following:

- There is already high use in the area surrounding Moonhills car park and the route itself. We do not expect much change to the pattern of access here.
- We do not anticipate trail users, who are predominantly intent on a coastal and linear walk, would break their walk at Moonhills and use the heathland for recreation.
- Waymarkers and interpretation panels at Moonhills Copse and on Summers Lane, will direct people and provide clear maps for those using the route. These are discussed further in subsection 5.6.7.

H4010 Northern Atlantic wet heaths with *Erica tetralix*

H4030 European dry heaths

Population of Schedule 8 plant - *Gladiolus illyricus*, Wild *Gladiolus*

- A risk that the England Coast Path will increase footfall away from the route causing:

- Direct trampling of plants
- Compaction of soil
- A risk that dog walkers will not pick up after their dogs if they foul on or close to the route, possibly leading to localised eutrophication of the soil.

We would expect the above risks to be reduced based on the following:

- Waymarkers and interpretation panels at Moonhills Copse and on Summers Lane, will direct people and provide clear maps for those using the route.
- There is already high use in the area surrounding Moonhills car park and the route itself. We do not expect much change to the pattern of access here.
- We do not anticipate trail users, who are predominantly intent on a coastal and linear walk, would break their walk at Moonhills and use the heathland for recreation.
- Waymarkers and interpretation panels at Moonhills Copse and on Summers Lane, will direct people and provide clear maps for those using the route. These are discussed further in subsection 5.6.7.

Amphibian Assemblage

There is a risk of disturbance to amphibians using the ponds outlined in section 3.6.1. We believe that i) by establishing a mapped route along Summer Lane and ii) the normally waterlogged or saturated nature of the ponds and area immediately around them, mean that this risk has been significantly reduced.

Based on this we do not believe the Amphibian Assemblage is at risk of disturbance by our proposals.

Reptile Assemblage

There is a risk of disturbance to reptiles basking or foraging close to the path. We believe that i) by establishing a mapped route along Summer Lane and ii) the area is well vegetated giving significant amounts of inaccessible cover (e.g. gorse, hawthorn), mean that this risk has been significantly reduced.

Based on this we do not believe the Reptile Assemblage is at risk of disturbance by our proposals.

5.7.6 Any mitigation measures included in the access proposal to address possible impacts

Raising Awareness through Interpretation Panels

The aforementioned interpretation panels will be positioned at the entrances to the Moonhills area: at Moonhills Copse and at Otterwood.

These panels will raise awareness of the sensitivities of the heathland and grassland habitats in the area, specifically the variety of bird species and plant species present. They will complement existing signage created by the Forestry Commission already situated at Moonhills Carpark.

Guidance will be given on how people can limit their impact on these species such as:

- Keeping to set routes and avoiding walking across the open heathland, to reduce impact on nesting birds and additional trampling of the grassland and heathland habitats
- Cleaning up after dogs if they foul. Promoting other areas of the route away from the Beaulieu Heaths. This will support the expected trend of taking people away from the heaths.
- We will also add wording that outlines that livestock are frequently on Beaulieu Heaths and that it is recommended people keep their dogs on leads for safety.

This signage will be done through liaison with the Natural England responsible officer for the New Forest SSSI, Forestry Commission, New Forest National Park Authority and other key New Forest stakeholder groups.

Clear Mapping and Route Waymarking

Maps clearly showing the set route along Summers Lane will be added to the interpretation panels to help guide people along the route.

These maps will be added to the interpretation panels at the entrances to the Moonhills area.

5.7.7 Conclusion

Taking account of proposed mitigation measures, we consider that the risk of our proposals having an impact on sensitive features at this location are minimal. Non-significant effects are considered further in Section 7.

5.8 East Beaulieu River (Including Sims Wood, Steerleys Copse and Spearbed Copse)

5.8.1 Ecological sensitivity

Non Breeding Waders and Shelduck

Non-Breeding Waterbird Assemblage

A Low-Tide survey conducted by Jonathan Cox Associates during the Winter of 2016 to 2017 is shown in table 2 (Jonathan Cox Associates, 2017). Relatively large proportions of the SPA population of Black-Tailed Godwit (11.5%), Shelduck (9.1%), Redshank (6.7%) and Lapwing (5.5%) were present between Beaulieu and the southern extent of the Beaulieu Estuary.

Species	Peak Count 2016/17	Percentage of SPA bird species at Beaulieu River
Teal	678	14.5
Black-Tailed Godwit	136	11.5
Shelduck	41	9.1
Wigeon	399	7.0
Redshank	60	6.7
Lapwing	200	5.5
Curlew	35	2.9
Dunlin	125	2.1
Brent Goose	43	0.6
Oystercatcher	8	0.5

Table 14 Based on a study carried out by Jonathan Cox Associates, Showing peak counts of local waterbirds at Beaulieu River in comparison to the SPA as a whole (Jonathan Cox Associates, 2017).

Dabbling Ducks

Table 14 (Jonathan Cox Associates, 2017) shows that relatively high proportions of the total SPA population of Teal (14.5%) and Wigeon (7%) are present along the eastern banks of the Beaulieu River.

Feeding Wigeon and Teal are shown to be concentrated on the shorelines in front of Exbury Gardens, opposite Bucklers Hard and that close to the houses along Docks Lane.

Breeding Birds Assemblage

Aggregations of breeding birds - Oystercatcher, *Haematopus ostralegus*

The eastern side of the Beaulieu River has suitable Salt Marsh and some small areas of shingle above the high tide mark which are suitable for breeding Oystercatcher, Redshank and Shelduck (Jonathan Cox Associates, 2016).

Breeding pairs are present along the eastern shoreline of the Beaulieu river between Beaulieu

village and the mouth of the Beaulieu River between Gull Island and Lower Exbury shoreline, between the start of April and August (Jonathan Cox Associates, 2016):

2015: ~14 Pairs of Shelduck, between 4-6 young recorded.

2016: ~10 Pairs of Shelduck

2015: ~23 Pairs of Oystercatcher

2016: ~21 Pairs of Oystercatcher

2015: ~15 Pairs of Redshank

2016: ~ 11 Pairs of Redshank

(Jonathan Cox Associates, 2016)

Vascular Plant Assemblage – Woodland, Heathland, Acid Grassland, Fen

Sims, Spearbed and Steerley Rides

- **Duke of Burgundy Butterfly**
- **Light Crimson Underwing Moth**

The gaps or 'rides' running through these woodlands have created a unique, shady habitat that is important for the vascular plant assemblage and invertebrates such as local butterflies specifically the Duke of Burgundy

The mixed deciduous and coniferous woodlands between Docks Lane and Summers Lane, particularly Sims Wood and Spearbed Copse, have suitable habitat for Stage Beetle (NFPA, 2016; JNCC, 2016), White Admiral (Butterfly Conservation, 2014; Butterfly Conservation, 2004), Silver-washed Fritillary (Butterfly Conservation, 2015), Light Crimson Underwing moth (Curson *pers comms*, 2018) .

Salt Marsh

Salt Marsh habitat is present along the eastern banks of this part of the Beaulieu River, with particular concentrations in front of Spearbed Copse and west of Gilbury Hard.

5.8.2 Current access provisions and use of site for recreation

This section focuses on:

- The **proposed route** between Otterwood Gate, near Moonhills car park and Exbury village, along Summer Lane.
- The **proposed Coastal Margin** along the shoreline by The Hummicks and other properties at the southern end of Docks Lane to Gilbury Hard.

This area comprises of private properties including those at; the end of Docks Lane, The Hummicks and Otterwood, private woodland including; Sims Wood, Spearbed Copse and Steerleys Copses.

This area has no public access points and there are no public footpaths or permissive access in the area except i) the public highway along Summer Lane ii) the public right of Way leading to Gilbury Hard and iii) the public highway road leading down to Gilbury Hard.

Summer Lane has three gates leading into the woodlands, specifically Steerleys Copse, which are all believed to be locked and fenced on either side. Signs are present indicating that the land is private and that public access is not permitted. The route adjacent to Steerleys Copse runs alongside thick hedgerow or scrub, backed by fencing. The route closer to Otterwood runs adjacent to pastures and is similarly sided with fencing and some hedgerow and scrub.

Within the woodlands there is some access for woodland maintenance, tree felling, use of a handful of private jetties and occasional shooting. There are unsealed vehicle tracks throughout the area and some rides leading down to the shoreline.

Although the area has no or very little formal public access, there are areas adjacent that are worth mentioning in detail. These can be divided as follows:

Moonhills Copse and Oxleys Copse

There is a promoted and signposted permissive route that passes through Oxley and Moonhills copses, linking Beaulieu village, a popular tourist attraction, with the New Forest Heaths, a very large common with relatively high levels of public access.

In the copses there are several permissive and de facto routes, allowing people access to most areas of these woodlands. Walkers are contained within the woodland and are not able to access Sims Wood further southeast or eastwards into land close to The Hummicks and Otterwood.

This area is considered in more depth in Section 5.7.

Moonhills carpark and New Forest Heaths

Moonhills car park, adjacent to Summer Lane, has a capacity of approximately 68 spaces (Davies, 2011). This is a relatively well used car park. There are walks from the car park into the Beaulieu Heaths and Moonhills Copse.

Exbury Gardens

Exbury Gardens is Park and Garden tourist attraction, with over 100 hectares of maintained gardens and walking routes. A cafe, gift shop, miniature steam railway and seasonal events. The site has both a main car park and overflow car park of a combined capacity of approximately 255 spaces (Davies, 2011).

Between 2005 and 2010 Exbury Gardens attracted on average 119,485 visitors annually (BDRC, 2011; Davies, 2011)

5.8.3 Proposed improvements to accessibility

As per map 27 (Section 5.6) from north to south; the route will follow Summer Lane from Otterwood Gate to just past Exbury Park and Gardens further south.

We propose to add in signage and waymarkers to demark the route here.

5.8.4 Predicted change in use of site for recreation

Along the **proposed route**; we would expect there to be a medium increase in the current access as although this is a public highway and is accessed by walkers, it is not a promoted route. By establishing Summer Lane as part of the England Coast Path, we would expect the related promotion to encourage more people to walk along this road.

The background level of access in this area is fairly high, with Beaulieu Village, Beaulieu Motor Museum & Historic House, the Beaulieu Heaths and Exbury Gardens, all attracting a large number of visitors and providing a range of amenities such as car parks, walking routes and cafes.

- Beaulieu: Between 2010 and 2016 on average, 308,285 visitors annually went to Beaulieu village and associated attractions within the immediate vicinity (ALVA, 2016).
- Exbury Gardens: Between 2005 and 2010 Exbury Gardens attracted on average 119,485 visitors annually

Within the **proposed Coastal Margin** we would anticipate a low or very low increase in use as:

- The route, after much consultation, has been sited well back from the coast being between 670m and 1km from the eastern bank of the Beaulieu River at all times.
- No coastal or estuarine views along the proposed route. We would expect people to continue north or south along the route to reach the Beaulieu or Lepe areas of estuary and coast respectively.
- The existing barriers to entering the woodland are fairly significant, including a mix of; fencing, hedgerows, gates, signage and natural vegetation. These barriers would help keep people to Summer Lane. This also reduces any attractors such as views of the coast or waters edge.

- The route will be a promoted National Trail with waymarking and signage indicating the route. We would expect the majority of walkers to follow our marked route here.
- Within the woodlands and fields near Otterwood, there are no provisions for walkers.

5.8.5 Possible adverse impacts to sensitive features

Non-Breeding Birds

The main risk to non-breeding birds in this area are people and dogs, which birds may interpret as a threat, interrupting feeding or causing birds to expend extra energy to move or fly away from the perceived threat. This disturbance could occur inland or on the intertidal and can be broken down further into:

- Direct disturbance such as dogs running into a flock of birds and causing a flight response
- Indirect line-of-sight disturbance such as people entering a field, some distance from the birds, causing them to stop feeding and move further away.

The route here has been aligned far back from the shoreline at Beaulieu river, where waders and other waterbirds will be feeding on the salt marsh and mudflats there. By setting back the path by at least 600m but often over 800m, and removing any coastal views, we believe the risk of disturbance to birds has been greatly reduced.

In combination with the waymarkers and signage along Summer Lane, we believe that the risks of people and/or dogs accessing the shoreline and either directly or indirectly disturbing birds here, is reduced to the point that it is no longer of concern.

Breeding Birds

The main risks to breeding birds are similar to non-breeding birds; people and dogs. Nesting pairs will interpret people as a threat and will either leave the nest or act to protect it from the perceived threat. This acts to reduce the time which the birds are incubating their eggs, feeding any young or being aware of other threats such as corvids or foxes. This disturbance is limited to the shoreline here and can be broken down into:

- Direct disturbance such as dogs running onto a nest, causing birds to flyaway or endangering eggs/chicks.
- Indirect line-of-sight disturbance such as people entering onto the beach some distance from the birds, causing them to leave the nest for a period to avoid the threat. This could again endanger the eggs or chicks in the nest.

As mentioned previously in this section; the route has been setback significantly in this area. In combination with the waymarkers and signage along Summer Lane we believe that the risks of; walkers and dogs accessing down to the shoreline here causing parent birds to cease foraging due to proximity to nests or cause nest abandonment or destruction as a result of direct disturbance is

reduced to the point that it is no longer of concern.

Sims, Spearbed and Steerley Rides

- Vascular Plant Assemblage
- Duke of Burgundy butterfly
- Light Crimson Underwing moth

The main risk to these features is concentrated trampling by walkers, which could cause destruction of plants and decrease the area of the unique ride habitat. Destruction of these features would have a knock on impact on Duke of Burgundy (and other invertebrate) which depend on these for as both habitat and food source.

The route here has been aligned far back from the shoreline at Beaulieu River but has also been routed away from the rides through Sims Wood, Spearbed Copse and Steerleys Copse. There are fence lines and gates between the trail and rides; making it undesirable for walkers to leave the trail along Summer Lane. There are also no views of the coast at this point, so walkers will not be drawn into the woods. They will instead be following the waymarked route, which provides the quickest return to the coast, either at Beaulieu Village or Lower Exbury.

Most of the rides are often saturated with water as a result of streams running through or alongside them. This would be a further deterrent to any walker accessing these rides.

In combination with the waymarkers and signage along Summer Lane, we believe that the risks of people accessing these rides and associated features, is reduced to the point that it is no longer of concern.

5.8.6 Any mitigation measures included in the access proposal to address possible impacts

Through appropriate routing of the trail along Summer Lane and away from both the shoreline and rides within the woodland here, we have reduced the likelihood of an interaction between walkers and the aforementioned sensitive features has been reduced to safe levels. This is not to say that the risk has been entirely removed; these measures will not stop all people from accessing down the woodlands and shoreline here but we conclude that the majority of walkers will be deterred by the distance and difficulty of getting to the shoreline.

5.8.7 Conclusion

Taking account of proposed mitigation measures, we consider that the risk of our proposals having an impact on sensitive features at this location are minimal. Non-significant effects are considered further in Section 7.

5.9 Exbury Fields

5.9.1 Ecological sensitivity

Non Breeding Waders and Shelduck

Non Breeding Dark-bellied Brent Geese

Non-Breeding Waterbird Assemblage

The in preparation, Solent Waders and Brent Goose Strategy 2018 (HIOWWT, 2018) classifies potential high tide roosts areas across the Solent in to areas of high to low use by Dark-bellied Brent Geese and Waders, please see Appendix 5 for definitions and map of the Exbury Fields area. The fields surrounding Exbury Fields are classified as follows:

- NF48
 - Secondary Support Area
 - Golden Plover and Lapwing were the only recorded species in 2008-09
- N50
 - Primary Support Area
 - Brent Geese, Oystercatcher, Dunlin and Grey Plover had the highest recorded counts.

The amount of Knot and Grey Plover recorded in NF50 represent relatively high proportions of their overall population in the Solent and Southampton Water SPA. The 2010 Solent Waders and Brent Goose Strategy (HIOWWT, 2010) related that NF50 was important for Dark-bellied Brent Geese.

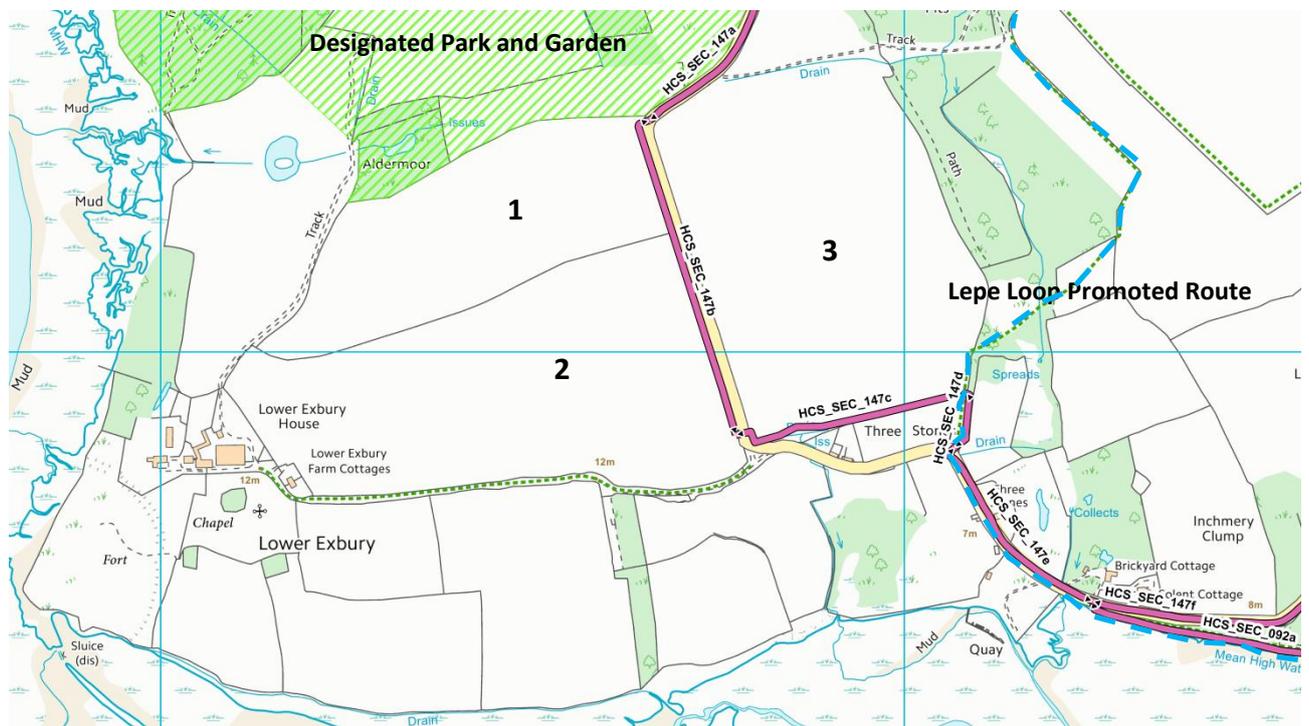
NF48 is not considered to be important for local waterbirds, this is based on the relatively small amount of Lapwing counted in 2008-2009 and a recent bird count carried out during the winter of 2016-17 (HIOWWT,2018). Waterbirds may use this field intermittently but it is not believed that occasional access along the very eastern edge of this field would cause significant disturbance, especially as, we will be adding a mesh fenceline here to help keep dogs to the trail.

5.9.2 Current access provisions and use of site for recreation

A promoted route; the Lepe Loop (see Appendix 4 for further details), runs along the south eastern corner of Field 3 (see Map 29). This is one of the main routes used by walkers from the nearby tourist attraction: Lepe Country Park.

There are also Public Rights of Way within Haxland Pits Wood to the north and east of Field 3. As well as a Public Right Of Way adjacent to the southern boundary of Field 1. Summer Lane is a Public Highway.

There are popular tourist attractions; Exbury Gardens and Lepe Country Park, in the wider area but there are currently negligible access provisions on site.



Map 29. Exbury fields 1-3, with Lepe Loop (blue dashed line) and nearby Exbury Gardens designated Park and Garden designation (shaded green).

5.9.3 Proposed improvements to accessibility

As per map 29, from North to South; the route will be taken off Summer Lane at map reference: 442635,099326 and routed along the eastern periphery of Field 1 and 2 for approximately 470m. At 442778,098889 before bearing east across Summers Lane.

The path will proceed approximately 300m east along the southern periphery of field 3. At the most south-easterly point of Field 3 the route will join a Public Right of Way, part of the Lepe Loop a promoted route.

Waymarkers will be added in at regular intervals. Also gates will be added to provide access through all hedgerows which don't already have entry points.

5.9.4 Predicted change in use of site for recreation

This is a newly proposed route in a wider area with medium to high public access.

The area is between two popular tourist destinations: Lepe Country Park, to the east and Exbury Gardens, to the north.

Lepe Country Park has a visitor centre, restaurants, toilets and a meeting hall. There are also three car parks which can hold approximately 293 cars (Hampshire County Council, 2016). The site is very popular during the summer months (April – September) where on average 1088.6 visitors are received every day, in winter (September-March) this falls to 534.6 per day (Hampshire County Council, 2016).

The Country Park has recently received planning permission to redevelop its visitor centre and increase its car park capacity to 401 spaces (Hampshire County Council, 2016), this is considered further in Section 7.

Exbury Gardens is also close (~1km north) to the area under consideration. This is a popular tourist destination, with a large car park.

Despite the area in question already receiving access along the Lepe Loop promoted route, due to the creation of a more formal route between Lepe and Exbury tourist destinations, we would expect a Medium increase in access along the trail.

The fields adjacent to the trail itself are primarily arable fields and are thus considered Excepted Land and not included within coastal access rights..

As per Map 29, just north of the area under consideration is Exbury Park and Gardens, this is Excepted land due to being a designated Park and Garden.

Although some of the coastal margin will fall within coastal access rights, such as the fields southwest of Exbury House, these are difficult to access due to intervening hedgerows, gates and a road. As such we would expect a medium to low increase in access to the coastal margin, concentrated on those areas with existing public access. It is also anticipated that, due to the relative distance of this area from car parks, that the actual number of daily walkers would be relatively low.

5.9.5 Possible adverse impacts to sensitive features

Walkers will be routed through the southern boundary of Field 3. The field is used by some waders and waterfowl during Winter primarily.

These birds could be disturbed due to the appearance of walkers on the southern boundary of the field. This could cause them to stop feeding or prompt a flight response. Additionally walkers with dogs are considered to be more disturbing than without (English Nature, 2005). In the UK between

30-41% of walkers have at least one dog with them, (TSE Research, 2015; English Nature, 2005; Stillman, West, Clarke, & Liley, 2012), as such it is likely that birds could be visually disturbed by walkers and dogs on the trail.

There is no inland coastal margin through Field 3, but there remains a risk dogs could be allowed to run into the fields, again causing birds stress and generating a higher likelihood of a flight response.

5.9.6 Any mitigation measures included in the access proposal to address possible impacts

Signage and information

Waymarkers will be added along the proposed route at each of the entry points to the aforementioned fields.

This waymarking will clearly define the route through this area.

Barriers and screening

80cm high wood/willow screens will be added along the southern periphery of Field 3 (please see Map 29). These panels will i) screen dogs from view landwards, ii) act as a barrier to the field, further ensuring that dogs are kept to the path and iii) to ensure that waders perceive that walkers are behind a barrier and are not able to come out onto the field.

5.9.7 Conclusion

Taking account of proposed mitigation measures, we consider that the risk of our proposals having an impact on sensitive features at this location are minimal. Non-significant effects are considered further in Section 7.

5.10 Cadland

5.10.1 Ecological sensitivity

The Cadland area can largely be divided into the following distinct areas:

- Cadland Fields, those north of coastline by Lepe
- Stone Marsh Nature Reserve
- Cadland shoreline

The sensitive features will be considered in respect of these areas:

Cadland Fields

Non Breeding Waders and Shelduck

Non Breeding Dark-bellied Brent Geese

Non-Breeding Waterbird Assemblage

The fields outlined in Map 30 provide suitable habitat and possible winter feeding for waders and Dark-bellied Brent Geese. Available survey data for the fields outlined in Map 30 are relatively low but these fields have been classified by both the 2010 and (in preparation) 2018 versions of the Solent Wader and Brent Goose Strategy (HIOWWT, 2018) as follows:

2010

- Fields 1-13 Potentially used by Waders
- Fields 1-4, 7-13 Potentially used by Dark-bellied Brent Geese

2018

- Fields 1-3, 6, 9-13 are Low Use for Waders and Dark-bellied Brent Geese
- Fields 7-8 are Secondary Support Sites for Waders and Dark-bellied Brent Geese

No known new data has been collected in the latest version of the strategy, but changes have been made as to how nearshore fields and other areas are classified in terms of their importance.

The fields in Map 30 will be considered further in this section based on i) their proximity to the trail and ii) the large area covered by the fields; offering a large area of potential habitat for Wader and Dark-bellied Brent Geese.

It should also be noted that the Lepe shoreline was recorded as having 36 Dark Bellied Brent Geese in 2016 (Cox , 2016) but it is believed there can be upto several hundred on the shoreline. Turnstone, Ringed Plover, Curlew and Oystercatcher were also present in 2015 (Cox, 2016).

The main land use here is for Winter Cereals and some Improved Grassland, Brent Geese do feed on Winter Cereals in the Solent (Hampshire Ornithological Society, 2015) (Rowell & Robinson, 2004) . The fields are mostly hedged but, with the exception of fields 9-11, are all relatively large, ensuring that both Brent Geese and waders such as Dunlin and Curlew have acceptable distanced between the centre of the field and cover, which could contain predators.

Based on the i) the suitability of the fields for waders and Dark-bellied Brent Geese i) recorded use, last fully surveyed in 2008-09 but also some fields more recently (GPM Ecology, 2013), iii) the large area covered by the fields; offering a large area of potential habitat for Wader and Dark-bellied Brent Geese iv) the proximity to an area of very high public access (Lepe Country Park); these fields will be considered further for their impact on Dark-bellied Brent Geese, Dunlin,

Lapwing and Curlew during the Winter.



Map 30. Numbered fields near to Cadland House and Lepe Country Park 1-13.

Stone Marsh Nature Reserve

Non-Breeding Waders and Shelduck, Non-Breeding Waterbird Assemblage, Breeding Waders and Shelduck, Assemblage of Breeding Birds for Lowland Damp Grassland, Assemblage of Breeding Birds for Lowland Open Waters and their Margins

Stone Marsh Local Nature Reserve lies northeast of Lepe Country Park and adjacent to Stansore Point.

Recent surveying during the winters of 2014-15 and 2015-16 found significant numbers of Snipe and Turnstone, with Knot and Black-Tailed Godwit also present (HIOWWT, 2018).

Work carried out by Jonathan Cox (Cox J. , England Coast Path - Survey of Breeding Wetland Birds, Beaulieu to Calshot (2015/2016), 2016) also highlights the importance of the marshes as a sheltered environment for breeding birds: Lapwing, Little Egret, Ringed Plover Shelduck and Mallard

Cadland Shoreline

Breeding Terns, Ringed Plover, Black-Headed Gull and Mediterranean Gull

Ringed Plover regularly breed along the shoreline by Cadland House (Cox, 2016).

Supralittoral Sediment



Map 31. Cadland Shoreline area

The shoreline in front of Cadland House has high quality shingle and strandline communities (King M. L., 2013) including *Atriplex prostrata*, *Festuca rubra* and *Festuca rubra juncea* (Cox, 2016).

The shoreline east of Stansore Point has collections of P1 and SD1 shingle communities (King M. L., 2013).

5.10.2 Current access provisions and use of site for recreation

The access provisions in this area can be grouped into two separate areas which have markedly different levels of access provision:

Cadland Estate

This is a private estate which is primarily used for agriculture, there are no current provisions for

public access across the area.

Lepe Country Park

Lepe Country Park has a visitor centre, restaurants, toilets and a hall. There are also three car parks which can hold 293 cars (Hampshire County Council, 2016). The site is very popular during the summer months (April – September) where on average 1088.6 visitors are received every day, in winter (September-March) this falls to 534.6 per day (Hampshire County Council, 2016).

The Country Park has recently received planning permission to redevelop its visitor centre and increase its car park capacity to 401 spaces (Hampshire County Council, 2016)

The area is very well accessed with a high level of current provision.

5.10.3 Proposed improvements to accessibility



Map 32. Proposed Route in the Cadland area

As per map 32, the route is aligned through the southern car park at Lepe Country Park and adjacent to its visitor centre. The route then proceeds along the existing walked route on the low cliff line, within managed grassland and scrub, just north of the beach. Adjacent to the southwestern edge of the Stone Marsh Nature Reserve, the route leaves the coast and heads

inland along the Stone Lane; currently a private vehicular track.

At the northern end of Stone Lane, the route is aligned on Stanswood Road until leaving it close to Calshot village approximately 2.7km further east.

There will be no significant changes to existing surface here. Signage and waymarking will be added in at appropriate points to ensure the route is clearly outlined.

5.10.4 Predicted change in use of site for recreation

We would expect the following changes along the **proposed trail** in this area:

- **Between Lepe Country Park and the Southern end of Stone Lane:** we would expect only a small increase in people accessing the area. This is already a very well visited and promoted site and we would not expect our proposals to greatly increase the already high access levels.
- **Along Stone Lane:** we would expect a large increase in access, as currently the only access here is believed to be by agricultural vehicles, access for the shoot, seasonal camping in the field just north of Lepe Country Park's northern carpark and access by New Forest National Park Authority or similar personnel for maintenance and other works to do with the Country Park and Stone Marsh Reserve.

Along Stanswood Road: we would expect a medium increase in access. This road is public highways and already has some access by walkers and cyclists, as well as occasional use by the shoot. Aligning along this country lane will increase the amount of people walking here but i) as it is quite far from the facilities and scenic areas of the Lepe Country Park and ii) it is at least a 2.7km walk to Calshot Village, the increase will be relatively moderate.

We would expect the following changes in the **proposed Coastal Margin** here:

- **Fields north of Lepe and close to Cadland House:** We would expect a small or negligible increase in access to the fields outlined in Map 32. The reasons for this are:
 - o Most of the fields are arable and therefore are Excepted from Coastal Access Rights.
 - o There are relatively few interest features in these fields that would attract people into them, especially when compared with the beaches and recreation areas close to Lepe and further west towards Exbury.
 - o Hedges, fences, gates and ditches crisscross this area. These obstacles deter access.
 - o The fields do not offer comfortable walking, especially as several are ploughed.
- **Cadland Shoreline:** Currently the area of vegetated shingle shoreline shown in Map 31 is managed by the Cadland Estate and Natural England to deter access. Current fencing and signage works for the majority of walkers that reach this point (either from Lepe Country Park or Calshot). There are some people that have been observed walking into the area.

With the addition of Coastal Margin and associated Coastal Access Rights over this

shoreline we would expect a medium to large increase in access on this shoreline, primarily from people accessing the shoreline from Lepe Country Park

- **Stone Marsh Nature Reserve:** This local nature reserve is well managed with fencing and some interpretation panels along the periphery. The reserve is attractive, with the potential for walking alongside part of the lagoon and woodland edge. We would expect the existing management to deter some access even with the addition of Coastal Access Rights, but would anticipate a medium increase in access to the reserve.

We do not anticipate that people are likely to try and access Stone Marsh Nature Reserve or the shoreline in front of Cadland from the woodland and fields further north, for the reasons raised above for these fields. We do not believe there is a significant likelihood that people will access down Jugglers Moor, due to existing obstacles (fenceline, hedgerows, woodland) and as the land is normally very wet and as a result, either difficult or undesirable to walk on.

5.10.5 Possible adverse impacts to sensitive features

Non-Breeding Birds

The main risk to non-breeding birds in this area are people and dogs, which birds may interpret as a threat, interrupting feeding or causing birds to expend extra energy to move or fly away from the perceived threat. This disturbance could occur inland or on the intertidal and can be broken down further into:

- o Direct disturbance such as dogs running into a flock of birds and causing a flight response
- o Indirect line-of-sight disturbance such as people entering a field, some distance from the birds, causing them to stop feeding and move further away.

Fields north of Lepe and close to Cadland House:

Disturbance could have a greater magnitude of impact where there is currently no or very low access, such as within the fields at north of Lepe and close to Cadland House.

Numerous route options have been considered in this area but the final alignment was chosen along Stanswood Lane rather than through the fields between Stanswood Lane and the shoreline by Lepe and Cadland House, which could have potentially increased the disturbance to the waders and waterbirds using the fields here.

As was outlined in section 5.10.1 although collectively the fields here offer habitat that has a some importance as supporting habitat for the Solent and Southampton Water SPA, individually most of the fields have relatively low use by waders and other waterbirds. This coupled with the realignment of the route so that it is along Stone and Stanswood Lanes, both of which have hedges, raised mounds or other vegetation which help to screen walkers from nearby field, will

reduce the risk of indirect line-of-site disturbance to waterbirds in the fields, to negligible levels.

We would also expect that since there are hedgerows, thick vegetation, fences, ditches and gates along much of this route, that there would be low risk of direct disturbance by walkers or dogs as a result of these obstacles.

Breeding Birds

The main risk to breeding birds are similar to non-breeding birds; people and dogs. Nesting pairs will interpret people as a threat and will either leave the nest or act to protect it from the perceived threat. This acts to reduce the time which the birds are incubating their eggs, feeding any young or being aware of other threats such as corvids or foxes. This disturbance is limited to the shoreline here and can be broken down into:

- Direct disturbance such as dogs running onto a nest, causing birds to flyaway or endangering eggs/chicks.
- Indirect line-of-sight disturbance, such as people entering onto the beach some distance from the birds, causing them to leave the nest for a period to avoid the threat. This could again endanger the eggs or chicks in the nest.

Cadland Shoreline

Ringed Plover are known to frequently nest in the vegetated shingle between the shoreline and woodland edge (Cox, 2016). There is an existing issue that management here is not being effective at stopping all access, and there is a risk that the England Coast Path proposal could exacerbate this.

The following risks will be considered further:

- Walkers and dogs accessing on to the shoreline from i) Lepe and ii) Calshot could cause parent birds to cease foraging due to proximity to nests or cause nest abandonment or destruction as a result of direct disturbance.
- Walkers and dogs accessing on to the shoreline from i) Lepe and ii) Calshot could cause parent birds to cease foraging due to proximity to nests or cause nest abandonment or destruction as a result of indirect disturbance.
- Development of desire lines within this area could act to destroy parts of the vegetated shingle habitat, having knock-on effects on breeding birds.

Stone Marsh Nature Reserve

Ringed Plover, Lapwing, Curlew, Little Egret, Mallard and Shelduck have been shown to breed in the reserve. Although the existing management is believed to be performing well, there is a risk that the proposals could undermine this.

The following risks will be considered further:

- Walkers and dogs accessing over the existing barriers at Stone Marsh from the shoreline at Lepe or along Stone Lane which could cause parent birds to cease foraging due to proximity to nests or cause nest abandonment or destruction as a result of direct disturbance.
- Walkers and dogs accessing over the existing barriers at Stone Marsh from the shoreline at Lepe or along Stone Lane, indirectly disturbing breeding birds within the reserve, increasing the risk of interrupting breeding or mortality of young.

Supralittoral Sediment

Vegetated shingle is susceptible primarily to trampling, but also eutrophication as a result of dog fouling.

The current proposals routes the path well away from the shoreline at Cadland but Coastal Margin would extend to include this area. The alignment of the England Coast Path route along Stone Lane will help to reduce the risk of people accessing the Cadland shoreline area. This has not removed the risks and as such the following risk will be considered further:

- The risk that increased access by walkers will cause destruction of vegetated shingle and strandline communities located along the shoreline in front of Cadland by trampling underfoot.
- The risk that walkers will access the Cadland shoreline area and may not pick up after their dogs. This could cause eutrophication of the area and negatively affect the vegetated shingle and strandline communities here.

5.10.6 Any mitigation measures included in the access proposal to address possible impacts

Access Exclusions

In respect of the environmental sensitivities, existing high levels of access here and our proposals we propose to establish the following Countryside Rights of Way Directions to better manage access:

- **Nature Conservation Direction 26(3)(a) Nature Conservation to Exclude access at Cadland shoreline**

Establishing a legal exclusion to include the shingle beach and intertidal area down to the low tide mark, will enhance the existing management.

We believe that this addition will significantly reduce the risks raised in section 5.10.4 regarding both disturbance to breeding birds and trampling and/or eutrophication of vegetated shingle and

strandline communities.

It should be noted that part of the shingle beach here can not be included in the exclusion as it falls within the Park and Garden designation at Cadland House and is therefore Excepted from our access proposals. The proposed exclusion area adequately accounts for people accessing onto the shingle beach here despite this.

- **Nature Conservation Direction 26(3)(a) Nature Conservation to Exclude access at Stone Marsh Nature Reserve.**

The Stone Marsh Nature Reserve is already well managed with little evidence to show that people currently move on to the reserve. We appreciate that inclusion of this area within Coastal Margin could result in an increase in access to an area well used by waterbirds. By establishing an access exclusion which adheres to the existing boundaries of the reserve, we have significantly reduced the risks raised in section 5.10.4 regarding disturbance to breeding birds.

Signage and information

We will establish signage and interpretation panels close to the proposed aligned route to outline the aforementioned exclusions and also to help educate walkers as to the sensitivities of the local fauna and flora.

There are currently few existing access points to these sensitive locations and considerable barriers to access in the form of hedgerows, thickets and fencing. In combination with clear signage, we believe people will not feel encouraged to leave the waymarked route and access the restricted areas.

Waymarkers will be added along the proposed route at each of the main entry points. This waymarking will clearly define the route through this area.

5.10.7 Conclusion

Taking account of proposed mitigation measures and the routing of the path away from the coast, we consider that the risk of our proposals having an impact on sensitive features at this location are minimal. Non-significant effects are considered further in Section 7.

5.11 Eaglehurst

5.11.1 Ecological sensitivity

Non Breeding Waders and Shelduck

Non Breeding Dark-bellied Brent Geese

Non-Breeding Waterbird Assemblage

The in preparation, Solent Waders and Brent Goose Strategy 2018 (HIOWWT, 2018) classifies potential high tide roosts areas across the Solent in to areas of high to low use by Dark-bellied Brent Geese and Waders, please see Appendix 1 for definitions and Appendix 5 for a map of the Eaglehurst area. The fields surrounding this area are classified as follows:

- NF155
 - Low Use
 - Redshank and Curlew were recorded in 2008-09, with Lapwing and Oystercatcher also present.
- NF154
 - Not an officially designated site but under the previous iteration of the strategy was Uncertain
 - No known records of use

NF 155 has moderate counts of Redshank (38 peak count) and Curlew (25 peak count), with very small counts of Lapwing (4 peak count) and Oystercatcher (1 peak count) (HIOWWT, 2018).

5.11.2 Current access provisions and use of site for recreation

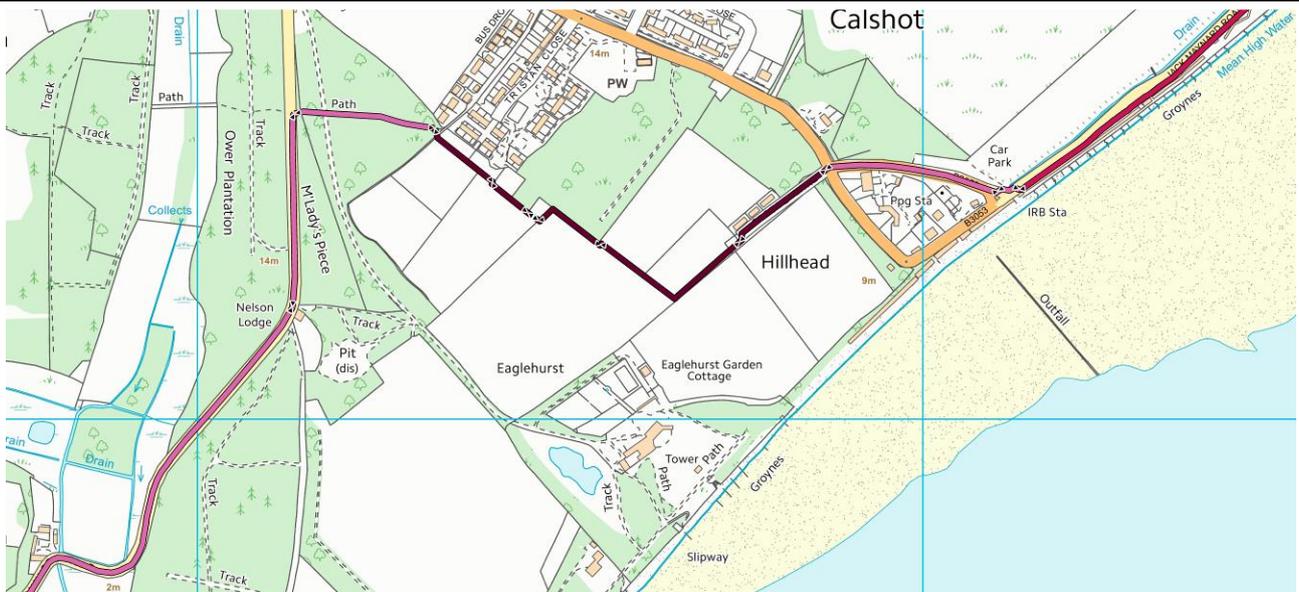
Low access provisions, close to popular tourist attractions.

This area is close to the Calshot Activity Centre and beach, which is a popular tourist destination at all times of the year but especially in Summer.

The fields between Calshot Village and Eaglehurst, have no current public access. There is a Public Right of Way that runs through nearby woodlands between Elmfield Lane and Stanswood Lane, the proposed route runs partly along this.

The fields between the trail and the B3053 have moderate, potentially higher, levels of existing access, as shown by de facto walked routes.

5.11.3 Proposed improvements to accessibility



Map 33. Route between Stanswood Lane and Calshot shoreline

As per map 33, from West to East; the route will run along Stanswood Lane joining an existing Public Right of Way towards Elmfield Lane. Before joining Elmfield Lane, the route bears southwest to run along the northern periphery of paddocks and an arable field, before entering into a field and scrubland adjacent to the Bungalows at Castle Lane. The route then proceeds down Castle Lane towards the seafront.

Waymarkers will be added in at regular intervals. Gates will be added to provide access through all hedgerows which don't already have entry points.

5.11.4 Predicted change in use of site for recreation

This is a newly proposed route in a wider area with medium to high public access.

The area has the popular tourist attractions of Calshot Activity Centre and Calshot beach to the east. Westwards there are few immediate attractions, although there are some footpaths around Sprats Down wetland area on the other side of Stanswood Road. Approximately 4km further west there is Lepe Country Park.

Calshot Beach to Calshot Activity Centre parking provision is difficult to approximate but a conservative estimate would be over 500 parking spaces (Davies, 2011). Most of the parking, especially in Summer, is charged for. There are no other formal carparks other than those at Lepe.

Considering that most of the attractions in this area are focused around Calshot beach and activity centre, we would expect most people to stay close to this area. As such we would expect the

majority of people accessing this part of the path to be local people from the residential areas nearby. As this is new access we would predict a high increase in access here, as there is only private use currently, however this wouldn't necessarily equate to large numbers of people; as there is not very much to attract them that is easily walkable.

The margin here extends over several arable fields which would be Excepted from coastal access rights, as too would any homes and gardens. The remaining area is given over to paddocks, grassland, scrub or woodland, which would not be Excepted. We would expect low use of the margin here because there is little attraction to leaving the path, with the coast at Calshot, being more easily accessed by following the coastal route.

5.11.5 Possible adverse impacts to sensitive features

Non-Breeding Birds

The main risk to non-breeding birds in this area are people and dogs, which birds may interpret as a threat, interrupting feeding or causing birds to expend extra energy to move or fly away from the perceived threat. This disturbance could occur inland or on the intertidal and can be broken down further into:

- Direct disturbance such as dogs running into a flock of birds and causing a flight response
- Indirect line-of-sight disturbance, such as people entering a field, some distance from the birds, causing them to stop feeding and move further away.

The fields north of the route are scrubland with patchy woodland and/or small fields lined by hedgerow; it is not believed that they represent suitable habitat for high tide roosting or feeding areas for waders.

The fields southwest and southeast of the route have low counts for primarily Redshank and Curlew. There is a risk that by creating a footpath route here birds using the field as a high tide roost will be disturbed by indirect line of sight disturbance. We believe that this risk has been reduced due to the following:

- Alignment of the route along the periphery of fields. Allowing a separation between the trail and any waders using the field.
- Partly routing the path behind full and partial screening
- The fields themselves have Low Use as found by the Solent Wader and Brent Goose Strategy 2018 (HIOWWT).

In light of this, we believe that the risk of waders being disturbed by line of sight to walkers has been reduced to safe levels.

We believe that because of the low level of use of the fields by waders, the lack of interesting features to attract walkers off the trail route and the clear route alignment along linear features e.g. hedgerows, fence line, the risk of people leaving the path is greatly reduced to a level

acceptable given the lower use of the fields by sensitive features.

5.11.6 Any mitigation measures included in the access proposal to address possible impacts

Through appropriate routing of the trail along the periphery of the fields here, use of existing natural screening and addition of clear waymarking, we have reduced the likelihood of an interaction between walkers and the aforementioned features to safe levels.

5.11.7 Conclusion

Taking account of proposed mitigation measures, we consider that the risk of our proposals having an impact on sensitive features at this location are minimal. Non-significant effects are considered further in Section 7.

6 Establishing and maintaining the England Coast Path

In this part of the document we describe how the access proposal would be implemented and arrangements for ongoing management and maintenance once coastal access rights are in place.

Note that before the access proposal can be taken forward, the coastal access report must first be considered by the Secretary of State in light of any representations, any objections from affected owners or occupiers and the Appointed Person's recommendations as to how any objections should be determined.

6.1 Establishment

6.1.1 Works on the ground

Once approval for a coastal access report is received from the Secretary of State, works can be carried out on the ground to make the trail fit for use and prepare for opening. In this case, works on the ground would be carried out by the New Forest National Park Authority and Hampshire County Council.

An estimate of the total cost of works needed to establish the trail is given in our coastal access report for the stretch. The cost of establishment works will be met by Natural England.

The New Forest National Park Authority and Hampshire County Council will be responsible for ensuring they take appropriate steps to protect sensitive features whilst works on the ground are carried out, in line with any recommendations or conditions agreed in advance. Any works will require Natural England's assent before the work takes place.

We have held preliminary discussions with both authorities about the works required and believe that it is feasible for them to be carried out without adverse effect on the designated sites considered in this appraisal providing they:

1. Installation of screening panels at Pitts Deep outside of winter months.
2. Cut brush to create route within Pitts Deep Copse during winter.
3. Installation of screening panels at Exbury Fields outside of Winter months.
4. Installation of hedgerows at Pitts Deep outside of winter months
5. Installation of additional boardwalks at Keeping Copse and Burnt Oak Copse is carried out between early August and Late October
6. Installation of additional fencing near to Pitts Deep is carried out outside of Winter months

Both authorities will instigate the SSSI assent process by writing to us to confirm the timing of works and how operations are to be undertaken in line with these conditions. Natural England will provide further advice and agree on methodology in line with the assenting process.

6.1.2 Implementation of mitigation measures

The mitigation measures described in Part 5 of this document (5.1.5 5.2.5 etc) will be implemented as follows:

Measure	Implementation
Interpretation panels at key access points	Installed by the New Forest National Park Authority
Interpretation panels at sensitive wildlife areas	Installed by the New Forest National Park Authority
Fencing	Installed by the New Forest National Park Authority and Hampshire County Council
Guide posts	Installed by the New Forest National Park Authority
Dogs-on-leads signage	Installed by the New Forest National Park Authority
Pitts Deep Viewpoint and associated infrastructure	Installed by the New Forest National Park Authority
Panelled Screens	Installed by the New Forest National Park Authority
Hedgerows	Installed by the New Forest National Park Authority

6.1.3 Local restrictions or exclusions

Where specific restrictions or exclusions have been included in the proposal, Natural England will give the necessary directions to give legal effect to these before the new public rights come into force.

6.2 Maintenance

Where there is a need for ongoing maintenance of any special measures proposed, this will become part of longer term arrangements for upkeep of the trail. All our proposed mitigation works have been considered against the requirement for maintenance to ensure they provide sufficient protection in the present and future. An overall estimate of the ongoing cost of maintaining stretches of the England Coast Path is given in the relevant part of our report for the stretch.

6.3 Monitoring

Monitoring of the protected site will continue through established programmes including Natural England's SSSI monitoring program (which is based on NE's common standards monitoring protocols). The access authority will be responsible for ongoing monitoring of trail condition. Natural England will be tracking general trends, including in the number of people using the path, as part of our evaluation of the coastal access programme nationally.

6.4 Future changes

The access proposals in this document are designed to ensure appropriate protection of sensitive features, taking account of any mitigation measures that are included. The coast is a dynamic environment and we have taken account of changes predicted by the Environment Agency as a result of coastal erosion or other geomorphological processes in the design of the access proposals. Should it be necessary in the future to identify a new alignment for the trail in line with 'roll back' proposals in the stretch report, due care will be taken at that stage to minimise any potential impacts of this change on sensitive features. The same will be true if any unforeseen other changes arise in the future that may require a variation of the access arrangements described in these proposals, following due procedures

7 Conclusions

7.1 Overall conclusion – Natura 2000/Ramsar sites

In this section of the document, we present our conclusions about the likelihood of significant effects alone and, where relevant, in-combination on sensitive features. We consider each of the qualifying features, or feature groups that include qualifying features, in turn. For a complete list of the qualifying features of the European sites involved and explanation of how we have grouped them for purposes of this assessment see section 3 of this document.

Our conclusions draw on the evidence and analysis presented earlier in the document, and take account of any modifications to our proposals described in Section 5. There is a degree of judgement involved in reaching this conclusion, and for some features it is not possible to entirely rule out that our proposals for the Coast Path could cause an effect. The nature of any leftover risks are described in the conclusion column of the Table below (7.3.1) and these risks are further considered as part of the in-combination assessment in Section Table B within this section.

7.1.1 Population level effects

Coastal Features

Feature - or feature group	Conclusion
Salt Marsh	Taking into account the proposed mitigation, there are no likely significant effects on this feature from the access proposal alone. However it is possible that the residual effects, which are minimal, could, in-combination with other plans or projects, contribute to a significant effect on this feature (Please see Table B).
Supra littoral Sediment	Taking into account the proposed mitigation, there are no likely significant effects on this feature from the access proposal alone. However it is possible that the residual effects, which are minimal, could, in-combination with other plans or projects, contribute to a significant effect on this feature (Please see Table B).
Vascular Plant Assemblage – Woodland, Heathland, Acid Grassland, Fen	Taking into account the proposed mitigation, there are no likely significant effects on this feature from the access proposal alone. However it is possible that the residual effects, which are minimal, could, in-combination with other plans or projects, contribute to a significant effect on this feature (Please see Table B).
Non-Breeding Dabbling Ducks	Taking into account the proposed mitigation, there are no likely significant effects on this feature from the access proposal alone. However it is possible that the residual effects, which are minimal, could, in-combination with other plans or projects, contribute to a significant effect on this feature (Please see Table B).
Non-Breeding Waders and	Taking into account the proposed mitigation, there are no

Shelduck	likely significant effects on this feature from the access proposal alone. However it is possible that the residual effects, which are minimal, could, in-combination with other plans or projects, contribute to a significant effect on this feature (Please see Table B).
Non-Breeding Waterbird Assemblage	Taking into account the proposed mitigation, there are no likely significant effects on this feature from the access proposal alone. However it is possible that the residual effects, which are minimal, could, in-combination with other plans or projects, contribute to a significant effect on this feature (Please see Table B).
Non-Breeding Dark-bellied Brent Geese	Taking into account the proposed mitigation, there are no likely significant effects on this feature from the access proposal alone. However it is possible that the residual effects, which are minimal, could, in-combination with other plans or projects, contribute to a significant effect on this feature (Please see Table B).
Non-Breeding Diving Waterbirds	Taking into account the proposed mitigation, there are no likely significant effects on this feature from the access proposal alone. However it is possible that the residual effects, which are minimal, could, in-combination with other plans or projects, contribute to a significant effect on this feature (Please see Table B).
Breeding Waders and Shelduck	Taking into account the proposed mitigation, there are no likely significant effects on this feature from the access proposal alone. However it is possible that the residual effects, which are minimal, could, in-combination with other plans or projects, contribute to a significant effect on this feature (Please see Table B).
Breeding Terns, Ringed Plover Black-Headed Gull and Mediterranean Gull	Taking into account the proposed mitigation, there are no likely significant effects on this feature from the access proposal alone. However it is possible that the residual effects, which are minimal, could, in-combination with other plans or projects, contribute to a significant effect on this feature (Please see Table B).
Breeding Grey Heron	Taking into account the proposed mitigation, there are no expected residual impacts on this feature from the access proposals. Therefore there are no likely significant effects alone or in-combination.
Assemblage of Breeding Birds for Lowland Damp Grassland	Taking into account the proposed mitigation, there are no likely significant effects on this feature from the access proposal alone. However it is possible that the residual effects, which are minimal, could, in-combination with other plans or projects, contribute to a significant effect on this feature (Please see Table B).
Assemblage of Breeding Birds for Lowland Open Waters and their Margins	Taking into account the proposed mitigation, there are no likely significant effects on this feature from the access proposal alone. However it is possible that the residual effects, which are minimal, could, in-combination with other plans or

	projects, contribute to a significant effect on this feature (Please see Table B).
Breeding Wetland Birds	Taking into account the proposed mitigation, there are no likely significant effects on this feature from the access proposal alone. However it is possible that the residual effects, which are minimal, could, in-combination with other plans or projects, contribute to a significant effect on this feature (Please see Table B).
Breeding Little Grebe, Shoveler and Water Rail	Taking into account the proposed mitigation, there are no likely significant effects on this feature from the access proposal alone. However it is possible that the residual effects, which are minimal, could, in-combination with other plans or projects, contribute to a significant effect on this feature (Please see Table B).
Vascular Plant Assemblage – Woodland, Heathland, Acid Grassland, Fen.	Taking into account the proposed mitigation, there are no expected residual impacts on this feature from the access proposals. Therefore there are no likely significant effects alone or in-combination.
Rides of Sims Wood, Steerley Copse and Spearbed Copse	Taking into account the proposed mitigation, there are no expected residual impacts on this feature from the access proposals. Therefore there are no likely significant effects alone or in-combination.
Duke of Burgundy Butterfly and Light Crimson Underwing Moth	Taking into account the proposed mitigation, there are no expected residual impacts on this feature from the access proposals. Therefore there are no likely significant effects alone or in-combination.
Subtidal Aquatic Features	Taking into account the proposed mitigation, there are no expected residual impacts on this feature from the access proposals. Therefore there are no likely significant effects alone or in-combination.
Mudflats and Sandflats not covered by seawater at low tide	Taking into account the proposed mitigation, there are no expected residual impacts on this feature from the access proposals. Therefore there are no likely significant effects alone or in-combination.
Dunes	Taking into account the proposed mitigation, there are no expected residual impacts on this feature from the access proposals. Therefore there are no likely significant effects alone or in-combination.
Woodland	Taking into account the proposed mitigation, there are no expected residual impacts on this feature from the access proposals. Therefore there are no likely significant effects alone or in-combination.
Desmoulins Whorl Snail	Taking into account the proposed mitigation, there are no expected residual impacts on this feature from the access proposals. Therefore there are no likely significant effects alone or in-combination.
Earth Heritage Coast Cliffs and Foreshore	Taking into account the proposed mitigation, there are no expected residual impacts on this feature from the access

	proposals. Therefore there are no likely significant effects alone or in-combination.
Lowland Neutral Grassland	Taking into account the proposed mitigation, there are no expected residual impacts on this feature from the access proposals. Therefore there are no likely significant effects alone or in-combination.
Fen, Marsh, Mire	Taking into account the proposed mitigation, there are no expected residual impacts on this feature from the access proposals. Therefore there are no likely significant effects alone or in-combination.

New Forest Features

Feature - or feature group	Conclusion
Lowland Dry Heathland and Acid Grassland	Taking into account the proposed mitigation, there are no expected residual impacts on this feature from the access proposals. Therefore there are no likely significant effects alone or in-combination.
Vascular Plant Assemblage Rare Plants and Lichen.	Taking into account the proposed mitigation, there are no expected residual impacts on this feature from the access proposals. Therefore there are no likely significant effects alone or in-combination.
Breeding Wetland Birds	Taking into account the proposed mitigation, there are no likely significant effects on this feature from the access proposal alone. However it is possible that the residual effects, which are minimal, could, in-combination with other plans or projects, contribute to a significant effect on this feature (Please see Table B).
Assemblage of breeding birds associated with heathland and woodland	Taking into account the proposed mitigation, there are no likely significant effects on this feature from the access proposal alone. However it is possible that the residual effects, which are minimal, could, in-combination with other plans or projects, contribute to a significant effect on this feature (Please see Table B).
Breeding Heathland Birds	Taking into account the proposed mitigation, there are no likely significant effects on this feature from the access proposal alone. However it is possible that the residual effects, which are minimal, could, in-combination with other plans or projects, contribute to a significant effect on this feature (Please see Table B).
Non-Breeding Hen Harrier	Taking into account the proposed mitigation, there are no likely significant effects on this feature from the access proposal alone. However it is possible that the residual effects, which are minimal, could, in-combination with other plans or projects, contribute to a significant effect on this feature (Please see Table B).
Reptile Assemblage	Taking into account the proposed mitigation, there are no expected residual impacts on this feature from the access

	proposals. Therefore there are no likely significant effects alone or in-combination.
Amphibian Assemblage	Taking into account the proposed mitigation, there are no expected residual impacts on this feature from the access proposals. Therefore there are no likely significant effects alone or in-combination.
Breeding Eurasian Hobby	Taking into account the proposed mitigation, there are no expected residual impacts on this feature from the access proposals. Therefore there are no likely significant effects alone or in-combination.
Breeding Honey Buzzard	Taking into account the proposed mitigation, there are no expected residual impacts on this feature from the access proposals. Therefore there are no likely significant effects alone or in-combination.
Breeding Wood Warbler	Taking into account the proposed mitigation, there are no expected residual impacts on this feature from the access proposals. Therefore there are no likely significant effects alone or in-combination.
Invertebrate	Taking into account the proposed mitigation, there are no expected residual impacts on this feature from the access proposals. Therefore there are no likely significant effects alone or in-combination.
Fresh Water Fairy Shrimp	Taking into account the proposed mitigation, there are no expected residual impacts on this feature from the access proposals. Therefore there are no likely significant effects alone or in-combination.
Tadpole Shrimp	Taking into account the proposed mitigation, there are no expected residual impacts on this feature from the access proposals. Therefore there are no likely significant effects alone or in-combination.
Earth Heritage Coast Cliffs and Foreshore	Taking into account the proposed mitigation, there are no expected residual impacts on this feature from the access proposals. Therefore there are no likely significant effects alone or in-combination.
Fen, Marsh, Mire	Taking into account the proposed mitigation, there are no expected residual impacts on this feature from the access proposals. Therefore there are no likely significant effects alone or in-combination.
Vascular Plant Assemblage, Rare Plants and Lichen	Taking into account the proposed mitigation, there are no expected residual impacts on this feature from the access proposals. Therefore there are no likely significant effects alone or in-combination.
Woodland	Taking into account the proposed mitigation, there are no expected residual impacts on this feature from the access proposals. Therefore there are no likely significant effects alone or in-combination.
Lowland Neutral Grassland	Taking into account the proposed mitigation, there are no expected residual impacts on this feature from the access

proposals. Therefore there are no likely significant effects alone or in-combination.

7.1.2 In combination assessment – where applicable

Table A - Other qualifying plans or projects

ID	Competent Authority	Plan or project	Description	Residual effect? Y/N
P1	New Forest National Park Authority	<p>Lepe Country Park Visitor Centre Redevelopment</p> <p>Status: Planning Approved.</p>	<p>Work commenced on the new visitor centre and carpark at Lepe Country Park during Spring 2017. Consent was given on the basis that work would be completed during non-sensitive periods.</p> <p>The HRA predicted that, as a result of this redevelopment and increased car park capacity, visitor numbers could increase by 20% (Hampshire County Council, 2016).</p> <p>The following mitigation was proposed:</p> <ul style="list-style-type: none"> ○ <i>Extensive improvements to visitor infrastructure in the inland areas of the country park will lead to a greater proportion of visitors using these habitats rather than coastal areas;</i> ○ <i>Parking capacity will be increased within the upper level car park promoting usage of the inland parts of the site;</i> ○ <i>Parking capacity will be reduced in the lower car park, with spaces removed all together from the area in front of the café and where the intertidal zone is at its most extensive; and</i> ○ <i>Increased staffing levels will allow all year round weekend cover by rangers, which is not currently the case. Rangers are aware of the sensitive nature of the maritime habitats at the site and actively engage with users to promote sensitive usage.</i> <p>(Hampshire County Council, 2016)</p> <p>As a result of the mitigation and wardening proposed the HRA concluded that there would be no significant effects.</p> <p>No non-significant effects were recorded in the HRA but in consideration of the large increase in visitors predicted</p>	Y

			<p>and that our route is aligned through the Country Park we will include the following residual non-significant effects, in line with the Precautionary Principle:</p> <ul style="list-style-type: none"> ▪ Possible small increase in disturbance to non-breeding feeding or roosting waterbirds ▪ Possible small increase in disturbance to breeding waterbirds <p>Possible small increase in trampling of supralittoral sediment feature group. These will be considered further in Table B</p>	
P2	New Forest District Council	<p>Hurst Spit Beach Nourishment</p> <p>Status: Planning Approved</p>	<p>The exact works to be conducted are:</p> <ul style="list-style-type: none"> • <i>Removal of shingle from area of accretion at North Point and deposition to areas of Hurst Spit where erosion is taking place using a range of heavy vehicles ...</i> • <i>Access and haulage route along single track below MHW to avoid tracking over areas of vegetated shingle.</i> • <i>The works are planned to take three weeks, commencing in late February 2018.</i> <p>(Natural England, 2018)</p> <p>No significant effect is anticipated. No residual effects have been identified and it is not expected that there will be an interaction with our proposals as the works for this project will be completed by the end of March 2018.</p>	N
P3	New Forest National Park Authority and New Forest District Council	<p>Fawley Residential Development</p> <p>Status: Application Not Submitted</p>	<p>It is expected that the Fawley Power Station and land immediately north and south of this will be developed for residential and/or business in the near future.</p> <p>No application has yet been submitted and it is not therefore possible to assess in-combination impacts at this time.</p>	N/A
P4	New Forest National Park Authority	<p>New Forest National Park Local Plan 2016-2036</p> <p>Status: Not Submitted</p>	<p>The Submission Draft New Forest Local Plan 2016-2036 has just concluded its period of public consultation with an expected submission date later in 2018.</p> <p>The current Consultation Draft Plan, which will inform the full Submission Draft Local Plan, states that at least 700 new homes will be developed within the National Parks boundaries between 2016-2036. The plan currently proposes five potential residential sites across the park for some of the new homes, these are:</p> <ul style="list-style-type: none"> - Land at Whartons Lane, Ashurst, approx. 50 homes. - Land at Mill Lane, Brockenhurst, approx. 11 	N

			<p>homes</p> <ul style="list-style-type: none"> - Land at the Lyndhurst Park Hotel, Lyndhurst, approx. 30 homes - Land south of Church Lane, Sway, approx. 90 homes - Land at 'The Yews', Southampton Road, Cadnam, approx. 12 homes <p>(New Forest National Park Authority, 2016) These sites are between 7-14km landward of the trail route.</p> <p>Although not fully assessed in the Consultation Draft Local Plan there are several other sites identified which have not been fully assessed. Although they are not the primary development sites they could potentially also be developed:</p> <ul style="list-style-type: none"> - Forest View, Landford. Potential land use: gypsy pitch. - Parking area and land adjoining 1 Tristan Close, Calshot. Potential land use: residential. Capacity 2-5 dwellings. - Land at St George's Close, Tristan Close, Calshot. Potential land use: residential. Capacity: 10 dwellings. - Land adjacent to 50 Tristan Close. Calshot. Potential land use: residential. Capacity: 2 dwellings. - Land adjacent to 53 Tristan Close, Calshot. Potential land use: residential. Capacity: 2-4 dwellings. - Stag Close, Calshot Road, Calshot. Potential land use: school. - Land at Strawberry Fields, East Boldre. Potential land use: residential. <p>Several further potential development sites were also outlined at Brockenhurst, Lyndhurst and Burley. These developments range from 10m-15km away from the proposed route. (New Forest National Park Authority, 2016)</p> <p>The draft Plan contains policies to protect the environment and the draft Habitats Regulations Assessment makes clear that environmentally damaging development will not receive planning permission. Any development which comes forward once the draft Plan has been adopted will need to comply with both legislative and policy provisions, and as such will not have a likely significant effect alone or in-combination.</p>	
P5	New forest	Development of	This application 16/00599 was approved in 2016.	N

	National Park Authority	<p>new cemetery at Calshot</p> <p>Status: Planning Approved</p>	<p>The application is to create a cemetery, burial grounds and a car park with 46 spaces on predominantly pasture fields by Calshot village.</p> <p>The Extended Phase 1 Habitat Survey (<i>Sedgehill Ecology Services, 2015</i>) in the planning application out recommended the following mitigation relating to local bird species:</p> <ul style="list-style-type: none"> ▪ <i>Site Clearance and vegetation works to be undertaken outside the bird nesting season (March to end of August) or immediately after an ecologist has confirmed the absence of active nests</i> <p>(<i>Sedgehill Ecology Services, 2015</i>)</p> <p>With this and other mitigation proposed, the assessment concluded that there would be no significant effects. Although not specifically related in the environmental assessment for this project noise will be created as a result of site clearance and clearing of vegetation and as such we will consider further in Table B the following non-significant effect:</p> <ul style="list-style-type: none"> ▪ Possible small increase in disturbance to non-breeding feeding or roosting waterbirds <p>This effect is in relation to i) noise during construction and ii) the possibility that the car park will be increase visitor usage along the England Coast Path.</p>	
P6	New Forest National Park Authority	<p>Inchmery House / Inchmery Park Cottage, Inchmery Lane – Demolition of building</p> <p>Status: Planning Approved</p>	<p>17/00579 application for the demolition of Inchmery Park Cottage and the erection of a new office identical to that approved under application 15/00909 on land at Inchmery Park Cottage, Inchmery Lane.</p> <p>As per the planning officers' reports for both 16/00579 and the original 15/00909 and associated consultation with Natural England, only impact on bats within the building here was deemed of any environmental concern. A Licence was issued ensuring bats would not be harmed in the development of the building (New Forest Park Authority, 2017). As a result no significant or residual non-significant effects were found to remain.</p>	N
P7	New Forest District Council	<p>New Forest District Local Plan 2016-2036</p> <p>Status: Not Submitted</p>	<p>The Draft Local Plan 2016-2036 is currently being reviewed and is subject to change but currently there are 20 areas proposed as strategic residential housing sites across the district, 10 of these are close enough to be considered here and are outlined below:</p> <ul style="list-style-type: none"> - D. North of Lymington approx. 870 homes - E. South West of Lymington (Green Belt) approx. 240 homes - F. North of Milford-on-Sea approx. 270 homes 	N

			<ul style="list-style-type: none"> - G. North East of Everton approx. 120 homes - H. Central Hordle approx. 180 homes - North of Hordle about 150 homes - J. North East of Hordle approx 200 homes - K. North West New Milton approx 300 homes - L. North East of New Milton approx 130 homes - M. South East of New Milton approx 200 homes - N. South West New Milton approx 300 homes <p>These strategic sites are between 150m-6km landward of the trail route.</p> <p>Although not fully assessed in the Draft Local Plan there are several “other areas of potential opportunity” which could also be outlined for development in the future. These are though not primarily proposed for residential purposes in the Draft Local Plan currently but could potentially include residential housing dependant on future revisions or planning applications:</p> <ul style="list-style-type: none"> - U. The former Fawley Power Station, Fawley. Potential land use; mixed use. - W. Otter Nurseries, Efford. Potential land use; commercial business park - X. Stem Lane, New Milton. Potential land use; employment. <p>(New Forest District Council, 2016)</p> <p>These other strategic sites are between 800m – 2.5km landward of the trail route.</p> <p>The draft Plan contains policies to protect the environment and the draft Habitats Regulations Assessment makes clear that environmentally damaging development will not receive planning permission. Any development which comes forward once the draft Plan has been adopted will need to comply with both legislative and policy provisions, and as such will not have a likely significant effect alone or in-combination</p>	
P10	New Forest District Council	New Milton Neighbourhood Plan Status: Not Submitted	<p>The New Milton proposed Neighbourhood Plan is currently out for consultation within the parish of New Milton. The Neighbourhood plan is designed to outline how the local community would like the local area to be developed.</p> <p>The Neighbourhood Plan has the following initial recommendations based on the New Forest District Councils Draft Local Plan have been made:</p> <ul style="list-style-type: none"> - Extension of the Draft Local Plan proposed development site ‘K’ (see P8 above) further 	N

			<p>south, so that more residential homes could be constructed here</p> <ul style="list-style-type: none"> - Potential redevelopment of New Milton town centre, so that more residential homes could be located here. <p>(New Milton Town Council, 2017)</p> <p>The Plan (and associated draft Local Plan) contains policies to protect the environment and the draft Habitats Regulations Assessment makes clear that environmentally damaging development will not receive planning permission. Any development which comes forward once the draft Plan has been adopted will need to comply with both legislative and policy provisions, and as such will not have a likely significant effect alone or in combination.</p>	
P11	New Forest District Council	<p>Lymington and Pennington Neighbourhood Plan</p> <p>Status: Not Submitted</p>	<p>The Lymington and Pennington proposed Neighbourhood Plan is currently out for consultation. The Neighbourhood plan is designed to outline how the local community would like the local area to be developed.</p> <p>The Neighbourhood Plan has the following initial recommendations based on the New Forest District Councils Draft Local Plan have been made:</p> <ul style="list-style-type: none"> - Town Centre Housing Sites. Approximately 10 sites within Lymington and Pennington urban areas have been identified as potentially suitable for the construction of between 100-200 residential homes - Town Centre Employment sites. Approximately 2 sites on the edges of the urban areas of Lymington and Pennington have been identified as potentially suitable for the development of businesses for employment opportunities - Land adjacent to Ridgeway Lane, Lymington, potential 125 residential homes - Didgemere Nurseries, Ramley Road, northwest of Pennington. Potential for mixed use site of 40-50 homes and light-industry businesses. <p>(Lymington and Pennington Town Council, 2017)</p> <p>The Plan (and associated draft Local Plan) contains policies to protect the environment and the draft Habitats Regulations Assessment makes clear that environmentally damaging development will not receive planning permission. Any development which comes forward once the draft Plan has been adopted will need</p>	N

			to comply with both legislative and policy provisions, and as such will not have a likely significant effect alone or in combination.	
P12	New Forest District Council	Hoburne Naish holiday park near Highcliffe—extension to occupation period to include over winter Status: Planning Approved	Hoburne Naish Holiday Park submitted a planning application for an extension to the occupation period of holiday lets, extending the period of occupation on site from 10 to 12 months. After initial Refusal this was Approved at Appeal on 23 rd October 2017. The planning application and officers report (New Forest Park Authority, 2017) recorded no significant or non-significant impacts as a result of the proposed development. Consultation with Natural England at the time also did not raise any concerns.	N
P13	New Forest National Park Authority	Replacement dwelling, Thorns Beach House, Beaulieu Status: Planning Approved	This application to construct a replacement dwelling at Thorns Beach, close to Thorns Marsh, has recently been approved with conditions. The developer proposed mitigation has been approved by the planning authority. The development is setback from the proposed route and considered Excepted Land under the England Coast Path Scheme but is close to Coastal Margin at Thorns Marsh. The ecological assessment (ECOSA, 2017) and Ecological Mitigation and Enhancement Strategy (ECOSA, 2017) carried out as part of the planning application recommended mitigation which included: <ul style="list-style-type: none"> - Installation of two bat boxes - Demolition works to take place November-February to avoid impact on local bat population. - Careful removal of bat roosts with licenced professional - Removal of hedgerow on site will be done outside the March-August breeding period, predominatly considering garden birds here. - Habitat creation for local reptiles The aforementioned ecological assessment and mitigation are believed to have removed any significant effects or residual non-significant affects associated with the development.	Y
P14	New Forest National Park Authority	Boardwalk at Lepe Status: Planning Approved	The application was approved in October 2017. Unlike the development of the new visitor centre (P1), also considered in this table, this application focuses on the extension of 200m of board walk within woodland	N

			<p>northwest of the visitor centre at Lepe.</p> <p>Through the assessment prepared by Hampshire County Council no significant effects were found to remain after mitigation. Residual non-significant effects were not raised in the assessment.</p> <p><i>For further information on Lepe Country Park Visitor Centre Redevelopment please see 'P1' at the top of this table.</i></p>	
P15	New Forest National Park Authority	<p>New Forest National Park Recreation Management Strategy 2010-2030</p> <p>Status: Not Submitted</p>	<p>The current version of this Strategy is being reviewed by the relevant organisations.</p> <p>As a revised document is not yet available, it is not possible to consider in-combination impacts at this stage.</p>	N/A
P16	Natural England	<p>England Coast Path Solent Proposed Stretches</p> <p>Status: Not Submitted</p>	<ul style="list-style-type: none"> ▪ Neighbouring stretches of the England Coast Path effecting designated sites listed within this assessment will be opened between 2017 and 2020. These include: Calshot to Gosport ▪ Gosport to Portsmouth ▪ South Hayling to East Head ▪ Isle of Wight <p>Given the nature of the proposals, it is possible that each of these stretches may have similar non-significant effects as this proposed stretch. Please see Table B..</p>	Y
P17	Natural England	<p>England Coast Path: Portsmouth to South Hayling</p> <p>Status: Planning Submitted</p>	<p>On 19 July 2017 Natural England submitted a report to the Secretary of State for the Environment, Food and Rural Affairs setting out the proposals for improved access to the coast between Portsmouth and South Hayling.</p> <p>The Access and Sensitive Features Appraisal (Natural England, 2017) did not record any significant impacts as a result of the proposal.</p> <p>The Appraisal raised the following residual non-significant impacts:</p> <ul style="list-style-type: none"> ▪ Possible small increase in disturbance to feeding or roosting waterbirds. ▪ Possible small increase in disturbance to breeding and foraging birds. 	Y

			<ul style="list-style-type: none"> ▪ Possible small increase in trampling damage to vegetated shingle. 	
P18	Natural England	England Coast Path: Kimmeridge Bay to Highcliffe Status: Planning Submitted	<p>On 21 June 2017, Natural England submitted a report to the Secretary of State for the Environment, Food and Rural Affairs setting out the proposals for improved access to the coast between Kimmeridge Bay and Highcliffe.</p> <p>The Access and Sensitive Features Appraisal (Natural England, 2017) did not record any significant or non-significant impacts as a result of the proposal.</p>	N
P19	New Forest National Park Authority	Change of use of building to holiday let; alterations and extension to existing building Status: Not Submitted	<p>A possible future application to create a holiday let within Pitts Deep Copse.</p> <p>No application has yet been submitted and it is not therefore possible to assess in-combination impacts at this time.</p>	N/A
P20	New Forest National Park Authority	Scoping Opinion for Proposed repairs and to extend coastal defences and associated works at Hurst Castle Status: Screening Opinion Registered	<p>Application for combined Screening and Scoping Opinion for future proposed improvements to the Hurst Castle coastal defences ref 17/00417.</p> <p>No application outlining the exact proposed works and impact has yet been submitted and it is not therefore possible to assess in-combination impacts at this time.</p>	N/A

At the time of carrying out this appraisal, Natural England is not aware of any other qualifying plans or projects that need to be considered.

Table B - Possible in combination effects

The magnitude, duration and location of the effects considered in Table B, vary between the following plans & projects. The likelihood of a significant effect is considered where these overlap.

Non-significant effect on feature group	In combination conclusion
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<p>arising from access proposal</p>	
<p>Possible small increase in disturbance to non-breeding feeding or roosting waterbirds.</p>	<p>Other plans and projects include (as carried over from Table A):</p> <ul style="list-style-type: none"> • England Coast Path: Future Solent Stretches • England Coast Path: Portsmouth to South Hayling (published) • Lepe Country Park Visitor Centre Redevelopment • Development of new cemetery at Calshot <p>We do not consider it likely that there will be a significant effect in combination for the following reasons:</p> <ol style="list-style-type: none"> 1) The England Coast Path routes are carefully chosen through an iterative process to ensure that they avoid likely significant effect on sensitive features. Where a coastal route would cause unacceptable impacts, we look to designate an inland alternative. This process has been followed on this stretch and all other stretches will follow the same approach. 2) Where a small impact is possible, our proposals incorporate mitigation to minimise the risk of these impacts occurring. These measures include restrictions and exclusions, waymarking and signage, dogs on leads restrictions, fencing and screening. Importantly, all stretches will use a similar approach ensuring that there is a consistent and coherent approach to managing access across the Solent and beyond. Where appropriate, our signage will aim to incorporate the logo and key messages of the Bird Aware Solent partnership, which will add to the consistency (and hence the efficacy) of the messaging across the Solent. 3) Where these proposals utilise existing coastal access routes, our proposals take opportunities to improve the path and waymarking to National Trail standards. In various places this will enable all visitors (including current visitors) to stick more closely to the path. We expect that in some areas, this will improve the current position, ensuring that, at worst, these areas see no increase in impacts, despite receiving additional visits. 4) Proposals for future stretches of England Coast Path are being designed to avoid and minimise the likelihood of significant effects of sensitive features, alone or in-combination, as mentioned above. Each of these access proposals will be fully assessed once the detail of

the routes have been developed. This will include consideration of in-combination effects.

- 5) We anticipate there will be similar opportunities within the forthcoming stretches, to improve on the existing access position in the Solent with regards to impacts on sensitive features. By working closely with groups such as Bird Aware Solent, we will continue to seek to minimise the impact of our proposals and, where possible, use delivery of the England Coast Path to improve waymarking and surfacing, such that each coastal visitor causes less disturbance when visiting. As a matter of course, when assessing forthcoming stretches, we will fully consider the impact of any new access or improvements to access at the coast are in-combination with the residual impact of these proposals. Establishment of England Coast Path stretches is an iterative approach, with Solent stretches timetabled to proceed over the next 2 years. We anticipate that implementation of stretches will rarely occur at the same time, and where disturbance to this feature group is possible, will be timetabled to avoid the most sensitive times of the year. An in-combination impact from implementation is not considered likely.
- 6) The proposed alignment, infrastructure and access restrictions and exclusions on this stretch, and the published Portsmouth to South Hayling stretch have been thoroughly considered both within Natural England and in consultation with other environmental groups. The measures proposed for both stretches work well to establish responsible access regimes individually and together. We have worked closely with all relevant parties to ensure a consistent approach to impact assessment is taken. We will continue to work with Bird Aware Solent, with the intention of co-branding our signage on all Solent stretches. Through close co-operation, we will seek to further raise awareness and education about the sensitive features.
- 7) The Lepe Visitor Improvements are included within this assessments on a precautionary basis as they overlap geographically with our proposals, both of which could attract additional visitors to the area. However, the Lepe proposals are well designed to attract visitors to the inland parts of the site, and when combined with our inland routing of the trail (i.e. away from the foreshore), establishment of access exclusions and addition of educational interpretation, will together act to protect local sensitive features and encourage responsible access. No significant effect in combination is anticipated.
- 8) We have also considered whether the works to create a new

	<p>cemetery at Calshot could have a significant effect in-combination with other plans or projects. As the construction works will be of short duration and focused location, it will have a very limited impact which is unlikely to have a significant effect in-combination. During the operational phase, we have considered whether the additional 46 car parking spaces could generate increased usage of the coast path and bird disturbance. As the spaces are private (ie for the use of mourners and cemetery staff only), we do not anticipate they will be regularly used by England Coast Path visitors. On the rare occasion when they might be used, the proposed route here is well defined and waymarked, helping to ensure that visitors do not leave the trail. Even if they did, the fields in question have low use by sensitive bird species, so we are confident that there will be no likely significant effect in combination.</p> <p>9) We have considered the likelihood of in-combination effects on non-breeding waterbirds and conclude that there is no likely significant effect as a result of this proposal, in combination with other plans and projects.</p>
<p>Possible small increase in disturbance to breeding waterbirds.</p>	<p>Other plans and projects include (as carried over from Table A):</p> <ul style="list-style-type: none"> • England Coast Path: Future Solent Stretches • England Coast Path: Portsmouth to South Hayling (published) • Lepe Country Park Visitor Centre Redevelopment <p>We do not consider it likely that there will be a significant effect in combination for the following reasons:</p> <ol style="list-style-type: none"> 1) The England Coast Path routes are carefully chosen through an iterative process to ensure that they avoid likely significant effect on sensitive features. This process has been followed on this stretch and all other stretches will follow the same approach. 2) Where a small impact is possible, our proposals incorporate mitigation to minimise the risk of these impacts occurring. These measures include restrictions and exclusions, waymarking and signage, dogs on leads restrictions, fencing and screening. Importantly, all stretches will use a similar approach ensuring that there is a consistent and coherent approach to managing access across the Solent and beyond. 3) Where these proposals utilise existing coastal access routes, our proposals take opportunities to improve the path and waymarking to National Trail standards. In various places this will enable all visitors

(including current visitors) to stick more closely to the path. We expect that in some areas, this will improve the current position, ensuring that, at worst, these areas see no increase in impacts, despite receiving additional visits.

- 4) Proposals for future stretches of England Coast Path are being designed to avoid and minimise the likelihood of significant effects of sensitive features, alone or in-combination, as mentioned above. Each of these access proposals will be fully assessed once the detail of the routes have been developed. This will include consideration of in-combination effects.
- 5) We anticipate there will be similar opportunities within the forthcoming stretches, to improve on the existing access position in the Solent with regards to impacts on sensitive features. We will continue to seek to minimise the impact of our proposals and, where possible, use delivery of the England Coast Path to improve waymarking and surfacing, such that each coastal visitor causes less disturbance when visiting. As a matter of course, when assessing forthcoming stretches, we will fully consider the impact of any new access or improvements to access at the coast are in-combination with the residual impact of these proposals.
- 6) Establishment of England Coast Path stretches is an iterative approach, with Solent stretches timetabled to proceed over the next 2 years. We anticipate that implementation of stretches will rarely occur at the same time, and where disturbance to this feature group is possible, will be timetabled to avoid the most sensitive times of the year. An in-combination impact from implementation is not considered likely.
- 7) The proposed alignment, infrastructure and access restrictions and exclusions on this stretch, and the published Portsmouth to South Hayling stretch have been thoroughly considered both within Natural England and in consultation with other environmental groups. The measures proposed for both stretches work well to establish responsible access regimes individually and together.
- 8) The Lepe Visitor Improvements are included within these assessments on a precautionary basis as they overlap geographically with our proposals, both of which could attract additional visitors to the area. However, the Lepe proposals are well designed to attract visitors to the inland parts of the site, and when combined with our inland routing of the trail (ie away from the foreshore), establishment of access exclusions and addition of educational interpretation, will

	<p>together act to protect local sensitive features and encourage responsible access. No significant effect in combination is anticipated.</p> <p>9) We have considered the likelihood of in-combination effects on breeding waterbirds and conclude that there is no likely significant effect as a result of this proposal, in combination with other plans and projects.</p>
<p>Possible small increase in trampling to Supralittoral Sediment habitat.</p>	<p>Other plans and projects include (as carried over from Table A):</p> <ul style="list-style-type: none"> • England Coast Path: Future Solent Stretches • England Coast Path: Portsmouth to South Hayling (published) • Lepe Country Park Visitor Centre Redevelopment <p>We do not consider it likely that there will be a significant effect in combination for the following reasons:</p> <ol style="list-style-type: none"> 1) The England Coast Path routes are carefully chosen through an iterative process to ensure that they avoid likely significant effect on sensitive features. This process has been followed on this stretch and all other stretches will follow the same approach. 2) Where a small impact is possible, our proposals incorporate mitigation to minimise the risk of these impacts occurring. These measures include restrictions and exclusions, waymarking and signage, dogs on leads restrictions, fencing and screening. Importantly, all stretches will use a similar approach ensuring that there is a consistent and coherent approach to managing access across the Solent and beyond. 3) Where these proposals utilise existing coastal access routes, our proposals take opportunities to improve the path and waymarking to National Trail standards. In various places this will enable all visitors (including current visitors) to stick more closely to the path. We expect that in some areas, this will improve the current position, ensuring that, at worst, these areas see no increase in impacts, despite receiving additional visits. 4) Proposals for future stretches of England Coast Path are being designed to avoid and minimise the likelihood of significant effects of sensitive features, alone or in-combination, as mentioned above. Each of these access proposals will be fully assessed once the detail of the routes have been developed. This will include consideration of in-combination effects. 5) We anticipate there will be similar opportunities within the

	<p>forthcoming stretches, to improve on the existing access position in the Solent with regards to impacts on sensitive features. We will continue to seek to minimise the impact of our proposals and, where possible, use delivery of the England Coast Path to improve waymarking and surfacing, such that each coastal visitor has less impact when visiting. As a matter of course, when assessing forthcoming stretches, we will fully consider the impact of any new access or improvements to access at the coast are in-combination with the residual impact of these proposals.</p> <p>6) The proposed alignment, infrastructure and access restrictions and exclusions on this stretch, and the published Portsmouth to South Hayling stretch have been thoroughly considered both within Natural England and in consultation with other environmental groups. The measures proposed for both stretches work well to establish responsible access regimes individually and together.</p> <p>7) The Lepe Visitor Improvements are included within this assessments on a precautionary basis as they overlap geographically with our proposals, both of which could attract additional visitors to the area. However, the Lepe proposals are well designed to attract visitors to the inland parts of the site, and when combined with our inland routing of the trail (ie away from the foreshore), establishment of access exclusions and addition of educational interpretation, will together act to protect local sensitive features and encourage responsible access. No significant effect in combination is anticipated.</p> <p>8) We have considered the likelihood of in-combination effects of trampling on Supralittoral sediment habitat and conclude that there is no likely significant effect as a result of this proposal, in combination with other plans and projects.</p>
Possible small increase in trampling of Salt Marsh habitat.	No in-combination effects identified.
Possible small increase in eutrophication on Supralittoral Sediment habitat.	<p>Other plans and projects include (as carried over from Table A):</p> <ul style="list-style-type: none"> • England Coast Path: Future Solent Stretches • England Coast Path: Portsmouth to South Hayling (published) • Lepe Country Park Visitor Centre Redevelopment <p>We do not consider it likely that there will be a significant effect in</p>

combination for the following reasons:

- 1) The England Coast Path routes are carefully chosen through an iterative process to ensure that they avoid likely significant effect on sensitive features. This process has been followed on this stretch and all other stretches will follow the same approach.
- 2) Where a small impact is possible, our proposals incorporate mitigation to minimise the risk of these impacts occurring. These measures include restrictions and exclusions, waymarking and signage, dogs on leads restrictions, fencing and screening. Importantly, all stretches will use a similar approach ensuring that there is a consistent and coherent approach to managing access across the Solent and beyond.
- 3) Where these proposals utilise existing coastal access routes, our proposals take opportunities to improve the path and waymarking to National Trail standards. In various places this will enable all visitors (including current visitors) to stick more closely to the path. We expect that in some areas, this will improve the current position, ensuring that, at worst, these areas see no increase in impacts, despite receiving additional visits.
- 4) Proposals for future stretches of England Coast Path are being designed to avoid and minimise the likelihood of significant effects of sensitive features, alone or in-combination, as mentioned above. Each of these access proposals will be fully assessed once the detail of the routes have been developed. This will include consideration of in-combination effects.
- 5) We anticipate there will be similar opportunities within the forthcoming stretches, to improve on the existing access position in the Solent with regards to impacts on sensitive features. We will continue to seek to minimise the impact of our proposals and, where possible, use delivery of the England Coast Path to improve waymarking and surfacing, such that each coastal visitor has less impact when visiting. As a matter of course, when assessing forthcoming stretches, we will fully consider the impact of any new access or improvements to access at the coast are in-combination with the residual impact of these proposals.
- 6) The proposed alignment, infrastructure and access restrictions and exclusions on this stretch, and the published Portsmouth to South Hayling stretch have been thoroughly considered both within Natural England and in consultation with other environmental groups. The measures proposed for both stretches work well to establish

	<p>responsible access regimes individually and together.</p> <p>7) The Lepe Visitor Improvements are included within this assessments on a precautionary basis as they overlap geographically with our proposals, both of which could attract additional visitors to the area. However, the Lepe proposals are well designed to attract visitors to the inland parts of the site, and when combined with our inland routing of the trail (ie away from the foreshore), establishment of access exclusions and addition of educational interpretation, will together act to protect local sensitive features and encourage responsible access. No significant effect in combination is anticipated.</p> <p>8) We have considered the likelihood of in-combination effects of eutrophication on Supralittoral sediment habitat and conclude that there is no likely significant effect as a result of this proposal, in combination with other plans and projects.</p>
Possible small increase in eutrophication on Salt Marsh habitat.	No in-combination effects identified.

7.1.3 Overall screening decision

Mark with an X as appropriate

No likely significant effect - as the new access proposal is unlikely to have a significant effect on Solent and Southampton Water SPA, New Forest SPA, Solent and Dorset Coasts pSPA, Solent Maritime SAC, Solent and Isle of Wight Lagoons SAC, The New Forest SAC, Solent and Southampton Water RAMSAR, New Forest RAMSAR, either alone or in combination with other plans or projects, (taking into account any proposed mitigation measures) no further Habitats Regulations assessment is required;

OR

Likely significant effect - as the new access proposal is likely to have a significant effect on Solent and Southampton Water SPA, New Forest SPA, Solent and Dorset Coasts pSPA, Solent Maritime SAC, Solent and Isle of Wight Lagoons SAC, The New Forest SAC, Solent and Southampton Water RAMSAR, New Forest RAMSAR, either alone or in combination with other plans or projects (despite any proposed mitigation measures), appropriate assessment is required to consider whether the new access proposal may proceed.

7.2 Overall conclusion - SSSI

In the light of this appraisal, Natural England has concluded that the new access proposal:
(Mark one box only with an X below)

complies with Natural England's duty to further the conservation and enhancement of the notified features of the SSSI, consistent with the proper exercise of its functions² - and accordingly the new access proposal may proceed as finally specified in this template

OR

would not comply with the duty referred to in (a) – and accordingly permission/ authorisation/ assent should not be given for the new access proposal in the form finally specified in this template, for the following reasons:

Reasons (where second box is ticked):

7.3 Overall conclusion - National Nature Reserve

In the light of this appraisal, Natural England has concluded that the new access proposal:
(Mark one box only with an X below)

² The reference in 7.2 above to Natural England's functions includes its balanced general purposes for access, nature conservation and landscape under the NERC Act 2006, any specific statutory duties it may have to deliver specific improvements to public access, and the access-related policies and priorities it periodically agrees with Defra.

will not compromise the management of the National Nature Reserve for its conservation purpose of preserving features of special interest in the area

OR

would compromise the management of the National Nature Reserve for its conservation purpose of preserving features of special interest in the area - and accordingly the new access proposal should not proceed in the form finally specified in this template, for the following reasons:

Reasons (where second box is ticked):

7.4 Other features about which concerns have been expressed

In the light of this appraisal, Natural England has concluded that:

(Mark one box only with an X below)

the appropriate balance has been struck by the new access proposal between NE's conservation and access objectives, duties and purposes - and accordingly the new access proposal should proceed as finally specified in this template

OR

the appropriate balance referred to above has not been struck – and accordingly the new access proposal should not proceed in the form finally specified in this template, for the following reasons:

Reasons (where second box is ticked):

8 Certification

8.1 Certification – Access Proposal

I agree with the conclusions of this appraisal and am satisfied that the final access proposal, incorporating any mitigation measures, is the least restrictive option necessary to ensure appropriate protection of sensitive features.

Name: Tim Hall Senior Adviser, England Coast Path South Hub	Signed: 	Date: 13/03/2018
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8.2 Certification – Environmental Impacts

I agree with the conclusions of this appraisal and am satisfied that potential environmental impacts of the access proposal on: Hurst Castle and Lymington River Estuary SSSI, North Solent SSSI, Highcliffe to Milford Cliffs SSSI, The New Forest SSSI, Lymington River Reedbeds SSSI, Sowley Pond SSSI, Solent and Southampton Water SPA, New Forest SPA, Solent and Dorset Coasts pSPA, Solent Maritime SAC, Solent and Isle of Wight Lagoons SAC, The New Forest SAC, Solent and Southampton Water RAMSAR, New Forest RAMSAR, North Solent NNR

Name: Simon Curson (Responsible Officer, New Forest Team)	Signed: 	Date: 13/03/2018
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10 Appendices

Appendix 1 Solent Waders and Brent Goose Strategy Classification List and Definitions

The following list defines the terms used to classify fields across the Solent under the in-preparation 2018 Solent Waders and Brent Goose Strategy (HLOWWT, 2018). As the strategy is still being prepared the below terms and definitions are subject to change.

Core Areas: These are considered essential to the continued function of the Solent wader and brent goose ecological network and have the strongest functionally-linkage to the designated Solent SPAs in terms of their frequency and continuity of use by SPA features.

Primary Support Areas: Contain land that, when in suitable management, make an important contribution to the function of the Solent wader and brent goose ecological network.

Secondary Support Areas: Offer a supporting function to the Core and Primary Support ecological network, but are generally used less frequently by significant numbers of SPA geese and waders. These sites become important when wader or brent goose populations are higher or when the habitat is in suitable management.

Low Use: sites have the potential to be used by waders or brent geese. These sites have the potential to support the existing network and provide alternative options and resilience for the future network.

Uncertain sites have records of large numbers of waders or brent geese. However, the large numbers have been recorded less than 3 times from 2006/2007 to present day. Further surveys are necessary to determine the classification of the site and it is likely that these sites will fall into the higher use categories, for example Core Area, Primary Support Area and Secondary Support Area.

Appendix 2. Wetland Bird Survey – North West Solent

Wetland Bird Survey Core Counts from the North West Solent Section in the Needs Ore Area

2011-2012

Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Max
Snipe				3	4	26	56	12	28	1			56
Redshank	251	141	287	64	162	120	129	49	106	66	44	52	287
Teal	2	26	480	643	1850	2032	2091	990	673	93	4	3	2091
Mute Swan	23	36	95	91	63	69	78	37	33	33	52	46	95

Lapwing	117	50	120	166	1200	1100	1050	672	52	9	26	25	1200
2012-2013													
Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Max
Snipe		18	1	8	22	11	7	5	6				22
Redshank	83	160	366	192	237	190	244	135	105	38	28	33	366
Teal		123	113	1422	1626	1948	1990	791	717	60			1990
Mute Swan	11	40	78	119	134	74	62	42	18	37	56	41	134
Lapwing	33	36	110	131	355	818	639	817	56	23	16	50	818
2013-2014													
Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Max
Snipe	1			2	7	2	3	3	12				12
Redshank	164	202	315	268	137	113	319	121	251	36	15	26	319
Teal		177	547	1405	1690	2170	2020	690	1018	36			2170
Mute Swan	25	75	95	70	53	21	36	31	35	21	20	17	95
Lapwing	204	89	173	438	385	293	1284	861	203	41	9	50	1284
2014-2015													
Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Max
Snipe	5	1	2	1		3	5		5	4			5
Redshank	166	267	424	286	270	99	144	30	138	17	19	4	424
Teal	4	4	919	1832	1428	2056	1334		615	116	46		2056
Mute Swan	13	18	95	44	35	30	43		27	32	33	29	95
Lapwing	73	83	47	313	556	979	725	34	38	13	13	12	979
2015-2016													
Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Max
Snipe		1		12		8	2	50	26				50
Redshank	70	237	69	206	183	206	171	219	91	95	28	16	237
Teal		190	276	1797	1830	1897	1470	839	508	178	5		1897
Mute Swan	22	6	50	25	40	30	45	41	44	48	37	16	50
Lapwing	20	146	27	595	930	1052	1037	971	117	19	20	17	1052

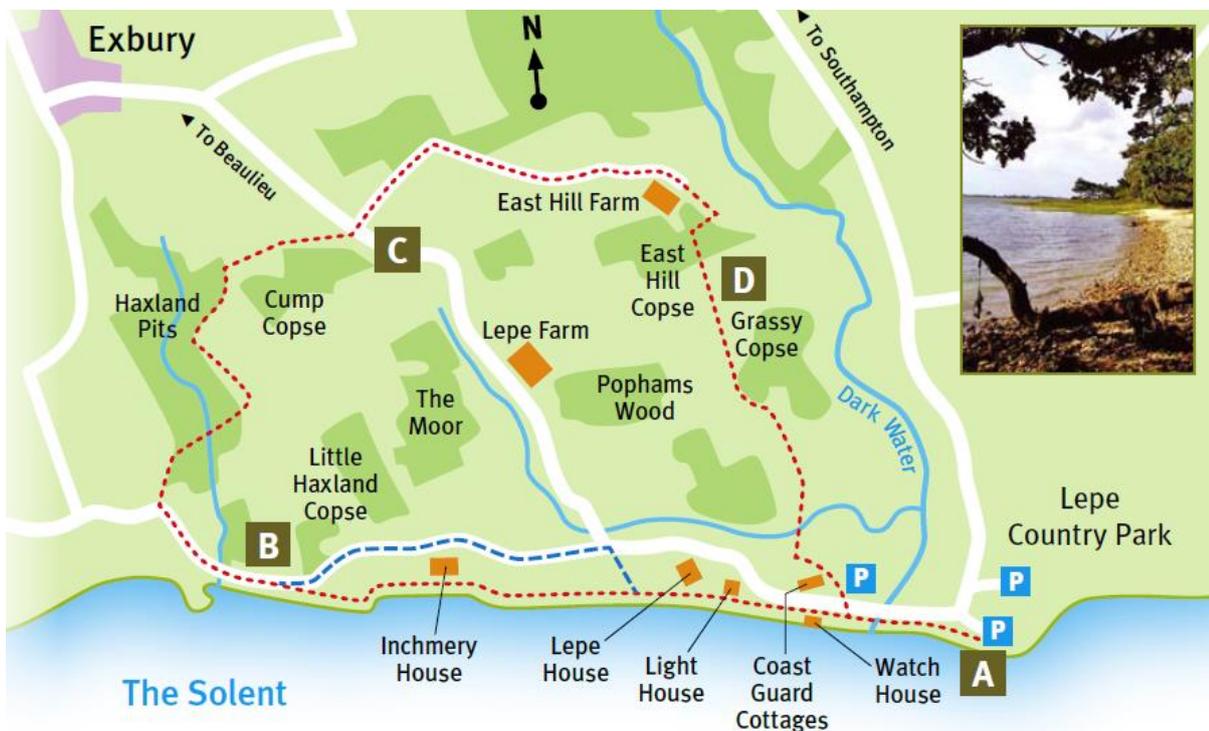
Appendix 3. Breeding Areas Comparison between 1986/91 and 2008/12 iterations of the Hampshire Bird Atlas

Species	Change in breeding areas between 1986/91 and 2008/12
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Avocet	+100%
Little Grebe	-9%
Mute Swan	-1%
Shelduck	-9%
Water Rail	-31%
Cuckoo	-25%
Reed Warbler	+24%
Bearded Tit	+57%
Reed Bunting	-36%
Shoveler	+60%
Redshank	-78%
Sedge Warbler	-37%
Lapwing	-47%
Snipe	-75%

Source: (Hampshire Ornithological Society, 2015)

Appendix 4. The Lepe Loop

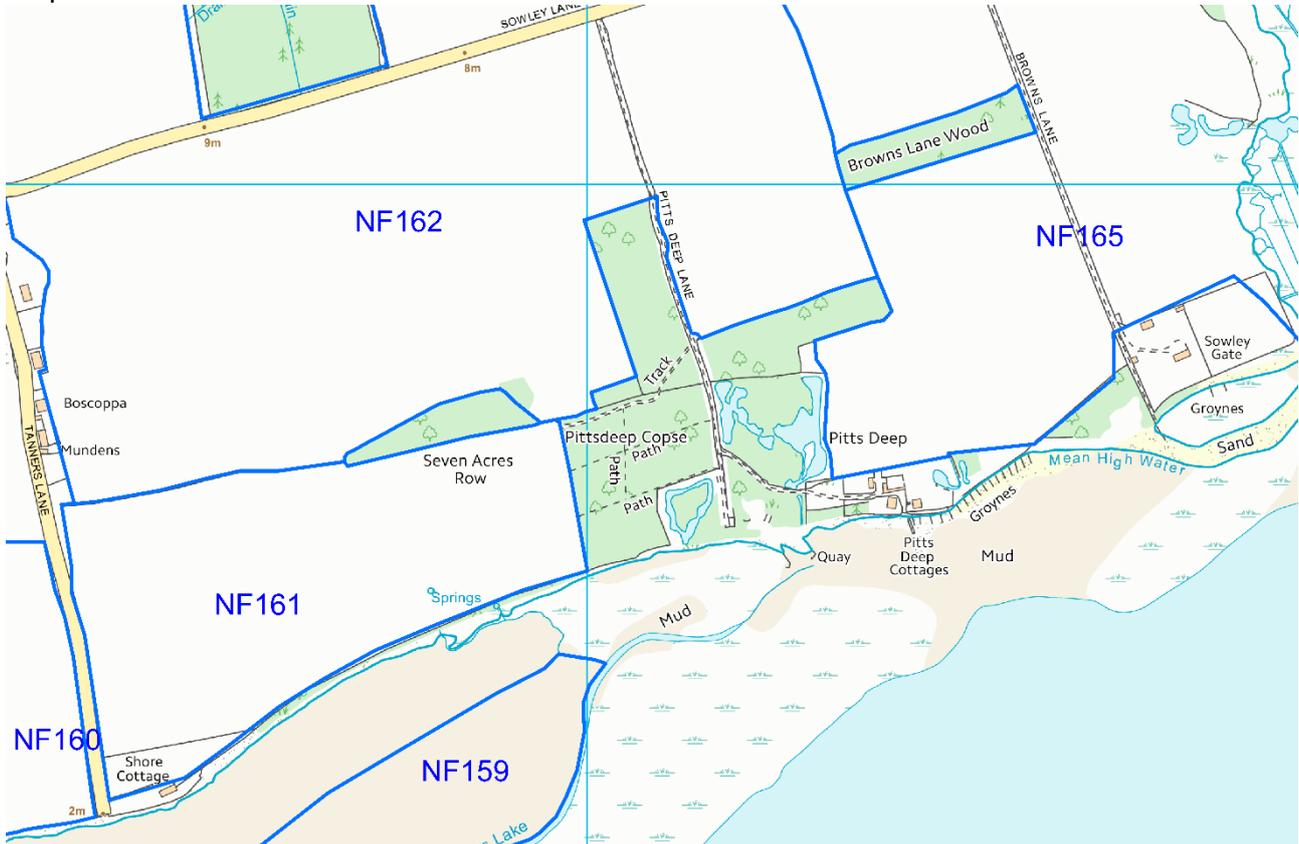


Map 1. The Lepe Loop promoted route, taken from a flyer outlining access in the area. (Hampshire County Council, 2014)

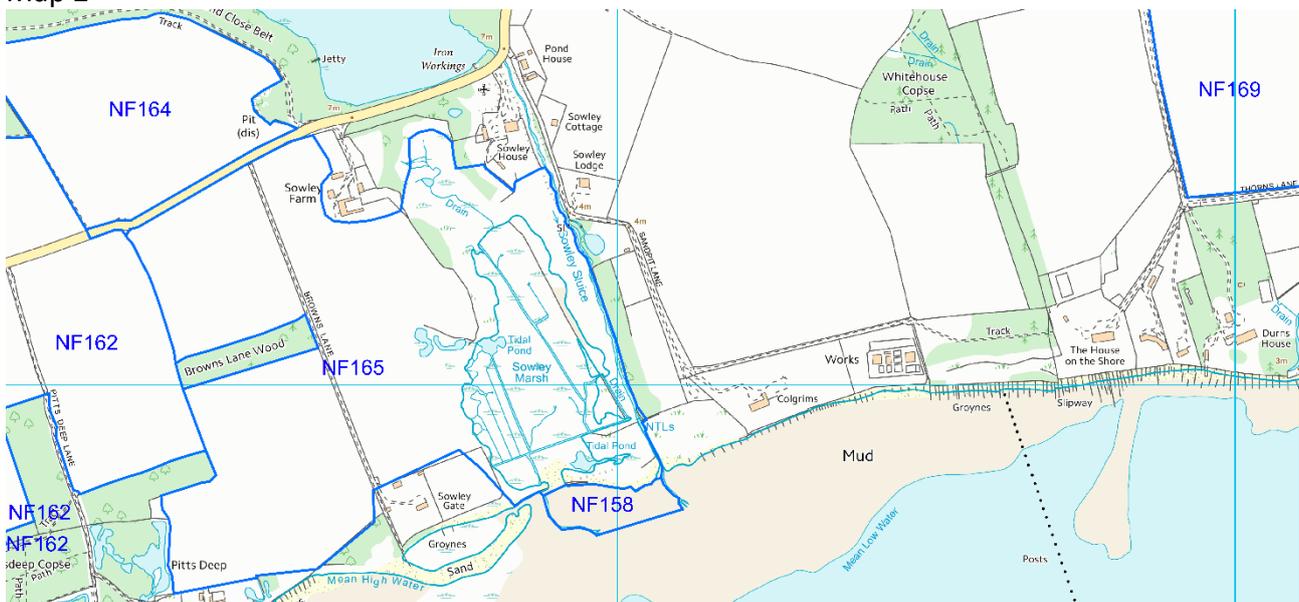
Appendix 5. Solent Waders and Brent Goose Strategy Classification List and Definitions

The following maps outline the survey sites included in the 2010 and in preparation 2018 versions of the Solent Waders and Brent Goose Strategy. Please note that not all surveyed areas, specifically those within SPA boundaries, are not necessarily recorded as part of the forthcoming 2018 version.

Map1



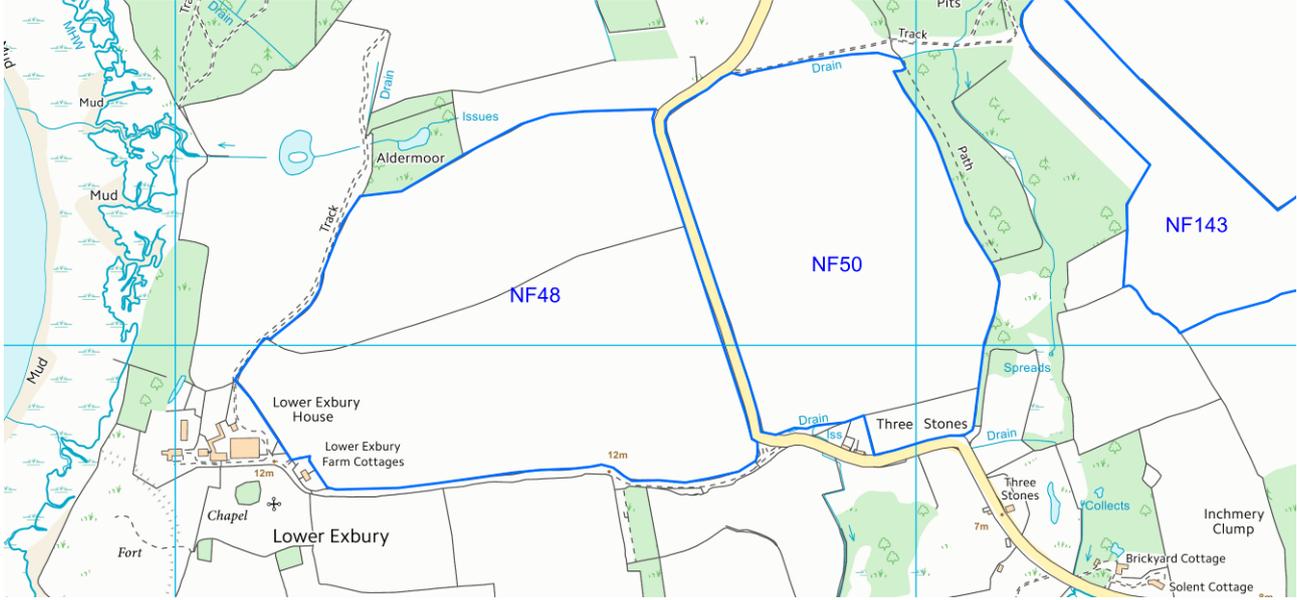
Map 2



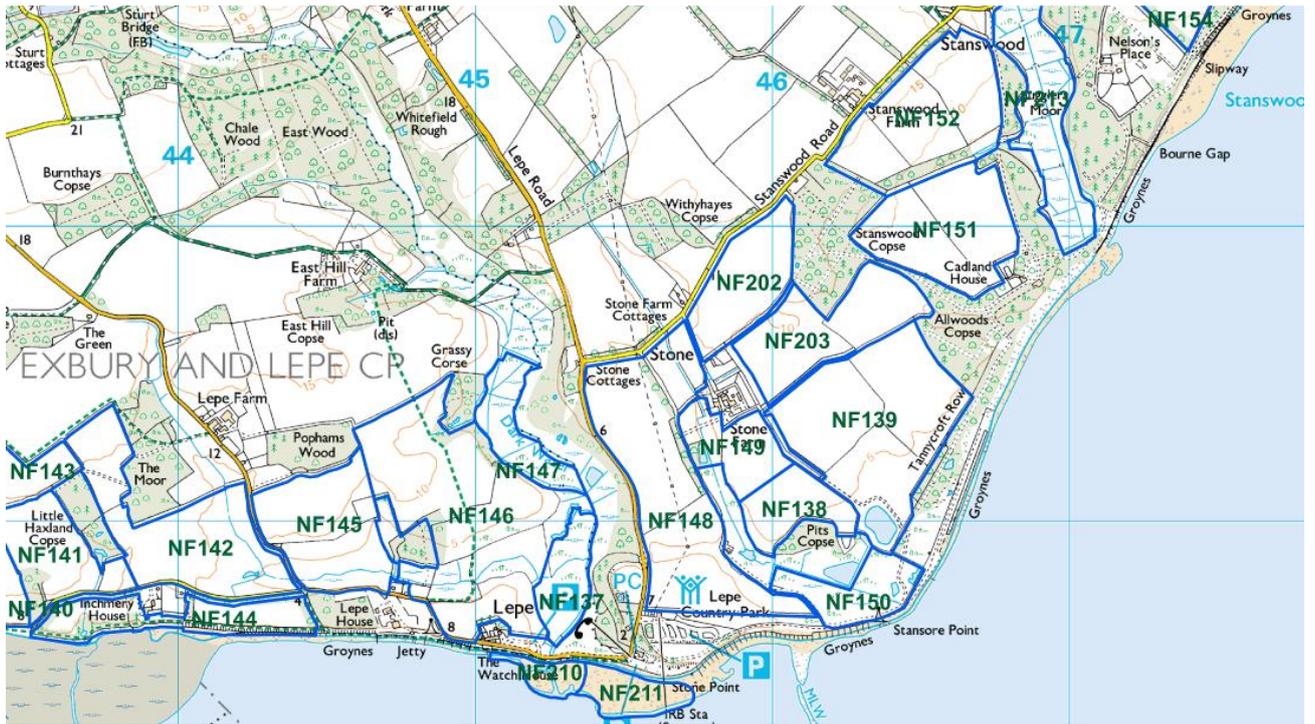
Map 3



Map 4



Map 6



Map 7



Appendix 6. New Forest SSSI Summarised Feature Condition Table

This table collates the conditions of SSSI units of the associated features for the New Forest SSSI.

Feature	Designation	Unfavourable Recovering	Unfavourable no change	Unfavourable declining	Partially destroyed	Destroyed	Not Assessed
H3110 Oligotrophic water contains few minerals of sandy plains	SAC	9	0	0	0	0	8
H3130 Oligotrophic to mesotrophic standing water with vegetation	SAC	1	0	0	0	0	0
H4010 Northern Atlantic wet heaths with <i>Erica tetralix</i>	SAC	108	8	5	0	5	9
H4020 Temp Atlantic wet heaths with <i>Erica ciliaris</i> and <i>E. tetralix</i>	SAC	1	0	0	0	0	0
H4030 European dry heaths	SAC	56	5	8	0	8	10
H6410 <i>Molinia</i> meadows on calcareous, peat or clay-silt soil	SAC	58	2	2	0	2	20
H7140 Transition mires and quaking bogs	SAC	6	0	0	0	0	0
H7150 Depressions on peat substrates of the <i>Rhynchosporion</i>	SAC	113	4	6	0	6	7
H7230 Alkaline fens	SAC	2	0	0	0	0	0
H9120 Atlantic acidophilous beech forests with <i>Ilex</i>	SAC	21	1	1	0	1	12
H9130 <i>Asperulo-Fagetum</i> beech forests	SAC	0	0	0	0	0	0
H9190 Old acidophilous oak woods with <i>Q. robur</i> on sandy plains	SAC	6	0	0	0	0	4
H91D0 Bog woodland	SAC	9	0	0	0	0	2
H91E0 Alluvial woods with <i>A. glutinosa</i> , <i>F. excelsior</i>	SAC	28	0	0	0	0	1
Butterflies which have experienced substantial declines - <i>Argynnis paphia</i> , Silver-washed Fritillary	SSSI	44	0	0	0	0	17
Butterflies which have	SSSI	27	0	0	0	0	13

experienced substantial declines - <i>Limenitis camilla</i> , White Admiral							
S1166 Great crested newt, <i>Triturus cristatus</i>	SAC	4	0	0	0	0	3
Dartford warbler, <i>Sylvia undata</i> - A302, b	SPA	1	0	0	0	0	0
Hen harrier, <i>Circus cyaneus</i> - A082, b	SPA	0	0	0	0	0	0
Nightjar, <i>Caprimulgus europaeus</i> - A224, b	SPA	0	0	0	0	0	0
Woodlark, <i>Lullula arborea</i> - A246, b	SPA	1	0	1	0	1	0
Aggregations of breeding birds - Dartford warbler, <i>Sylvia undata</i>	SSSI	2	0	0	0	0	8
Aggregations of breeding birds - Nightjar, <i>Caprimulgus europaeus</i>	SSSI	2	0	0	0	0	9
Aggregations of breeding birds - Woodlark, <i>Lullula arborea</i>	SSSI	4	0	0	0	0	13
Aggregations of non-breeding birds - Hen harrier, <i>Circus cyaneus</i>	SSSI	0	0	0	0	0	6
Amphibian assemblage	SSSI	29	1	0	0	0	41
Assemblages of breeding birds - Lowland heath	SSSI	16	0	0	0	0	35
Bryophyte assemblage	SSSI	88	5	2	0	2	104
Invert. assemblage A1 arboreal canopy	SSSI	54	0	1	0	1	36
Invert. assemblage A211 heartwood decay	SSSI	32	0	1	0	1	29
<i>Calluna vulgaris</i> - <i>Ulex minor</i> heath (H2)	SSSI	0	0	0	0	0	1
EO - Palaeogene	SSSI	0	0	0	0	0	0
FB - Palaeogene	SSSI	0	0	0	0	0	0
FB - Quaternary of South Central England	SSSI	0	0	0	0	0	1
FM - Quaternary of South Central England	SSSI	1	0	0	0	0	0
Great Crested Newt, <i>Triturus cristatus</i>	SSSI	1	0	0	0	0	6

Hen harrier, <i>Circus cyaneus</i> - A082, b	SSSI	0	0	0	0	0	1
Hibernating populations of bats - Barbastelle, Bechstein's bat, Greater Horseshoe bat, Lesser Horseshoe bat and mixed assemblages	SSSI	49	0	1	0	1	29
IA - Fluvial Geomorphology	SSSI	2	0	0	0	0	2
Invert. assemblage A212 bark and sapwood decay	SSSI	32	0	1	0	1	29
Invert. assemblage A213 fungal fruiting body	SSSI	32	0	1	0	1	29
Invert. assemblage F001 scrub edge	SSSI	15	1	0	0	0	10
Invert. assemblage F003 scrub-heath & moorland	SSSI	4	0	0	0	0	7
Invert. assemblage F111 bare sand & chalk	SSSI	2	0	0	0	0	2
Invert. assemblage W126 seepage	SSSI	4	0	0	0	0	1
Invert. assemblage W221 undisturbed fluctuating marsh	SSSI	0	0	0	0	0	0
Invert. assemblage W313 moss & tussock fen	SSSI	59	5	1	0	1	57
Population of Schedule 5 beetle - <i>Lucanus cervus</i> , Stag Beetle	SSSI	19	0	0	0	0	31
S1044 Southern damselfly, <i>Coenagrion mercuriale</i>	SAC	14	0	1	0	1	0
Lichen assemblage	SSSI	82	1	2	0	2	85
Lowland beech and yew woodland	SSSI	0	0	0	0	0	1
Lowland dry acid grassland (U1b,c,d,f)	SSSI	2	0	0	0	0	1
Lowland dry acid grassland (U4)	SSSI	0	0	0	0	0	6
Lowland dry acid grassland (U5/U6)	SSSI	1	0	0	0	0	0
Lowland dry heath	SSSI	36	4	1	0	1	29
Lowland mire grassland and rush pasture	SSSI	5	1	1	0	1	7
Lowland mixed deciduous woodland	SSSI	102	1	1	0	1	48

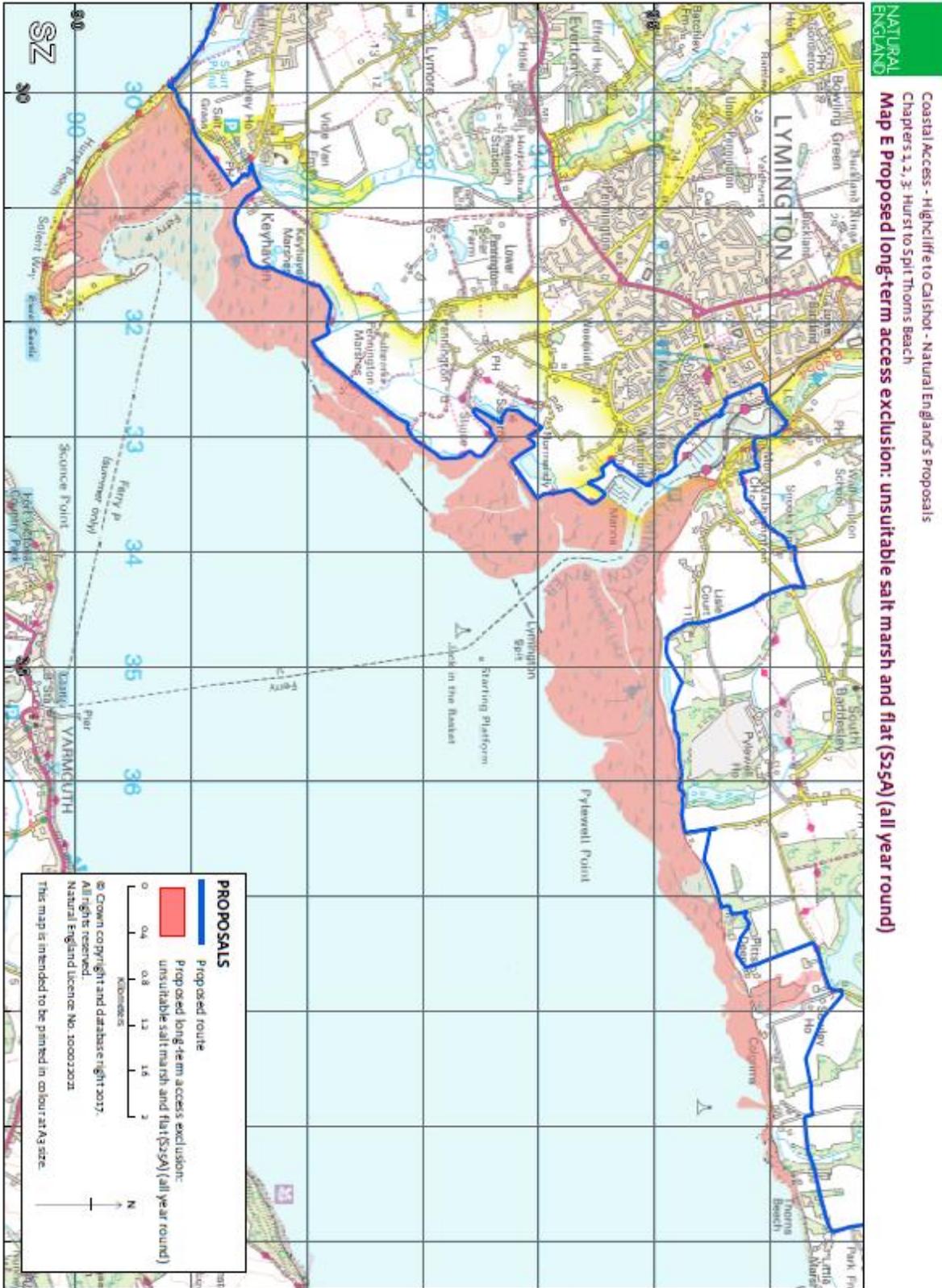
Lowland neutral grassland (MG5)	SSSI	6	2	5	0	5	8
Lowland wet heath	SSSI	65	5	1	0	1	34
Lowland wetland including basin fen, valley fen, floodplain fen, waterfringe fen, spring/flush fen and raised bog lagg	SSSI	77	5	2	0	2	47
Maternity colonies of bats - Barbastelle, Barbastella barbastellus and Bechstein's bat, Myotis bechsteinii	SSSI	0	0	0	0	0	0
Nationally rare and scarce dragonfly species - Coenagrion mercuriale, Southern Damselfly	SSSI	9	0	0	0	0	9
Nationally scarce plant - Chamaemelum nobile, Chamomile	SSSI	0	0	1	0	1	1
Nightjar, Caprimulgus europaeus - A224, b	SSSI	0	0	0	0	0	0
Ponds	SSSI	10	0	2	0	2	20
Population of RDB plant - Lobelia urens, Heath Lobelia	SSSI	0	1	0	0	0	0
Population of RDB plant - Ludwigia palustris, Hampshire Purslane	SSSI	5	0	0	0	0	4
S1083 Stag beetle, Lucanus cervus	SAC	44	0	1	0	1	26
Population of Schedule 5 crustacean - Chirocephalus diaphanus, a freshwater fairy shrimp	SSSI	1	0	0	0	0	3
Population of Schedule 5 crustacean - Triops cancriformis, Tadpole Shrimp	SSSI	0	0	0	0	0	0
Population of Schedule 8 fungi - Hericium erinaceum, Hedgehog fungus	SSSI	4	0	0	0	0	9
Population of Schedule 8 lichen - Catillaria laureri, Laurer's Catillaria	SSSI	2	0	0	0	0	2
Population of Schedule 8 lichen - Parmelia minarum, New Forest Parmelia	SSSI	2	0	0	0	0	5

Population of Schedule 8 plant - Eriophorum gracile, Slender Cottongrass	SSSI	0	0	0	0	0	2
Population of Schedule 8 plant - Gladiolus illyricus, Wild Gladiolus	SSSI	1	0	0	0	0	5
Population of Schedule 8 plant - Pulicaria vulgaris, Lesser Fleabane	SSSI	0	0	0	0	0	2
Reptile assemblage	SSSI	11	1	0	0	0	21
Rivers and Streams	SSSI	3	0	0	0	0	0
Sand lizard, Lacerta agilis	SSSI	1	0	0	0	0	6
Smooth snake, Coronella austriaca	SSSI	3	0	0	0	0	13
Standing waters	SSSI	0	0	0	0	0	2
Vascular plant assemblage	SSSI	0	0	1	0	1	1
Wet woodland	SSSI	12	0	0	0	0	3
Woodlark, Lullula arborea - A246, b	SSSI	0	0	0	0	0	0

Appendix 7. Proposed Countryside Rights of Way Act Directions to Exclude or Restrict Access – Highcliffe to Calshot

Proposed Countryside Rights of Way Act Directions

1.1 Chapters 1,2,3: Hurst to Spit Thorns Beach, Map E Proposed long-term access exclusion:



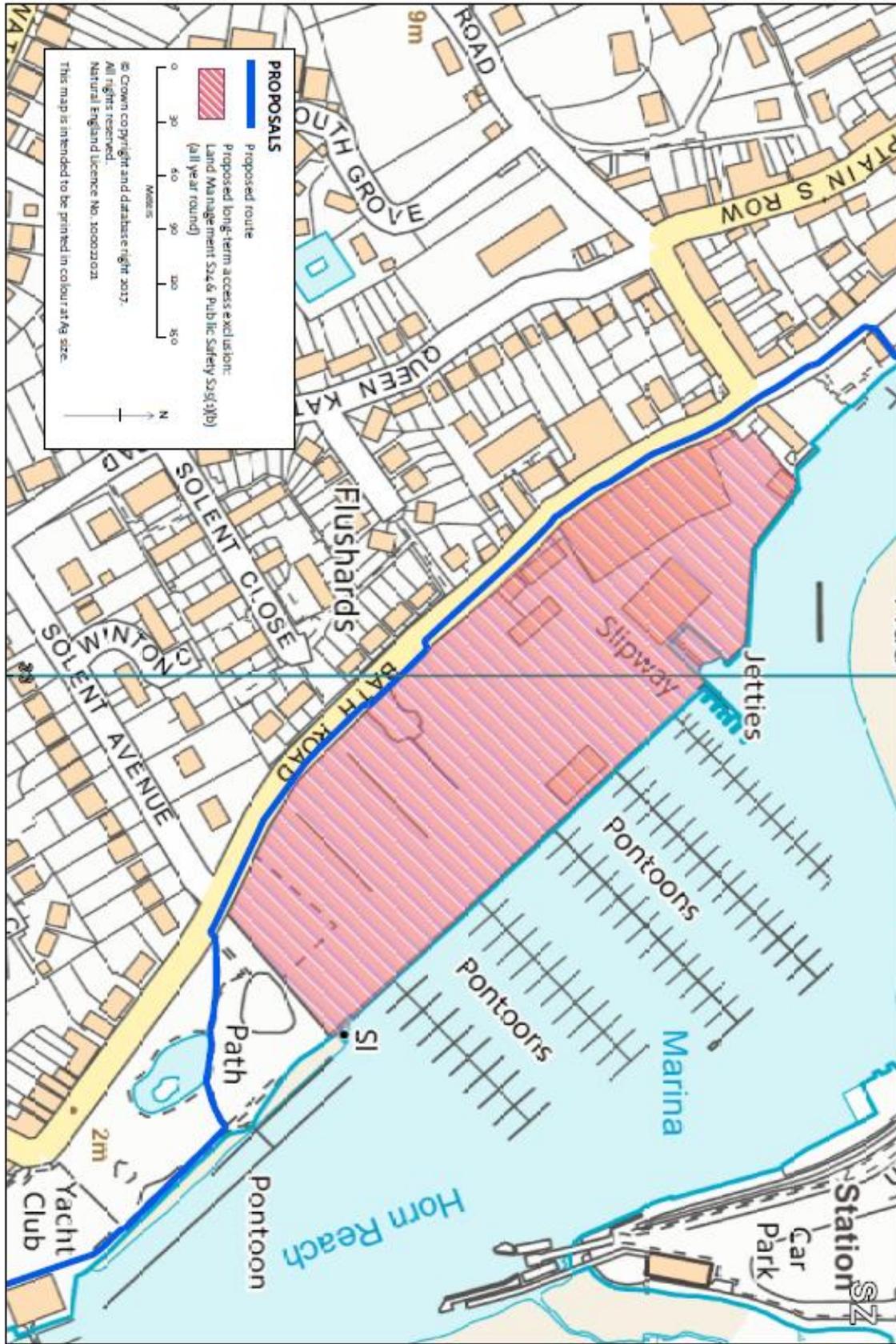
Map E Proposed long-term access exclusion: unsuitable salt marsh and flat (S2SA) (all year round)

unsuitable salt marsh and flat (S25A) (all year round)

1.2 Chapters 3, 4, 5: Park Shore to Beaulieu Estuary East, Map F Proposed long-term access exclusion: unsuitable salt marsh and flat (S25A)

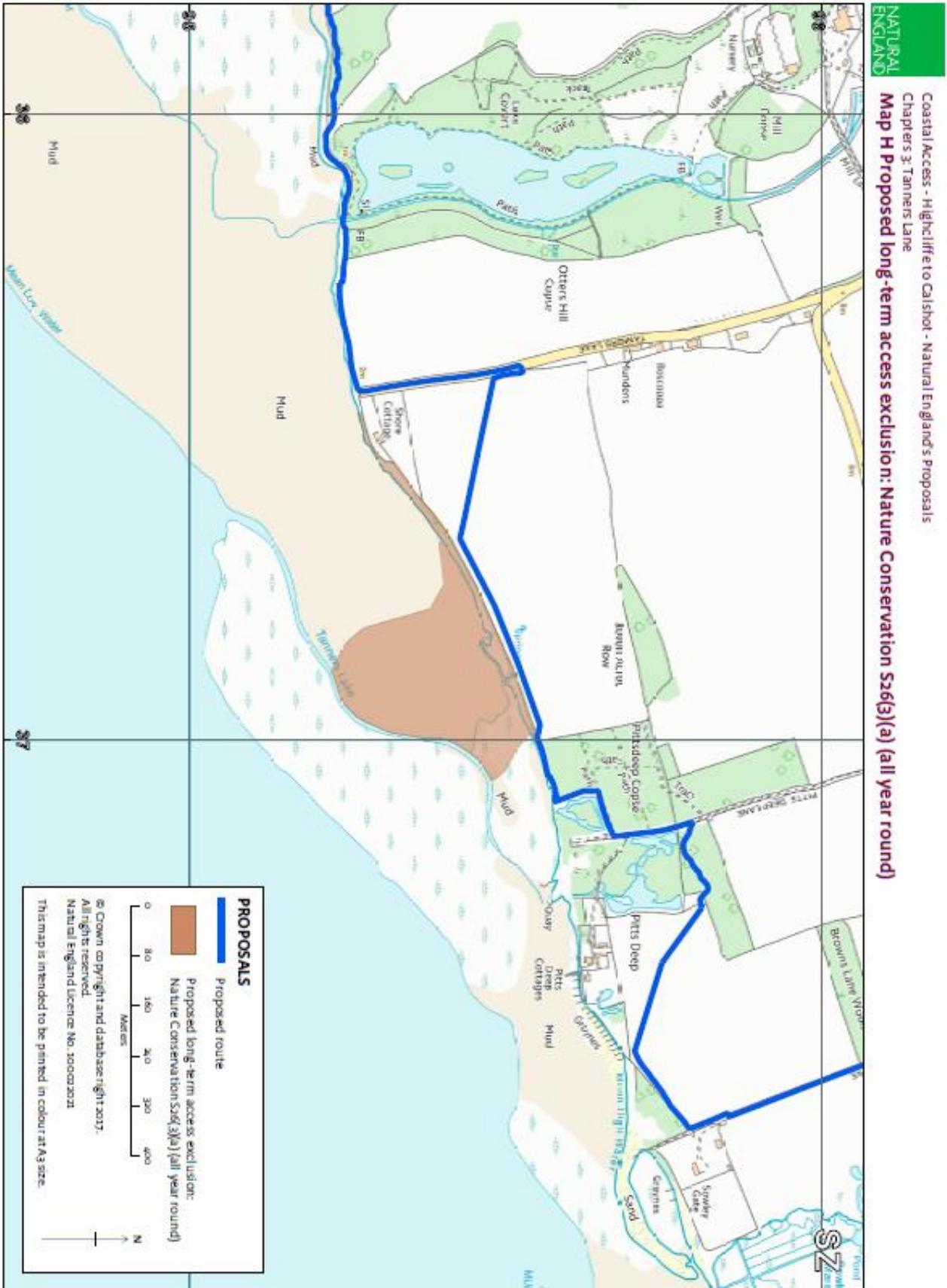


1.3 Chapter 2: Berthon Boatyard, Map G Proposed long-term access exclusion: Land Management S24 & Public Safety S25(1)(b)



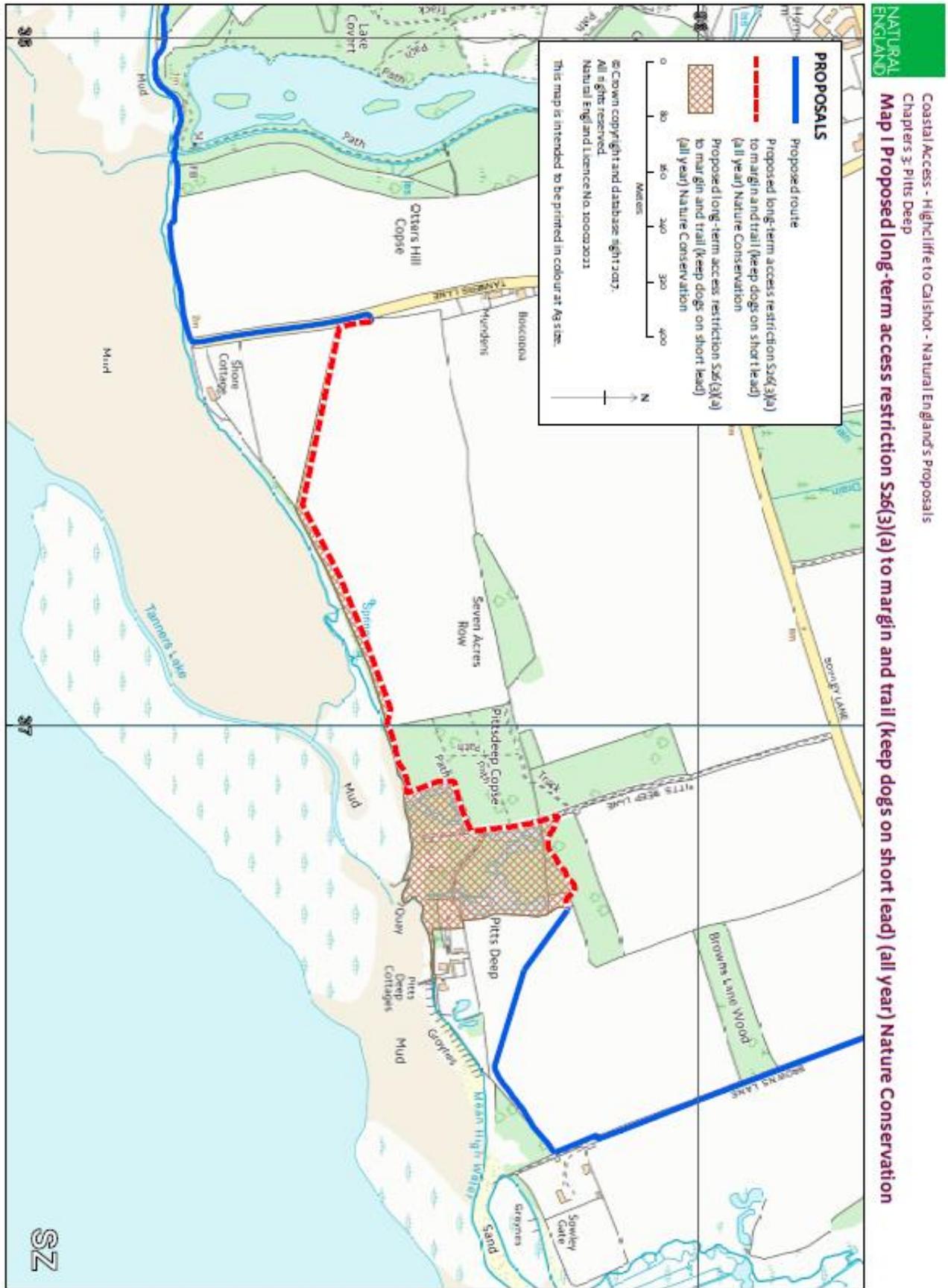
Coastal Access - Highcliffe to Calshot - Natural England's Proposals
 Chapter 2: Berthon Boatyard
Map G Proposed long-term access exclusion: Land Management S24 & Public Safety S25(1)(b) (all year round)

1.4 Chapter 3: Tanners Lane, Map H Proposed long-term access exclusion: Nature Conservation S26(3)(a) (all year round)

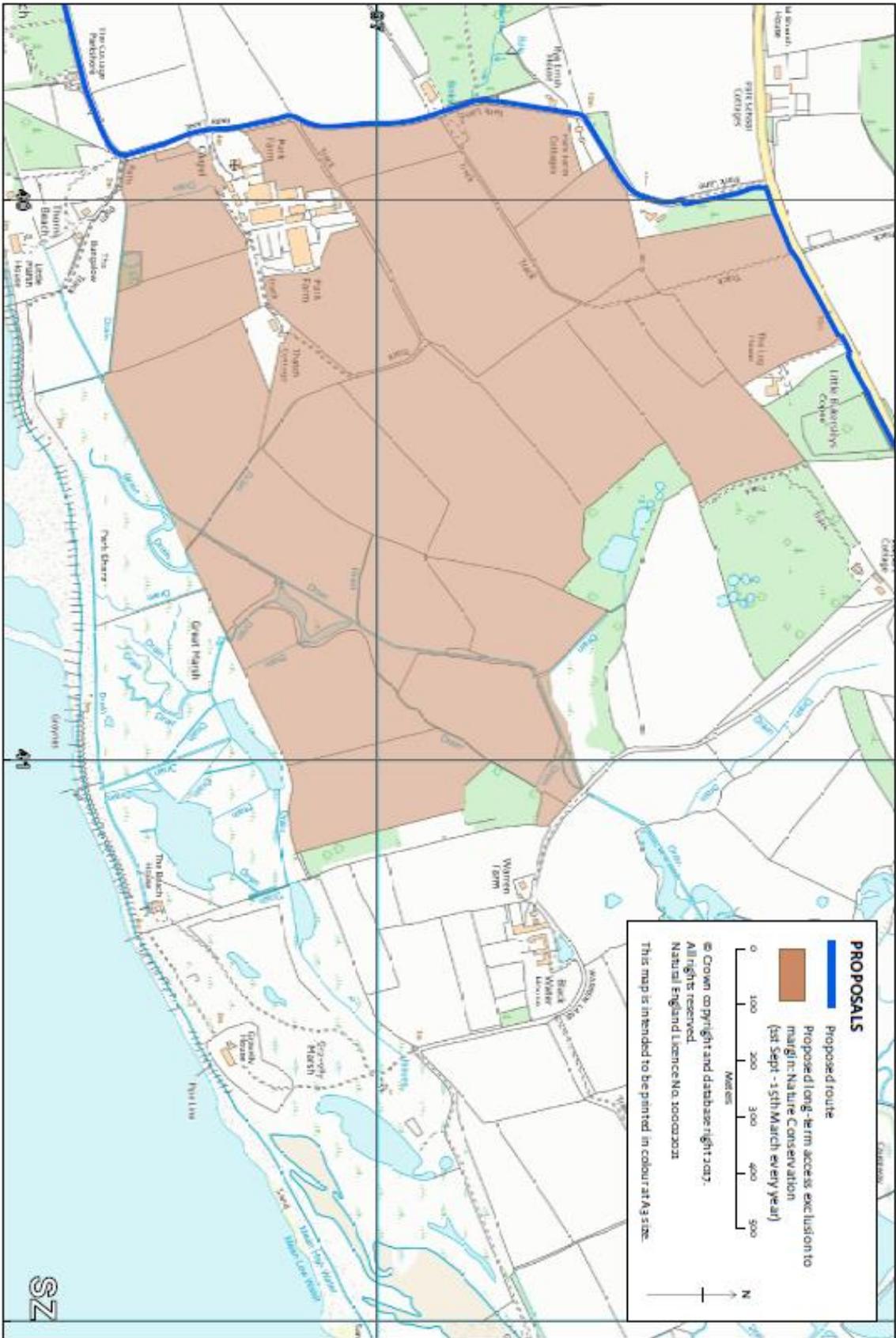


Map H Proposed long-term access exclusion: Nature Conservation S26(3)(a) (all year round)

1.5 Chapter 3: Pitts Deep, Map I Proposed long-term access restriction S26(3)(a) to margin and trail (keep dogs on short lead) (all year) Nature Conservation

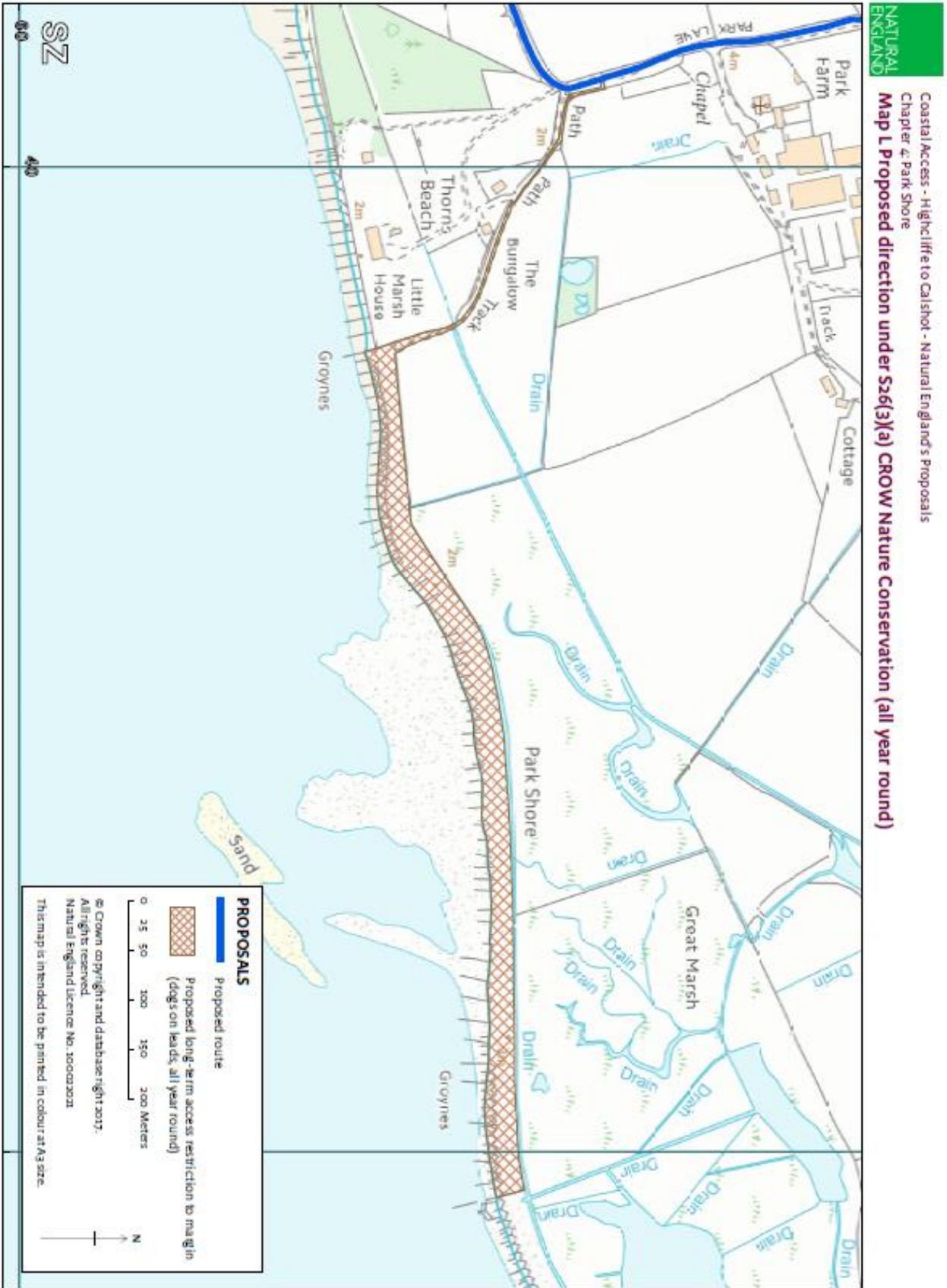


1.7 Chapters 3 & 4: Park Farm Fields, Map K Proposed direction under S26(3)(a) Nature Conservation



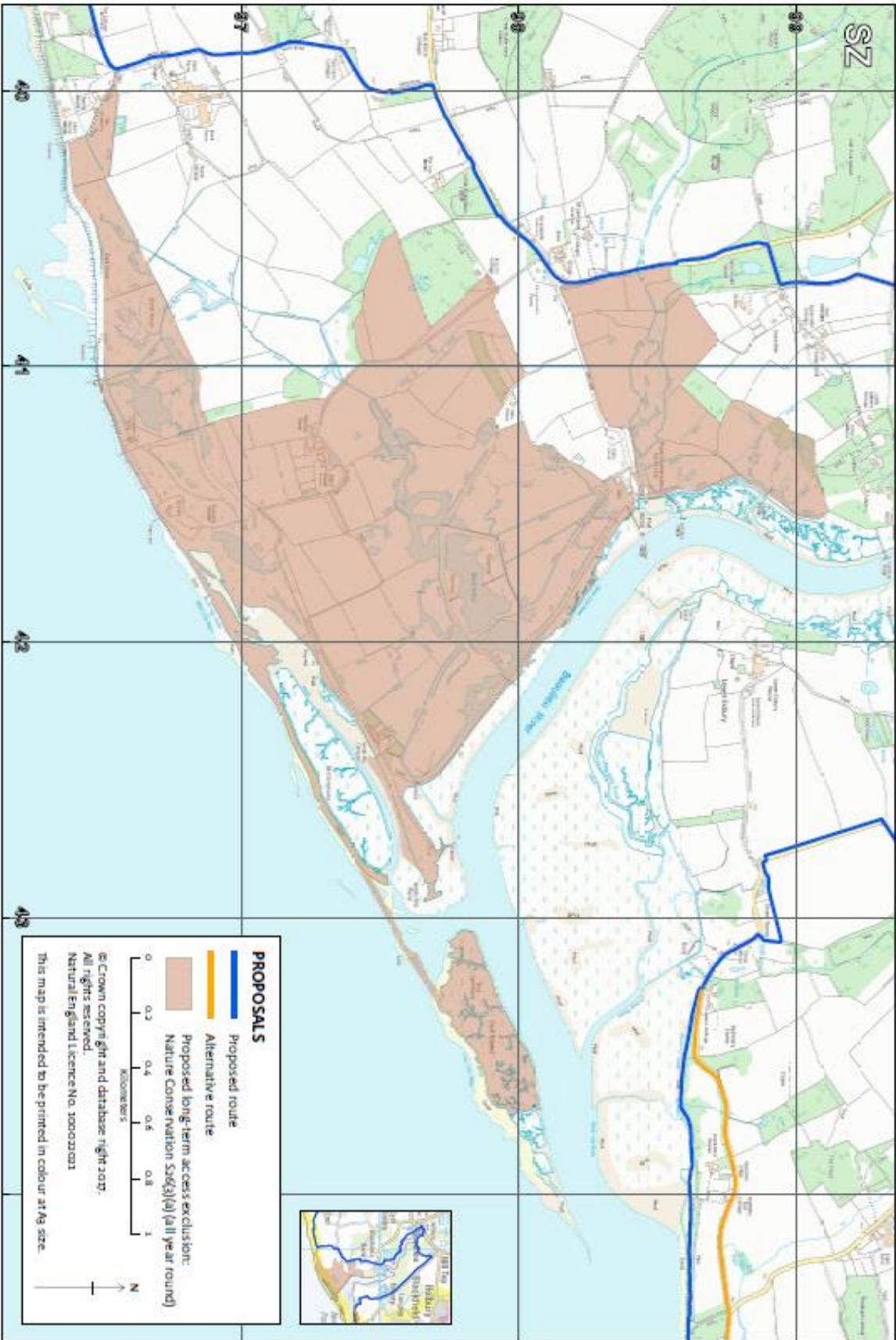
NATURAL ENGLAND
 Coastal Access - Highcliffe to Calshot - Natural England's Proposals
 Chapters 3 & 4: Park Farm Fields
Map K Proposed direction under S26(3)(a) Nature Conservation

1.8 Chapter 4: Park Shore, Map L Proposed direction under S26(3)(a) CROW Nature Conservation (all year round)



Map L Proposed direction under S26(3)(a) CROW Nature Conservation (all year round)

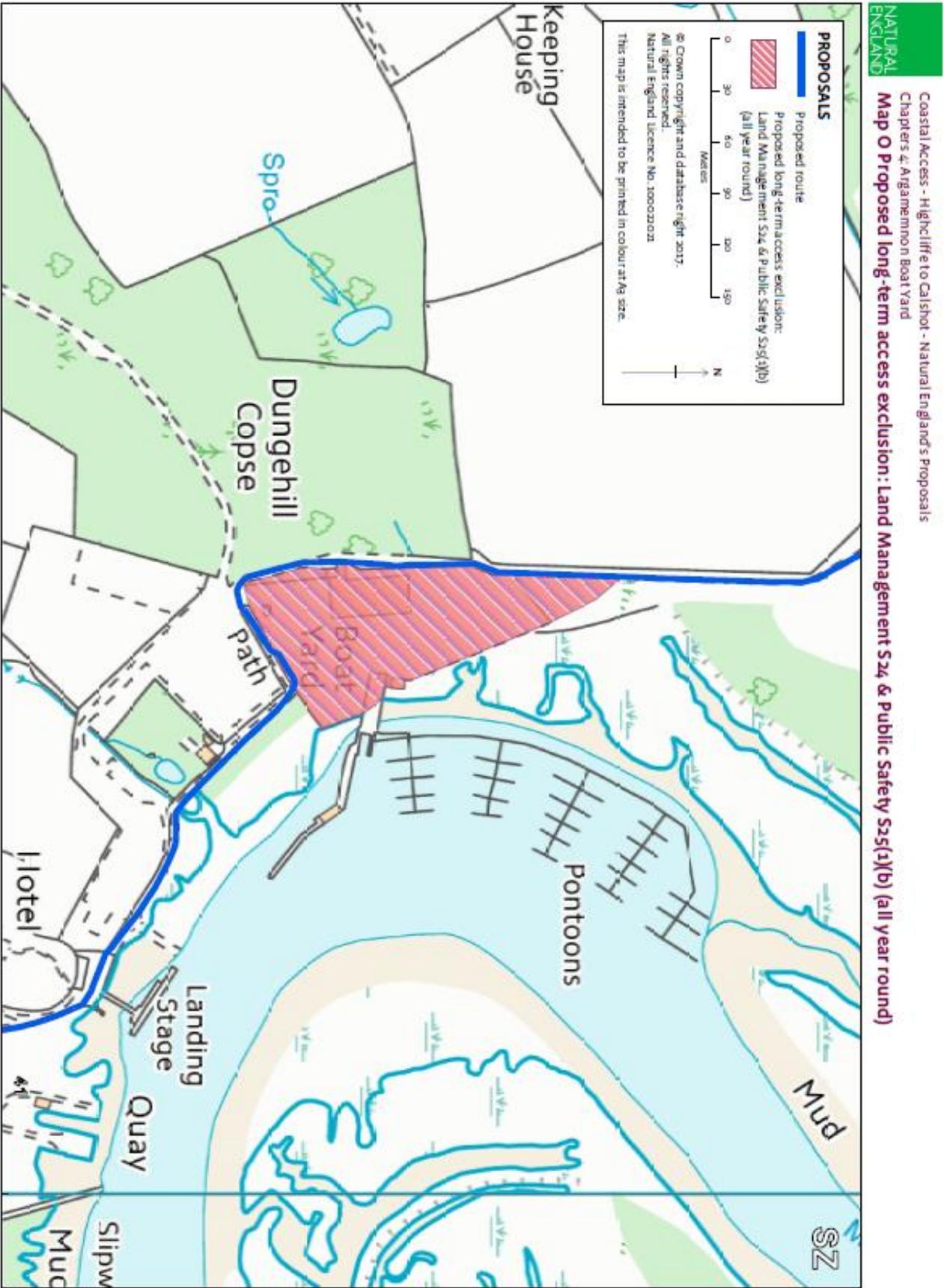
1.9 Chapters 3, 4 & 5: Needs Ore, Map M Proposed long-term access exclusion: Nature Conservation Sz6(3)(a) (all year round)



Map M Proposed long-term access exclusion: Nature Conservation Sz6(3)(a) (all year round)

1.10 Chapter 4: Bucklers Hard, Map N Proposed direction under S24 CROW Land Management

1.11 Chapter 4: Argamemnon Boat Yard, Map O Proposed long-term access exclusion: Land



Map O Proposed long-term access exclusion: Land Management S24 & Public Safety S25(1)(b)

Management S24 & Public Safety S25(1)(b) (all year round)

1.12 Chapter 5: Stone Marsh, Map P Proposed long-term access exclusion: Nature Conservation S26(3)(a) (all year round)



Coastal Access - Highcliffe to Caishot - Natural England's Proposals
Chapter 5: Stone Marsh

Map P Proposed long-term access exclusion: Nature Conservation S26(3)(a) (all year round)



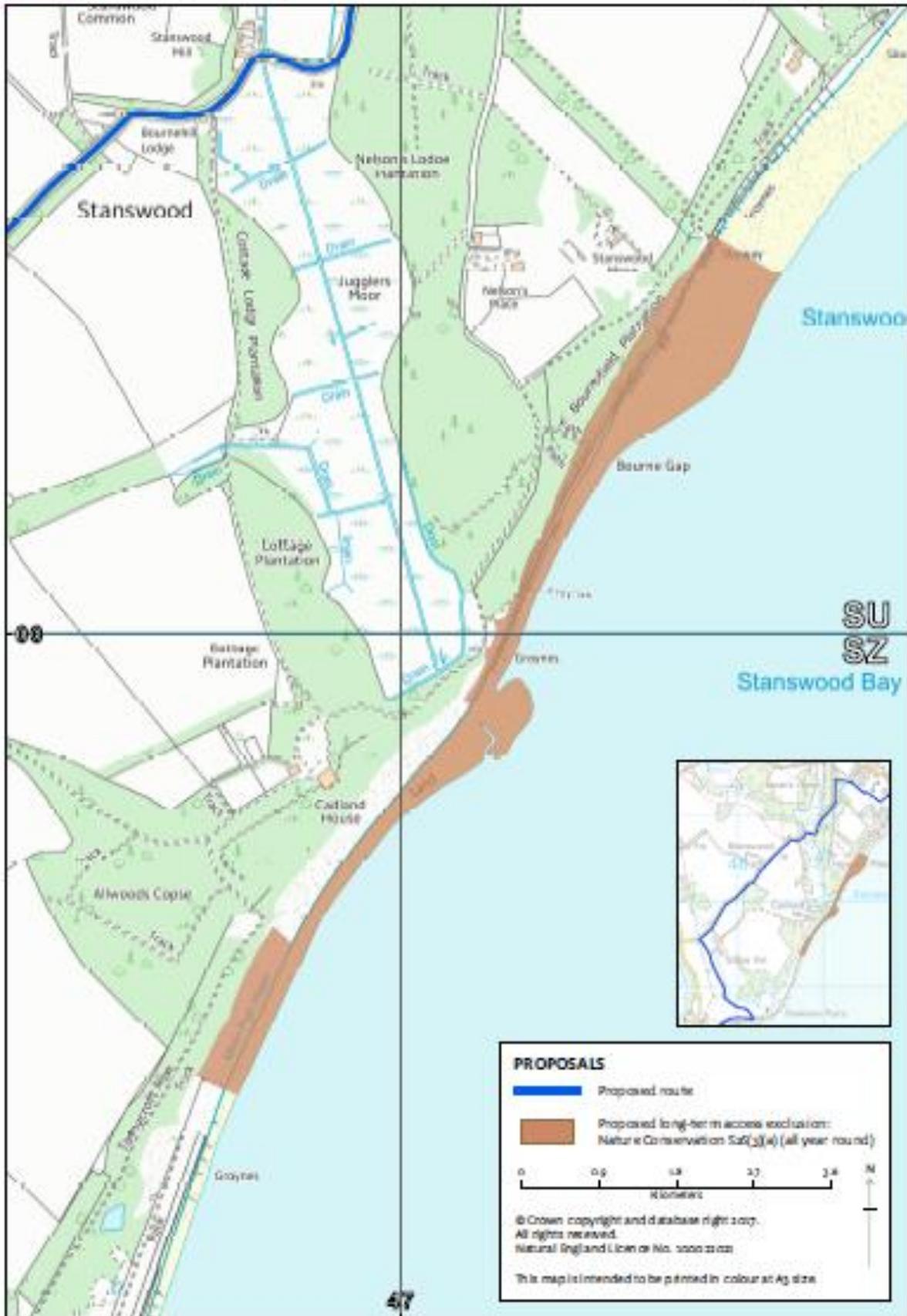
Map P Proposed long-term access exclusion: Nature Conservation S26(3)(a) (all year round)

1.13 Chapter 5: Cadland Estate Shoreline, Map Q Proposed long-term access exclusion: Nature Conservation S26(3)(a) (all year round)



Coastal Access - Highcliffe to Caishott - Natural England's Proposals
Chapter 5: Cadland Estate Shoreline

Map Q Proposed long-term access exclusion: Nature Conservation S26(3)(a) (all year round)



Map Q Proposed long-term access exclusion: Nature Conservation S26(3)(a) to protect vegetated shingle (all year round)