

A1 Birtley to Coal House

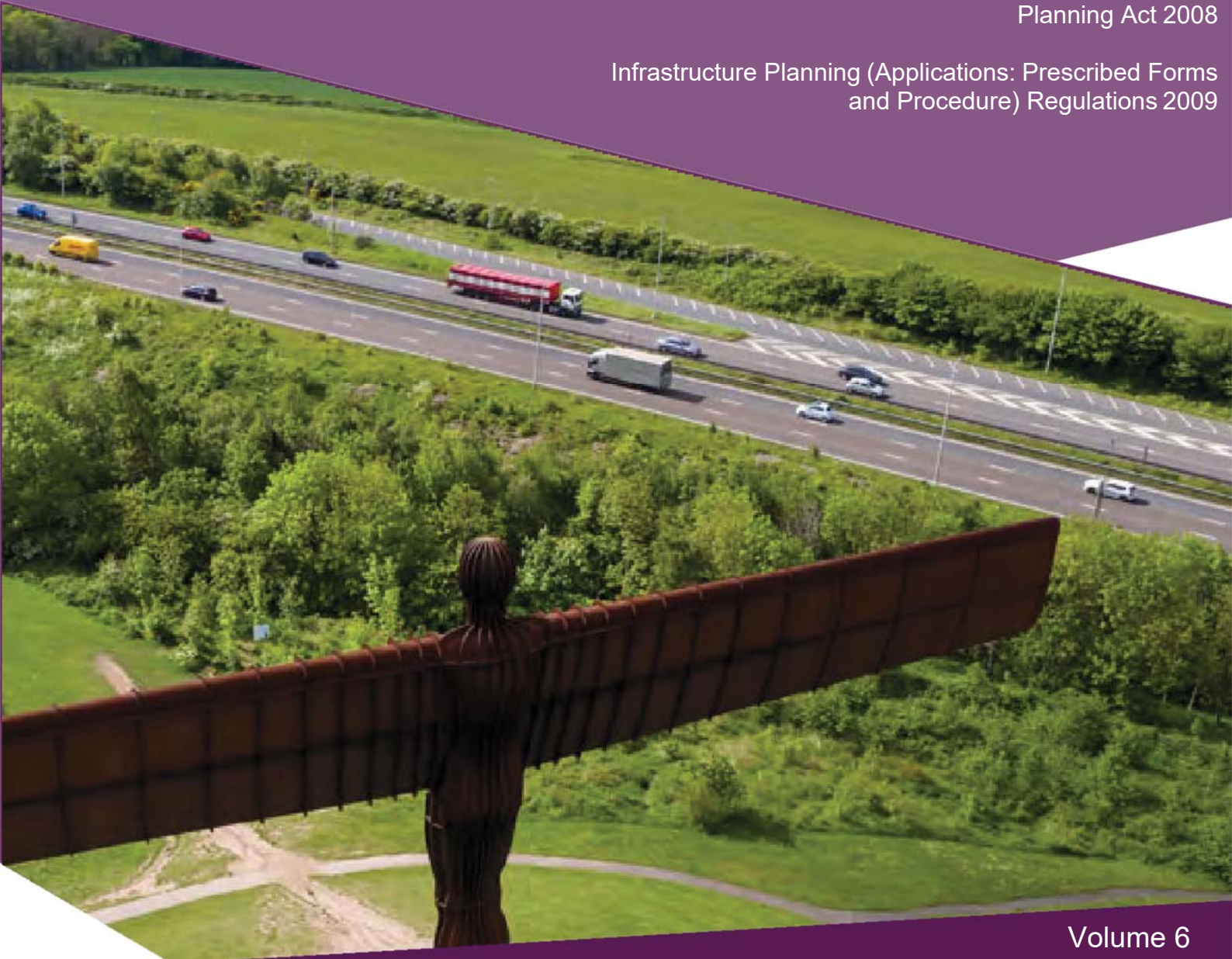
Scheme Number: TR010031

6.3 Environmental Statement – Appendix 8.2 Habitats Regulations Assessment

APFP Regulation 5(2)(a)

Planning Act 2008

Infrastructure Planning (Applications: Prescribed Forms
and Procedure) Regulations 2009



Infrastructure Planning

Planning Act 2008

**The Infrastructure Planning
(Applications: Prescribed Forms and
Procedures) Regulations 2009**

**A1 Birtley to Coal House
Development Consent Order 20[xx]**

**Environmental Statement -
Appendix**

Regulation Reference:	APFP Regulation 5(2)(a)
Planning Inspectorate Scheme Reference	TR010031
Application Document Reference	TR010031/APP/6.3
Author:	A1 Birtley to Coal House Project Team, Highways England

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1 INTRODUCTION

1.1 OVERVIEW

- 1.1.1 This Habitat Regulations Assessment (HRA) Report (this “Report”) relates to an application to the Planning Inspectorate (the “Inspectorate”) by Highways England (the “Applicant”) for a Development Consent Order (DCO) for the A1 Birtley to Coal House (the “Scheme”). A detailed description of the Scheme can be found in Chapter 2 of the Environmental Statement (ES) (**Application Document Reference: TR010031/APP/6.1**).
- 1.1.2 This Report has been prepared to comply with the requirements of Regulation 5(2)(g) of the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009, which requires an application for a DCO to be accompanied by: *“any Report identifying any European site to which regulation 48 of the Conservation (Natural Habitats, &c.) Regulations 1994 applies, or any Ramsar site, which may be affected by the proposed development, together with sufficient information that will enable the Secretary of State to make an appropriate assessment of the implications for the site if required by regulation 48(1)”*.
- 1.1.3 The Report has been produced to inform the Habitats Regulations Assessment (HRA) of the Scheme and comprises a No Significant Effects Report for the Scheme.
- 1.1.4 The associated Screening Matrices for each European Site have been included at **Appendix A** in accordance with the Inspectorate’s PINS Advice Note 10 Habitat Regulations Assessment relevant to Nationally Significant Infrastructure Projects (NSIP). These include a clear summary of the potential effects against each qualifying feature of each European Site, in a simple check-box matrix.

1.2 PURPOSE OF THIS REPORT

- 1.2.1 Under the requirements of European Council Directive 92/43/EEC ‘The Habitats Directive’ and the Council Directive 2009/147/EES ‘The Birds Directive’, all Member States are required to implement a network of protected sites and maintain their ecological integrity. This network of sites is collectively termed ‘Natura 2000 Sites’. The aim of the Natura 2000 network of sites is to maintain long-term survival of Europe’s most valuable and threatened species and habitats.
- 1.2.2 The information contained in this Report is required to inform the decision as to whether an Appropriate Assessment (AA) is required, in compliance with Regulations 62 to 69 of the Conservation of Habitats and Species Regulations 2017 (as amended) (‘the Habitats Regulations’), implementing Article 6(3) of the Habitats Directive.
- 1.2.3 The core requirements of the Habitats Directive in respect of Natura 2000 Sites are given in Article 6 (3) as follows:
- “Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other*

plans or projects, shall be subject to an AA of its implications for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public."

- 1.2.4 This Report is a 'Screening Report', the purpose of which is to provide an informed decision as to whether a project is likely to have a significant effect (LSE) on a European Site (either alone or in combination with other plans or projects). This Report has been prepared in accordance with the Design Manual for Roads and Bridges (DMRB), Volume 11, Section 4, 'Assessment of Implications on European Sites' (HD44/09; Highways Agency, 2009), Interim Advice Note (IAN) 141/11 'Assessment of Implications on European Sites' (Highways Agency, 2011) and PINS Advice Note 10. PINS Advice Note 10 and HD 44/09 are the principal sources of guidance for HRA for road schemes and IAN 141/11 supplements this, with respect to road projects that are categorised as NSIP, under Section 22 of the Planning Act 2008.
- 1.2.5 The Habitats Regulations (HMSO, 2017) require the competent authority¹, before deciding to give any consent, permission or other authorisation, to undertake an AA of the implications for the conservation objectives of a given European Site, where a project:
- Is likely to have a significant effect on a European Site (either alone or in combination with other plans or projects).
 - Is not directly connected with or necessary to the management of the site.
- 1.2.6 The following designations fall within the definition of a European Site (Natura 2000 site)²:
- Ramsar sites, including potential sites
 - Special Areas of Conservation (SACs), including candidate or possible SACs (cSACs or pSACs)
 - Special Protection Areas (SPAs), including potential SPAs (pSPAs)
 - Sites of Community Importance (SCIs)

1.3 SITES CONSIDERED IN THE ASSESSMENT

- 1.3.1 The sites considered in this assessment are situated beyond the standard radii applied to identify sites for impact assessment. Published guidance (HD44/09) states that HRA should

¹ Note that, for a Development Consent Order application, the competent authority is the relevant Secretary of State.

² As defined in Section 3.6 of the Highways Agency (2009) document.

take account of European designated sites (defined as those making up the European ecological network or Natura 2000 sites) within 2km of a proposed highway scheme or within 30km if bats are one of the qualifying interests. However, it is stated that the 2km boundary should be extended if the scheme lies upstream or downstream of a watercourse designated as a European Site, or if the scheme has the potential to impact on the flightpaths or feeding grounds of birds outside an SPA.

1.3.2 The assessment has therefore been extended to include several coastal European designated sites that are hydrologically connected to the Scheme via watercourses crossed by the A1 (the River Team and its tributaries). There are no European designations within 30km that include bat species as a qualifying feature.

1.3.3 Sites considered in this Report comprise:

- Northumbria Coast SPA
- Northumbria Coast Ramsar
- Durham Coast SAC

1.3.4 The locations of these sites in relation to the Scheme are shown at **Appendix B, Figure 1** of this Report.

1.4 REPORT CONTENT

1.4.1 Matrices in the form of DMRB checklists are presented in **Section 2** of this Report. These contain the following information:

- Description of Scheme
- Description of avoidance and/or mitigation measures (if required)
- Characteristics of European Site(s)
- Assessment Criteria
- Initial Assessment
- Outcome of Screening Stage
- **Appendix A** of this HRA presents Screening Matrices compliant with PINS Advice Note 10.

1.5 LIMITATIONS

1.5.1 No limitations have been identified.

2 HRA SCREENING MATRICES

2.1.1 One table (matrix) has been provided below for each of the following three Natura 2000 sites under consideration in a separate section as detailed below.

- Section 2.2 - Northumbria Coast SPA
- Section 2.3 - Northumbria Coast Ramsar
- Section 2.4 - Durham Coast SAC

2.2 NORTHUMBRIA COAST SPECIAL PROTECTION AREA

Table 2-1 - Northumbria Coast Special Protection Area

Scheme Name: A1 Birtley to Coal House Scheme		Natura 2000 Sites under Consideration: Northumbria Coast SPA
Date: April 2019	Author (Name/Organisation): Sarah Proctor, Associate Ecologist, WSP	Verified (Name/Organisation): Andy Bascombe, Technical Director, WSP
Description of Scheme:		
Size and scale (road type and probable traffic volume)	<p>The Scheme consists of widening the existing carriageway between junction 67 (Coal House) and junction 65 (Birtley) to provide additional lanes and increase capacity. The widening would be mainly online widening, with a short section of realignment (offline) where the A1 crosses the East Coast Main Line (ECML) between junction 67 (Coal House) and Smithy Lane Overbridge. The main areas of land take for the replacement of Allerdene Bridge and southbound verge are located between junction 66 (Eighton Lodge) and junction 65 (Birtley). The existing road width would be maintained north of junction 67 (Coal House).</p> <p>The A1 would also be realigned to facilitate demolition and replacement of the Allerdene Bridge approximately 40m south of the existing structure. The existing bridge would be kept open during construction to allow continuous provision for drivers and would be demolished once traffic has been diverted onto the new alignment.</p> <p>Traffic Flows</p> <p>The current Annual Average Daily Traffic (AADT) flow (based on modelling of 2015) northbound between junction 65 (Birtley) and junction 66 (Eighton Lodge) is 46,103, and 43,769 between</p>	

<p>Scheme Name: A1 Birtley to Coal House Scheme</p>	<p>Natura 2000 Sites under Consideration: Northumbria Coast SPA</p>
	<p>junction 66 (Eighton Lodge) and junction 67 (Coal House). It is anticipated the Scheme will result in an increased AADT flow between these junctions to 57,410 and 56,184 respectively in 2023. On the southbound carriageway, the current AADT flow is 45,951 between junction 65 (Birtley) and junction 66 (Eighton Lodge) and 53,037 between junction 66 (Eighton Lodge) and junction 67 (Coal House). With the Scheme these would increase to 63,549 and 61,641 respectively in 2023.</p>
<p>Land-take</p>	<p>There is no land take required from within the boundary of the European Site. The proposed works are confined to the existing A1 route corridor.</p> <p>Some 3.20 hectares of additional land take is required to the south of the existing Allerdene Bridge to allow for construction of a replacement bridge. This area of land-take is situated c. 15.3km from the European Site.</p> <p>Therefore, no direct impacts upon the European Site are anticipated to result from the destruction of habitat by new works during either the construction or operational stages.</p>
<p>Distance from the European Site or key features of the site (from edge of the Scheme assessment corridor)</p>	<p>The European Site is situated >13km from the Scheme in a straight line and c. 23km from the Scheme via the River Team and River Tyne.</p> <p>Taking into consideration the intervening distance, no impacts on the European Site are anticipated as a result of the Scheme during the construction or operational stages.</p>
<p>Resource requirements (from the European Site or from areas in proximity to the site, where of relevance to consideration of impacts)</p>	<p>Resource requirements for the Scheme are considered to have no potential to impact the European Site. No materials will be taken from or in close proximity to the boundary of the European Site and no space or land-take in proximity to the European Site is required for access, storage or laydown areas.</p> <p>Therefore, no impacts on the European Site are anticipated as a result of resource requirements during the construction or operational stages.</p>

<p>Scheme Name: A1 Birtley to Coal House Scheme</p>	<p>Natura 2000 Sites under Consideration: Northumbria Coast SPA</p>
<p>Emissions (e.g. polluted surface water runoff – both soluble and insoluble pollutants, atmospheric pollution)</p>	<p>Taking into account the direct distance of over 13km between the Scheme and the European Site, no impacts are anticipated on any of the qualifying features of the site as a result of any short-term localised effects on air quality, atmospheric pollution (such as particulate matter or nitrogen deposition), noise or lighting resulting from the works at the construction or operational stages.</p> <p>The Scheme crosses the River Team, which is connected to the European Site via the River Tyne, approximately 23km downstream.</p> <p>The Scheme design includes the installation of oil interceptors at all outfalls and an attenuation pond to prevent release of pollutants and/or contaminants into groundwater or surface water flows.</p> <p>Taking into consideration the intervening distance and the high dilution rate of any pollutants (if any) carried 23km downstream, no impacts to the qualifying features of the European Site are anticipated as a result of polluted surface water runoff during the construction or operational stages.</p> <p>Therefore, no impacts on the European Site or its qualifying features are anticipated as a result of emissions during the construction or operational stages.</p>
<p>Excavation requirements (e.g. impacts of local hydrogeology)</p>	<p>Excavation would be required along either side of the existing A1 carriageway to accommodate lane widening. This would involve existing Highways England land predominantly forming embankments and verges with grassland, scrub and plantation woodland. Drainage management including silt traps would be implemented during construction. Oil interceptors and an attenuation pond have been being incorporated into the Scheme design.</p> <p>As detailed in the Chapter 9 of the ES ‘Geology and Soils’ (Application Document Reference TR010031/APP/6.1), characteristics of the underlying strata and the connectivity to surface</p>

<p>Scheme Name: A1 Birtley to Coal House Scheme</p>	<p>Natura 2000 Sites under Consideration: Northumbria Coast SPA</p>
	<p>and groundwater would limit hydrological or hydrogeological effects. Pre-mitigation effects discussed extend no further than the River Team, as the volumes and nature of the excavations are very unlikely to produce contaminants capable of reaching the European Site 23km downstream at any significant concentrations. The relevant chapter concludes that the proposed works would result in at most a direct, temporary effect on controlled water receptors of minor to negligible significance (not significant) following the implementation of the hydrogeological mitigation measures during construction.</p> <p>No impacts on the European Site are anticipated as a result of excavation requirements during the construction stage. No excavations will be required at the operational stage.</p>
<p>Transportation requirements</p>	<p>Lane closures would be required throughout the construction works. The affected traffic would be diverted suitably (if full closure is required), with advanced information and signing provided to assist motorists. Diversions would not affect roads or transport links in proximity to the European Site.</p> <p>As detailed in the Outline Construction Traffic Management Plan (CTMP) (Application Document Reference: TR010031/APP/7.5) for the Scheme, the increase in traffic volumes would be approximately 250 vehicles per day, and at most 500 per day, over the 11 quarters which the construction phase will span. Given the extant traffic volumes (see 'Size and Scale' Section above), this increase is proportionally very small.</p> <p>Further, the local road layout and position of the European Site mean that diverted traffic and construction traffic are unlikely to re-route or pass the European Site.</p> <p>Therefore, no impacts on the European Site are anticipated as a result of transportation requirements during the construction or operational stages.</p>

<p>Scheme Name: A1 Birtley to Coal House Scheme</p>	<p>Natura 2000 Sites under Consideration: Northumbria Coast SPA</p>
<p>Duration of construction, operation, etc.</p>	<p>The anticipated start date for the works is Winter 2020 and is anticipated to be complete by Winter 2023. Advanced works are anticipated to take place in Spring 2020 to Spring/Summer 2021.</p> <p>Given the absence of any likely impacts on the European Site, the duration of construction and operation of the Scheme is also not anticipated to impact the European Site.</p>
<p>Other.</p>	<p>The following measures which would benefit ecological resources have been incorporated into the Scheme design and delivery:</p> <ul style="list-style-type: none"> ■ All outfalls would be fitted with oil interceptors. ■ An attenuation pond would be provided in the location of the former A1 footprint following realignment for the replacement of Allerdene Bridge. The attenuation pond would capture the water drained from the majority of the catchment (i.e. Eighton Lodge North Bridge to Allerdene Bridge south abutment). This would reduce the rate of the surface water run-off which would have flowed freely ultimately into the River Team. The pond would do this by storing surface water run-off during peak flow (i.e. heavy rainfall) and slowly releasing the water after the peak flow has passed. The attenuation pond would allow sediments and pollutants to settle out and would protect against spillage events reaching Allerdene Culvert or the River Team. The attenuation pond and other storage facilities would be designed with overflow and isolation systems in order to prevent contaminated water drainage systems or watercourses. <p>An Outline Construction Environmental Management Plan (CEMP) (Application Document Reference: TR010031/APP/7.4) has been produced. A full CEMP will be produced detailing measures to manage environmental aspects during construction and to identify best practice for the Scheme This would include detail on; pollution prevention methods, measures to protect surrounding habitat and control of invasive</p>

<p>Scheme Name: A1 Birtley to Coal House Scheme</p>	<p>Natura 2000 Sites under Consideration: Northumbria Coast SPA</p>
	<p>species on site. The CEMP would be communicated to site operatives as part of the induction process prior to the commencement of the works. It is considered in the absence of the measures detailed within the CEMP, the SPA would not be significantly impacted. The CEMP would include the following:</p> <ul style="list-style-type: none"> ■ Since works to extend the culverts on the River Team will be required, an emergency response procedure would be in place as part of the CEMP which would detail measures to be implemented in the event of a spillage. This would include appropriate spill materials being available e.g. booms, to effectively contain any spillage and site operatives being trained in pollution prevention and use of spill kits. ■ Best practice measures would be put in place to prevent pollution from construction plant, vehicles and machinery including refuelling in designated areas, on an impermeable surface, away from drains and watercourses and supervised; plant would be maintained in a good condition with wheel washing in place; plant and equipment maintenance would take place in a designated area away from drains or areas where surface waters may pond. ■ All fuel, oil and chemicals would be stored in a designated secure area, with secondary containment provided. ■ All drains within the likely to be affected by the construction of the Scheme would be identified and labelled and standard pollution prevention measures implemented to prevent polluting substances from entering them. ■ A temporary surface water drainage strategy would be prepared for the construction stage. Further detail will be provided in the CEMP. ■ Concrete wash out would only take place at designated concrete washout areas. ■ Surface water run-off and excavation dewatering would be captured and settled out prior to disposal to sewer as appropriate. Any contaminants would be removed prior to disposal.

<p>Scheme Name: A1 Birtley to Coal House Scheme</p>	<p>Natura 2000 Sites under Consideration: Northumbria Coast SPA</p>
	<ul style="list-style-type: none"> ■ Works on site would follow best management practices to reduce and effectively manage any dust generation affecting local air quality. This would include dampening down any processes that could create excessive dust and storing stockpiles/excavated materials in such a way to minimise silt laden runoff and/or windblown particles (e.g. by covering or seeding). ■ Works on site would follow best management practices to reduce and effectively manage any potential noise generation. ■ Any waste generated as part of the works would be collected and disposed of appropriately in accordance with legal requirements. ■ Appropriate best practice would be followed including EA Pollution Prevention Guidelines (PPGs), which have been withdrawn but still provide good practice advice, in particular, PPG1 'General Guide to the Prevention of Pollution, PPG5 Works and maintenance in or near water, PPG6 Working at Construction and Demolition Sites and PPG21 Pollution Incident Response Planning, Construction Industry Research and Information Association (CIRIA) Control of Water Pollution from Construction Sites and, as well as CIRIA's Environmental Good Practice on Site guidance.
<p>Description of avoidance and/or mitigation measures</p>	
<p>Nature of proposals</p>	<p>No mitigation is required in relation to the European Site.</p>
<p>Location</p>	<p>N/A</p>
<p>Evidence for effectiveness</p>	<p>N/A</p>
<p>Mechanism for delivery (legal conditions, restrictions or other legally enforceable obligations)</p>	<p>N/A</p>

Characteristics of European Site(s)	
Name of European Site and its EU Code	The European Site under consideration is Northumbria Coast SPA (EU Code: UK9006131).
Location and distance of the European Site from the proposed works	<p>The European Site is located on the north-east coast of England at the mouth of the River Tyne. The nearest point of the European Site is located at NZ367688, located c. 13km directly from the Scheme and c. 23km downstream of the Scheme via the River Team and the River Tyne. The site boundary is coincident with that of the Northumbria Coast Ramsar.</p> <p>The River Team currently flows under the Scheme at approximately NZ249585. The location of this crossing point will remain unchanged.</p>
European Site size	1,107.98 hectares
Key features of the European Site including the primary reasons for selection and any other qualifying interests	<p>This site qualifies under Article 4.1 of the Directive (79/409/EEC) by supporting populations of European importance of the following species listed on Annex I of the Directive:</p> <p>During the breeding season:</p> <p>Little Tern <i>Sterna albifrons</i>, 40 pairs representing at least 1.7% of the breeding population in Great Britain (five-year peak mean 1991/2 - 1995/6).</p> <p>Arctic Tern <i>Sterna paradisaea</i>, 1,773 breeding pairs representing at least 3% of the breeding population in Great Britain (five-year peak mean 2013-2017)</p> <p>This site also qualifies under Article 4.2 of the Directive (79/409/EEC) by supporting populations of European importance of the following migratory species:</p> <p>Over winter:</p> <p>Purple Sandpiper <i>Calidris maritima</i>, 763 individuals representing at least 1.5% of the wintering Eastern Atlantic - wintering population (five-year peak mean 1991/2 - 1995/6).</p> <p>Turnstone <i>Arenaria interpres</i>, 1,456 individuals representing at least 2.1% of the wintering Western Palearctic - wintering population (five-year peak mean 1991/2 - 1995/6).</p>

Characteristics of European Site(s)

<p>Vulnerability of the European Site – any information available from the standard data forms on potential effect pathways</p>	<p>The Northumbria Coast Natura 2000 – Standard Data Form:</p> <p>The following ‘threats and pressures’ to the Northumbria Coast designated site are identified and ranked as ‘high’:</p> <p>Outdoor sports and leisure activities, recreational activities (G01), Changes in biotic conditions (M02) Pollution to surface waters (limnic & terrestrial, marine & brackish) (H01) Human induced changes in hydraulic conditions (J02), Other human intrusions and disturbances (G05).</p> <p>Natural England Site Improvement Plan (SIP) for Northumberland Coastal (SIP 157), Version 1.0, 29/04/2015:</p> <p>The Northumberland Coastal SIP covers five Natura 2000 sites including the Northumbria Coast SPA. The plan identifies thirteen priority issues for these sites including public access, water pollution, invasive species, direct impact from third party, transportation and service corridors and air pollution.</p> <p>Of potential relevance to the Scheme is the threat of water pollution. The SIP states: “There is direct evidence of poor water quality at Lindisfarne SPA and Berwickshire & North Northumberland Coast SAC through the presence of increased macroalgae abundance. The Tweed Estuary [at the northern extent, near Berwick-upon-Tweed] may be the source of nutrient enrichment, the possible sources being terrestrial run off from agriculture and domestic sewage. Toxins (heavy metals, metaldehydes) and plastics have been identified as a moderate threat and are potentially a cause for concern”.</p> <p>Run-off from roads or pollution from upstream construction activities are not identified as a specific threat.</p>
<p>European Site conservation objectives – where these are readily available</p>	<p>European Site Conservation Objectives for Northumbria Coast SPA Site Code: UK9006131. Publication date: 29 January 2016 (Version 3).</p> <p>With regard to the SPA and the individual species and/or assemblage of species for which the site has been or may be classified (the ‘Qualifying Features’ including the</p>

Characteristics of European Site(s)

‘Additional Qualifying Features’ listed below), and subject to natural change;

“Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;

The extent and distribution of the habitats of the qualifying features.

The structure and function of the habitats of the qualifying features.

The supporting processes on which the habitats of the qualifying features rely.

The population of each of the qualifying features.

The distribution of the qualifying features within the site”.

Qualifying Features:

- Purple sandpiper (Non-breeding)
- Ruddy turnstone (Non-breeding)
- Little tern (Breeding)
- Arctic Tern (breeding)

This approach has also been agreed upon by Natural England following submission of a Draft HRA Screening Assessment. Their response, received by email on 15 October 2018, confirmed approval of the approach. The finalised HRA Screening Assessment will also be submitted to Natural England to allow them to comment.

Assessment Criteria

The Scheme Footprint is from junction 65 (Birtley) (approximate grid reference NZ281567) to junction 67 (Coal House) (approximate grid reference NZ249585).

The European Site is situated over 13km from the Scheme across land. Therefore, no impacts from noise, lighting, odour, emissions or changes in air quality are anticipated on any of the qualifying features of the site as a result of the Scheme.

The European Site is approximately 23km downstream from the Scheme via the River Team and River Tyne. Given the intervening distance, no impacts on any of the qualifying features of the European Site are anticipated as a result from changes in water quality or potential pollution/contamination incidents.

Upgrade works to the A1 between Scotswood and North Brunton are proposed to commence in March 2020. This section of the A1 crosses a number of minor watercourses including the Ouse Burn which are connected to the River Tyne and subsequently the designated site. At this stage of the scheme it is assumed that no

Characteristics of European Site(s)

works are required on these watercourses (such as culvert widening) therefore no effects in combination with this Scheme are anticipated. A separate Annex C Screening Matrix has been produced for this Scheme which has identified no likely significant effects.

Chapter 15 of the ES 'Cumulative and Combined Assessment' (**Application Document Reference TR010031/APP/6.1**) confirms the absence of likely significant cumulative effects upon the European Site, as well as detailing the methodology used. This conclusion has also been viewed and approved by Natural England through their review of the Draft HRA Screening Assessment.

Initial Assessment

Reduction of habitat area	No Impact. The Scheme does not involve land-take within the European Site. As such, there will be no reduction in habitat area as a consequence of the works.
Disturbance to key species	No Impact. The European Site is situated over 13km from the Scheme, therefore there would be no disturbance to key species arising from human disturbance, noise, lighting, odour or emissions.
Habitat or species fragmentation	No Impact. There will be no change in habitat or species fragmentation due to the proposed works.
Reduction in species density	No Impact. There will be no reduction in species density as a result of the proposed works.
Changes in key indicators or conservation value (water quality etc.)	No Impact. No changes in key indicators of conservation value are anticipated as a result of the proposed works. Taking into consideration the intervening distance and the high dilution rate of any pollutants carried 23km downstream, no impacts to the qualifying features of the European Site are anticipated as a result of polluted surface water runoff. Therefore, no impacts on the European Site or its qualifying features are anticipated as a result of emissions from the Scheme.
Climate change	No Impact. The Scheme is not considered likely to impact climate change.
Describe any likely impacts on the European Site as a whole in terms of:	

Initial Assessment	
Interference with the key relationships that define the structure of the site	Not Applicable. There are no works proposed within the boundaries of the European Site and the Scheme is situated a substantial distance from the nearest European Site.
Interference with key relationships that define the function of the site	
Indicate the significance as a result of the identification of impacts set out above in terms of:	
Reduction of habitat area	Not significant.
Disturbance to key species	Not significant.
Habitat or species fragmentation	Not significant.
Loss	Not significant.
Fragmentation	Not significant.
Disruption	Not significant.
Disturbance	Not significant.
Change to key elements of the site (e.g. water quality, hydrological regime etc.)	Not significant.
Describe from the above those elements of the Scheme, or combination of elements, where the above impacts are likely to be significant or where the scale or magnitude of impacts is not known.	
No significant impacts on the Northumbria Coast SPA are anticipated as a result of the proposed upgrade and improvement works to the A1 between Birtley and Coal House.	
Outcome of screening stage (delete as appropriate)	Not Likely to be Significant Effects
Are the appropriate statutory environmental bodies in agreement with this conclusion (delete as appropriate and attached relevant correspondence)	Natural England were privy to the Draft HRA (which contained the same conclusions of no likely adverse effects upon the European Sites), and confirmed via email in October 2018 that they are in agreement.

2.3 NORTHUMBRIA COAST RAMSAR

Table 2-2 - Northumbria Coast Ramsar

Scheme Name: A1 Birtley to Coal House Scheme		Natura 2000 Sites under Consideration: Northumbria Coast Ramsar
Date: April 2019	Author (Name/Organisation): Sarah Proctor, Associate Ecologist, WSP	Verified (Name/Organisation): Andy Bascombe, Technical Director, WSP
Description of Scheme:		
Size and scale (road type and probable traffic volume)	<p>The Scheme consists of widening the existing carriageway between junction 67 (Coal House) and junction 65 (Birtley) to provide additional lanes and increase capacity. The widening would be mainly online widening, with a short section of realignment (offline) where the A1 crosses the ECML between junction 67 (Coal House) and Smithy Lane Overbridge. The main areas of land take for the replacement of Allerdene Bridge and southbound verge are located between junction 66 (Eighton Lodge) and junction 65 (Birtley). The existing road width would be maintained north of junction 67 (Coal House).</p> <p>The A1 would also be realigned to facilitate demolition and replacement of the Allerdene Bridge approximately 40 metres south of the existing structure. The existing bridge would be kept open during construction to allow continuous provision for drivers and would be demolished once traffic has been diverted onto the new alignment.</p> <p>Traffic Flows</p> <p>The current Annual Average Daily Traffic (AADT) flow (based on modelling of 2015) northbound between junction 65 (Birtley) and junction 66 (Eighton Lodge) is 46,103, and 43,769 between junction 66 (Eighton Lodge) and junction 67 (Coal House). It is anticipated the Scheme will result in an increased AADT flow between these junctions to 57,410 and 56,184 respectively in 2023. On the</p>	

<p>Scheme Name: A1 Birtley to Coal House Scheme</p>	<p>Natura 2000 Sites under Consideration: Northumbria Coast Ramsar</p>
	<p>southbound carriageway, the current AADT flow is 45,951 between junction 65 and 66, and 53,037 between junction 66 (Eighton Lodge) and junction 67 (Coal House). With the Scheme these would increase to 63,549 and 61,641 respectively in 2023.</p>
<p>Land-take</p>	<p>There is no land take required from within the boundary of the European Site. The proposed works are confined to the existing A1 route corridor.</p> <p>Some 3.20 hectares of additional land take is required to the south of the existing Allerdene Bridge to allow for construction of a replacement bridge. This area of land-take is situated c. 15.3km from the European Site.</p> <p>Therefore, no direct impacts upon the European Site are anticipated to result from the destruction of habitat by new works during either the construction or operational stages.</p>
<p>Distance from the European Site or key features of the site (from edge of the Scheme assessment corridor)</p>	<p>The European Site is situated >13km from the Scheme in a straight line and c. 23km from the Scheme via the River Team and River Tyne.</p> <p>Taking into consideration the intervening distance, no impacts on the European Site are anticipated as a result of the Scheme during the construction or operational stages.</p>
<p>Resource requirements (from the European Site or from areas in proximity to the site, where of relevance to consideration of impacts)</p>	<p>Resource requirements for the Scheme are considered to have no potential to impact the European Site. No materials will be taken from or in close proximity to the boundary of the European Site and no space or land-take in proximity to the European Site is required for access, storage or laydown areas.</p> <p>Therefore, no impacts on the European Site are anticipated as a result of resource requirements during the construction or operational stages.</p>
<p>Emissions (e.g. polluted surface water runoff – both soluble and</p>	<p>Taking into account the direct distance of over 13km between the Scheme and the European</p>

<p>Scheme Name: A1 Birtley to Coal House Scheme</p>	<p>Natura 2000 Sites under Consideration: Northumbria Coast Ramsar</p>
<p>insoluble pollutants, atmospheric pollution)</p>	<p>Site, no impacts are anticipated on any of the qualifying features of the site as a result of any short-term localised effects on air quality, atmospheric pollution (such as particulate matter or nitrogen deposition), noise or lighting resulting from the works at the construction or operational stages.</p> <p>The Scheme crosses the River Team, which is connected to the European Site via the River Tyne, approximately 23km downstream.</p> <p>The Scheme design includes the installation of oil interceptors at all outfalls and an attenuation pond to prevent release of pollutants and/or contaminants into groundwater or surface water flows.</p> <p>Taking into consideration the intervening distance and the high dilution rate of any pollutants (if any) carried 23km downstream, no impacts to the qualifying features of the European Site are anticipated as a result of polluted surface water runoff during the construction or operational stages.</p> <p>Therefore, no impacts on the European Site or its qualifying features are anticipated as a result of emissions during the construction or operational stages.</p>
<p>Excavation requirements (e.g. impacts of local hydrogeology)</p>	<p>Excavation would be required along either side of the existing A1 carriageway to accommodate lane widening. This would involve existing Highways England land predominantly forming embankments and verges with grassland, scrub and plantation woodland. Drainage management including silt traps would be implemented during construction. Oil interceptors at all outfalls and an attenuation pond have been incorporated into the Scheme design.</p> <p>As detailed in the Chapter 9 of the ES 'Geology and Soils' (Application Document Reference TR010031/APP/6.1), characteristics of the underlying strata and the connectivity to surface and groundwater would limit hydrological or hydrogeological effects. Pre-mitigation effects</p>

<p>Scheme Name: A1 Birtley to Coal House Scheme</p>	<p>Natura 2000 Sites under Consideration: Northumbria Coast Ramsar</p>
	<p>discussed extend no further than the River Team, as the volumes and nature of the excavations are very unlikely to produce contaminants capable of reaching the European Site 23km downstream at any significant concentrations. The relevant chapter concludes that the proposed works would result in at most a direct, temporary effect on controlled water receptors of minor to negligible significance (not significant) following the implementation of the hydrogeological mitigation measures during construction.</p> <p>No impacts on the European Site are anticipated as a result of excavation requirements during the construction stage. No excavations will be required at the operational stage.</p>
<p>Transportation requirements</p>	<p>Lane closures would be required throughout the construction works. The affected traffic would be diverted suitably (if full closure is required), with advanced information and signing provided to assist motorists. Diversions would not affect roads or transport links in proximity to the European Site.</p> <p>As detailed in the Outline CTMP (Application Document Reference: TR010031/APP/7.5) for the Scheme, the increase in traffic volumes would be approximately 250 vehicles per day, and at most 500 per day, over the 11 quarters which the construction phase will span. Given the extant traffic volumes (see 'Size and Scale' Section above), this increase is proportionally very small.</p> <p>Further, the local road layout and position of the European Site mean that diverted traffic and construction traffic are unlikely to re-route or pass the European Site.</p> <p>Therefore, no impacts on the European Site are anticipated as a result of transportation requirements during the construction or operational stages.</p>
<p>Duration of construction, operation, etc.</p>	<p>The anticipated start date for the works is Winter 2020 and is anticipated to be complete by Winter 2023. Advanced works are anticipated to take place in Spring 2020 to Spring/Summer 2021.</p>

<p>Scheme Name: A1 Birtley to Coal House Scheme</p>	<p>Natura 2000 Sites under Consideration: Northumbria Coast Ramsar</p>
	<p>Taking into consideration the absence of any likely impacts on the European Site, the duration of construction and operation of the Scheme is not anticipated to impact the European Site.</p>
<p>Other</p>	<p>The following measures which would benefit ecological resources have been incorporated into the Scheme design and delivery:</p> <ul style="list-style-type: none"> ■ All outfalls would be fitted with oil interceptors. ■ An attenuation pond would be provided in the location of the former A1 footprint following realignment for the replacement of Allerdene Bridge. The attenuation pond would capture the water drained from the majority of the catchment (i.e. Eighton Lodge North Bridge to Allerdene Bridge south abutment). This would reduce the rate of the surface water run-off which would have flowed freely ultimately into the River Team. The pond would do this by storing surface water run-off during peak flow (i.e. heavy rainfall) and slowly releasing the water after the peak flow has passed. The attenuation pond would allow sediments and pollutants to settle out and would protect against spillage events reaching Allerdene Culvert or the River Team. The attenuation pond and other storage facilities would be designed with overflow and isolation systems in order to prevent contaminated water drainage systems or watercourses. <p>An Outline CEMP has been produced (Application Document Reference: TR010031/APP/7.4). A full CEMP will be produced detailing measures to manage environmental aspects during construction and to identify best practice for the Scheme This would include detail on; pollution prevention methods, measures to protect surrounding habitat and control of invasive species on site. The CEMP would be communicated to site operatives as part of the induction process prior to the commencement of the works. It is considered in the absence of the measures detailed within the CEMP, the SPA</p>

<p>Scheme Name: A1 Birtley to Coal House Scheme</p>	<p>Natura 2000 Sites under Consideration: Northumbria Coast Ramsar</p>
	<p>would not be significantly impacted. The CEMP would include the following:</p> <ul style="list-style-type: none"> ■ Since works to extend the culverts on the River Team will be required, an emergency response procedure would be in place as part of the CEMP which would detail measures to be implemented in the event of a spillage. This would include appropriate spill materials being available e.g. booms, to effectively contain any spillage and site operatives being trained in pollution prevention and use of spill kits. ■ Best practice measures would be put in place to prevent pollution from construction plant, vehicles and machinery including refuelling in designated areas, on an impermeable surface, away from drains and watercourses and supervised; plant would be maintained in a good condition with wheel washing in place; plant and equipment maintenance would take place in a designated area away from drains or areas where surface waters may pond. ■ All fuel, oil and chemicals would be stored in a designated secure area, with secondary containment provided. ■ All drains within the likely to be affected by the construction of the Scheme would be identified and labelled and standard pollution prevention measures implemented to prevent polluting substances from entering them. ■ A temporary surface water drainage strategy would be prepared for the construction stage. Further detail will be provided in the CEMP. ■ Concrete wash out would only take place at designated concrete washout areas. ■ Surface water run-off and excavation dewatering would be captured and settled out prior to disposal to sewer as appropriate. Any contaminants would be removed prior to disposal. ■ Works on site would follow best management practices to reduce and effectively manage any dust generation affecting local air quality. This would include dampening down any processes that could create excessive dust and storing

<p>Scheme Name: A1 Birtley to Coal House Scheme</p>	<p>Natura 2000 Sites under Consideration: Northumbria Coast Ramsar</p>
	<p>stockpiles/excavated materials in such a way to minimise silt laden runoff and/or windblown particles (e.g. by covering or seeding).</p> <ul style="list-style-type: none"> ■ Works on site would follow best management practices to reduce and effectively manage any potential noise generation. ■ Any waste generated as part of the works would be collected and disposed of appropriately in accordance with “legal requirements”. ■ Appropriate best practice would be followed including EA Pollution Prevention Guidelines (PPGs), which have been withdrawn but still provide good practice advice, in particular, PPG1 ‘General Guide to the Prevention of Pollution, PPG5 Works and maintenance in or near water, PPG6 Working at Construction and Demolition Sites and PPG21 Pollution Incident Response Planning, Construction Industry Research and Information Association (CIRIA) Control of Water Pollution from Construction Sites and, as well as CIRIA’s Environmental Good Practice on Site guidance.

Description of avoidance and/or mitigation measures

<p>Nature of proposals</p>	<p>No mitigation is required in relation to the European Site.</p>
<p>Location</p>	<p>N/A</p>
<p>Evidence for effectiveness</p>	<p>N/A</p>
<p>Mechanism for delivery (legal conditions, restrictions or other legally enforceable obligations)</p>	<p>N/A</p>

Characteristics of European Site(s)

<p>Name of European Site and its EU Code</p>	<p>The European Site under consideration is Northumbria Coast Ramsar wetland (EU code UK11049).</p>
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Characteristics of European Site(s)	
Location and distance of the European Site from the proposed works	<p>The European Site is located on the north-east coast of England at the mouth of the River Tyne. The nearest point of the European Site is located at NZ367688, located c. 13km directly from the Scheme and c. 23km downstream of the Scheme via the River Team and the River Tyne. The site boundary is coincident with that of the Northumbria Coast SPA.</p> <p>The River Team currently flows under the Scheme at approximately NZ249585. The location of this crossing point will remain unchanged.</p>
European Site size	1,107.98 hectares
Key features of the European Site including the primary reasons for selection and any other qualifying interests	<p>Ramsar criterion 6 – species/populations occurring at levels of international importance.</p> <p>Qualifying Species/populations (as identified at designation):</p> <p>Species regularly supported during the breeding season:</p> <p>Little tern, W Europe 43 apparently occupied nests, representing an average of 2.2% of the GB population (Seabird 2000 Census).</p> <p>Species with peak counts in winter:</p> <p>Purple sandpiper, E Atlantic – wintering 291 individuals, representing an average of 1.6% of the GB population (five year peak mean 1998/9-2002/3) Ruddy turnstone, NE Canada, Greenland/W Europe & NW Africa 978 individuals, representing an average of 1% of the population (5 year peak mean 1998/9-2002/3).</p>
Vulnerability of the European Site – any information available from the standard data forms on potential effect pathways	<p>The Northumbria Coast Natura 2000 – Standard Data Form:</p> <p>The following ‘threats and pressures’ to the Northumbria Coast designated site are identified and ranked as ‘high’:</p> <p>Outdoor sports and leisure activities, recreational activities (G01), Changes in biotic conditions (M02) Pollution to surface waters (limnic & terrestrial, marine & brackish) (H01) Human induced changes in hydraulic conditions (J02), Other human intrusions and disturbances (G05).</p> <p>Natural England Site Improvement Plan (SIP) for Northumberland Coastal (SIP 157), Version 1.0, 29/04/2015:</p>

Characteristics of European Site(s)

	<p>The Northumberland Coastal SIP covers five Natura 2000 sites including the Northumbria Coast SPA. As the Ramsar site is designated due to presence of the same species as the SPA it is considered that the threats and pressures applicable to the SPA are also applicable to the Ramsar site.</p> <p>The plan identifies thirteen priority issues for these sites including public access, water pollution, invasive species, direct impact from third party, transportation and service corridors and air pollution.</p> <p>Of potential relevance to the Scheme is the threat of water pollution. The SIP states: “There is direct evidence of poor water quality at Lindisfarne SPA and Berwickshire & North Northumberland Coast SAC through the presence of increased macroalgae abundance. The Tweed Estuary [at the northern extent, near Berwick-upon-Tweed] may be the source of nutrient enrichment, the possible sources being terrestrial run off from agriculture and domestic sewage. Toxins (heavy metals, metaldehydes) and plastics have been identified as a moderate threat and are potentially a cause for concern”.</p> <p>Run-off from roads or pollution from upstream construction activities are not identified as a specific threat.</p>
<p>European Site conservation objectives – where these are readily available</p>	<p>Information on European Site conservation objectives are not published for the Ramsar site. However as this covers the same geographical area; it is considered that the objectives for the SPA (detailed below) are also applicable to the Ramsar site.</p> <p>European Site Conservation Objectives for Northumbria Coast SPA Site Code: UK9006131. Publication date: 29 January 2016 (Version 3).</p> <p>With regard to the SPA and the individual species and/or assemblage of species for which the site has been or may be classified (the ‘Qualifying Features’ including the ‘Additional Qualifying Features’ listed below), and subject to natural change;</p> <p>“Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;</p>

Characteristics of European Site(s)

	<p>The extent and distribution of the habitats of the qualifying features.</p> <p>The structure and function of the habitats of the qualifying features.</p> <p>The supporting processes on which the habitats of the qualifying features rely.</p> <p>The population of each of the qualifying features.</p> <p>The distribution of the qualifying features within the site”.</p> <p>Qualifying Features:</p> <ul style="list-style-type: none"> ■ Purple sandpiper (Non-breeding) ■ Ruddy turnstone (Non-breeding) ■ Little tern (Breeding) ■ Arctic Tern (breeding) <p>This approach has also been agreed upon by Natural England following submission of a Draft HRA Screening Assessment. Their response, received by email on 15 October 2018, confirmed approval of the approach. The finalised HRA Screening Assessment will also be submitted to Natural England to allow them to comment.</p>
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Assessment Criteria

The Scheme Footprint is from junction 65 (Birtley) (approximate grid reference NZ281567) to junction 67 (Coal House) (approximate grid reference NZ249585).

The European Site is situated over 13km north-east from the Scheme. Therefore, no impacts from noise, lighting, odour, emissions or changes in air quality are anticipated on any of the qualifying features of the site as a result of the Scheme.

The European Site is approximately 23km downstream from the Scheme via the River Team and River Tyne. Given the intervening distance, no impacts on any of the qualifying features of the European Site are anticipated as a result from changes in water quality or potential pollution/contamination incidents.

Upgrade works to the A1 between Scotswood and North Brunton are proposed to commence in March 2020. This section of the A1 crosses a number of minor watercourses including the Ouse Burn which are connected to the River Tyne and subsequently the designated site. At this stage of the scheme it is assumed that no works are required on these watercourses (such as culvert widening) therefore no effects in combination with this Scheme are anticipated. A separate Annex C Screening Matrix has been produced for this Scheme which has identified no likely significant effects.

Chapter 15 of the ES ‘Cumulative and Combined Assessment’ confirms the absence of likely significant cumulative effects upon the European Site, as well as detailing the

Characteristics of European Site(s)

methodology used. This conclusion has also been viewed and approved by Natural England through their review of the Draft HRA Screening Assessment.

Initial Assessment

Reduction of habitat area	No Impact. The Scheme does not involve land-take within the European Site. As such, there will be no reduction in habitat area as a consequence of the works.
Disturbance to key species	No Impact. The European Site is situated over 13km from the Scheme, therefore there would be no disturbance to key species arising from human disturbance, noise, lighting, odour or emissions.
Habitat or species fragmentation	No Impact. There will be no change in habitat or species fragmentation due to the proposed works.
Reduction in species density	No Impact. There will be no reduction in species density as a result of the proposed works.
Changes in key indicators or conservation value (water quality etc.)	No Impact. No changes in key indicators of conservation value are anticipated as a result of the proposed works. Taking into consideration the intervening distance and the high dilution rate of any pollutants carried 23km downstream, no impacts to the qualifying features of the European Site are anticipated as a result of polluted surface water runoff. Therefore, no impacts on the European Site or its qualifying features are anticipated as a result of emissions from the Scheme.
Climate change	No Impact. The Scheme is not considered likely to impact climate change.
Describe any likely impacts on the European Site as a whole in terms of:	
Interference with the key relationships that define the structure of the site	Not Applicable. There are no works proposed within the boundaries of the European Site and the Scheme is situated a substantial distance from the nearest European Site.
Interference with key relationships that define the function of the site	

Initial Assessment

Indicate the significance as a result of the identification of impacts set out above in terms of:

Reduction of habitat area	Not significant.
Disturbance to key species	Not significant.
Habitat or species fragmentation	Not significant.
Loss	Not significant.
Fragmentation	Not significant.
Disruption	Not significant.
Disturbance	Not significant.
Change to key elements of the site (e.g. water quality, hydrological regime etc.)	Not significant.

Describe from the above those elements of the Scheme, or combination of elements, where the above impacts are likely to be significant or where the scale or magnitude of impacts is not known.

No significant impacts on the Northumbria Coast Ramsar wetland site are anticipated as a result of the proposed upgrade and improvement works to the A1 between Birtley and Coal House.

Outcome of screening stage (delete as appropriate)	Not Likely to be Significant Effects
Are the appropriate statutory environmental bodies in agreement with this conclusion (delete as appropriate and attached relevant correspondence)	Natural England were privy to the Draft HRA (which contained the same conclusions of no likely adverse effects upon the European Sites), and confirmed via email in October 2018 that they are in agreement.

2.4 DURHAM COAST SPECIAL AREA OF CONSERVATION

Table 2-3 - Durham Coast Special Area of Conservation

Scheme Name: A1 Birtley to Coal House Scheme		Natura 2000 Sites under Consideration: Durham Coast SAC
Date: April 2019	Author (Name/Organisation): Sarah Proctor, Associate Ecologist, WSP	Verified (Name/Organisation): Andy Bascombe, Technical Director, WSP
Description of Scheme:		
Size and scale (road type and probable traffic volume)	<p>The Scheme consists of widening the existing carriageway between junction 67 (Coal House) and junction 65 (Birtley) to provide additional lanes and increase capacity. The widening would be mainly online widening, with a short section of realignment (offline) where the A1 crosses the ECML between junction 67 (Coal House) and Smithy Lane Overbridge. The main areas of land take for the replacement of Allerdene Bridge and southbound verge are located between junction 66 (Eighton Lodge) and junction 65 (Birtley). The existing road width would be maintained north of junction 67 (Coal House).</p> <p>The A1 would also be realigned to facilitate demolition and replacement of the Allerdene Bridge approximately 40 metres south of the existing structure. The existing bridge would be kept open during construction to allow continuous provision for drivers and would be demolished once traffic has been diverted onto the new alignment.</p> <p>Traffic Flows</p> <p>The current Annual Average Daily Traffic (AADT) flow (based on modelling of 2015) northbound between junction 65 (Birtley) and junction 66 (Eighton Lodge) is 46,103, and 43,769 between junction 66 and 67. It is anticipated the Scheme will result in an increased AADT flow between these junctions to 57,410 and 56,184 respectively in 2023. On the southbound carriageway, the current AADT flow is 45,951 junction 65 (Birtley) and junction 66 (Eighton Lodge), and 53,037 between junction 66 (Eighton Lodge) and 67 (Coal</p>	

Scheme Name: A1 Birtley to Coal House Scheme	Natura 2000 Sites under Consideration: Durham Coast SAC
	House). With the Scheme these would increase to 63,549 and 61,641 respectively in 2023.
Land-take	<p>There is no land take required from within the boundary of the European Site. The proposed works are confined to the existing A1 route corridor.</p> <p>Some 3.20 hectares of additional land take is required to the south of the existing Allerdene Bridge to allow for construction of a replacement bridge. This area of land-take is situated c. 15.3km from the European Site.</p> <p>Therefore, no direct impacts upon the European Site are anticipated to result from the destruction of habitat by new works during either the construction or operational stages.</p>
Distance from the European Site or key features of the site (from edge of the Scheme assessment corridor)	<p>The European Site is situated >12km north-east from the Scheme and c. 25km from the Scheme via the River Team and River Tyne.</p> <p>Taking into consideration the intervening distance, no impacts on the European Site are anticipated as a result of the Scheme during the construction or operational stages.</p>
Resource requirements (from the European Site or from areas in proximity to the site, where of relevance to consideration of impacts)	<p>Resource requirements for the Scheme are considered to have no potential to impact the European Site. No materials will be taken from or in close proximity to the boundary of the European Site and no space or land-take in proximity to the European Site is required for access, storage or laydown areas.</p> <p>Therefore, no impacts on the European Site are anticipated as a result of resource requirements during the construction or operational stages.</p>
Emissions (e.g. polluted surface water runoff – both soluble and insoluble pollutants, atmospheric pollution)	Taking into account the direct distance of over 12km between the Scheme and the European Site, no impacts are anticipated on any of the qualifying features of the site as a result of any short-term localised effects on air quality, atmospheric pollution (such as particulate matter

<p>Scheme Name: A1 Birtley to Coal House Scheme</p>	<p>Natura 2000 Sites under Consideration: Durham Coast SAC</p>
	<p>or nitrogen deposition), noise or lighting resulting from the works at the construction or operational stages.</p> <p>The Scheme crosses the River Team, which is connected to the European Site via the River Tyne, approximately 25km downstream.</p> <p>The Scheme design includes the installation of oil interceptors at all outfalls and an attenuation pond to prevent release of pollutants and/or contaminants into groundwater or surface water flows.</p> <p>Taking into consideration the intervening distance and the high dilution rate of any pollutants (if any) carried 25km downstream, no impacts to the qualifying features of the European Site are anticipated as a result of polluted surface water runoff during the construction or operational stages.</p> <p>Therefore, no impacts on the European Site or its qualifying features are anticipated as a result of emissions during the construction or operational stages.</p>
<p>Excavation requirements (e.g. impacts of local hydrogeology)</p>	<p>Excavation would be required along either side of the existing A1 carriageway to accommodate lane widening. This would involve existing Highways England land predominantly forming embankments and verges with grassland, scrub and plantation woodland. Drainage management including silt traps would be implemented during construction. Oil interceptors and an attenuation pond have been incorporated into the approved Scheme design.</p> <p>As detailed in the Chapter 9 of the ES 'Geology and Soils' (Application Document Reference TR010031/APP/6.1), characteristics of the underlying strata and the connectivity to surface and groundwater would limit hydrological or hydrogeological effects. Pre-mitigation effects discussed extend no further than the River Team, as the volumes and nature of the excavations are very unlikely to produce contaminants capable of reaching the European Site 25km downstream at</p>

<p>Scheme Name: A1 Birtley to Coal House Scheme</p>	<p>Natura 2000 Sites under Consideration: Durham Coast SAC</p>
	<p>any significant concentrations. The relevant chapter concludes that the proposed works would result in at most a direct, temporary effect on controlled water receptors of minor to negligible significance (not significant) following the implementation of the hydrogeological mitigation measures during construction.</p> <p>No impacts on the European Site are anticipated as a result of excavation requirements during the construction stage. No excavations will be required at the operational stage.</p>
<p>Transportation requirements</p>	<p>Lane closures would be required throughout the construction works. The affected traffic would be diverted suitably (if full closure is required), with advanced information and signing provided to assist motorists. Diversions would not affect roads or transport links in proximity to the European Site.</p> <p>As detailed in the Outline CTMP (Application Document Reference: TR010031/APP/7.5) for the Scheme, the increase in traffic volumes would be approximately 250 vehicles per day, and at most 500 per day, over the 11 quarters which the construction phase will span. Given the extant traffic volumes (see 'Size and Scale' Section above), this increase is proportionally very small.</p> <p>Further, the local road layout and position of the European Site mean that diverted traffic and construction traffic are unlikely to re-route or pass the European Site.</p> <p>Therefore, no impacts on the European Site are anticipated as a result of transportation requirements during the construction or operational stages.</p>
<p>Duration of construction, operation, etc.</p>	<p>The anticipated start date for the works is Winter 2020 and is anticipated to be complete by Winter 2023. Advanced works are anticipated to take place in Spring 2020 to Spring/Summer 2021.</p> <p>Taking into consideration the absence of any likely impacts on the European Site, the duration of construction and operation of the Scheme is not anticipated to impact the European Site.</p>

<p>Scheme Name: A1 Birtley to Coal House Scheme</p>	<p>Natura 2000 Sites under Consideration: Durham Coast SAC</p>
<p>Other</p>	<p>The following measures which would benefit ecological resources have been incorporated into the Scheme design and delivery:</p> <ul style="list-style-type: none"> ■ All outfalls would be fitted with oil interceptors. ■ An attenuation pond would be provided in the location of the former A1 footprint following realignment for the replacement of Allerdene Bridge. The attenuation pond would capture the water drained from the majority of the catchment (i.e. Eighton Lodge North Bridge to Allerdene Bridge south abutment). This would reduce the rate of the surface water run-off which would have flowed freely ultimately into the River Team. The pond would do this by storing surface water run-off during peak flow (i.e. heavy rainfall) and slowly releasing the water after the peak flow has passed. The attenuation pond would allow sediments and pollutants to settle out and would protect against spillage events reaching Allerdene Culvert or the River Team. The attenuation pond and other storage facilities would be designed with overflow and isolation systems in order to prevent contaminated water drainage systems or watercourses. <p>An Outline CEMP (Application Document Reference: TR010031/APP/7.4) has been produced. A full CEMP will be produced detailing measures to manage environmental aspects during construction and to identify best practice for the Scheme This would include detail on; pollution prevention methods, measures to protect surrounding habitat, control of invasive species on site. The CEMP would be communicated to site operatives as part of the induction process prior to the commencement of the works. It is considered in the absence of the measures detailed within the CEMP, the SPA would not be significantly impacted. The CEMP would include the following:</p> <ul style="list-style-type: none"> ■ Since works to extend the culverts on the River Team will be required, an emergency response procedure would be in place as part of the CEMP which would detail measures to be

<p>Scheme Name: A1 Birtley to Coal House Scheme</p>	<p>Natura 2000 Sites under Consideration: Durham Coast SAC</p>
	<p>implemented in the event of a spillage. This would include appropriate spill materials being available e.g. booms, to effectively contain any spillage and site operatives being trained in pollution prevention and use of spill kits.</p> <ul style="list-style-type: none"> ■ Best practice measures would be put in place to prevent pollution from construction plant, vehicles and machinery including refuelling in designated areas, on an impermeable surface, away from drains and watercourses and supervised; plant would be maintained in a good condition with wheel washing in place; plant and equipment maintenance would take place in a designated area away from drains or areas where surface waters may pond. ■ All fuel, oil and chemicals would be stored in a designated secure area, with secondary containment provided. ■ All drains within the likely to be affected by the construction of the Scheme would be identified and labelled and standard pollution prevention measures implemented to prevent polluting substances from entering them. ■ A temporary surface water drainage strategy would be prepared for the construction stage. Further detail will be provided in the CEMP. ■ Concrete wash out would only take place at designated concrete washout areas. ■ Surface water run-off and excavation dewatering would be captured and settled out prior to disposal to sewer as appropriate. Any contaminants would be removed prior to disposal. ■ Works on site would follow best management practices to reduce and effectively manage any dust generation affecting local air quality. This would include dampening down any processes that could create excessive dust and storing stockpiles/excavated materials in such a way to minimise silt laden runoff and/or windblown particles (e.g. by covering or seeding). ■ Works on site would follow best management practices to reduce and effectively manage any potential noise generation.

Scheme Name: A1 Birtley to Coal House Scheme	Natura 2000 Sites under Consideration: Durham Coast SAC
	<ul style="list-style-type: none"> ■ Any waste generated as part of the works would be collected and disposed of appropriately in accordance with the relevant waste legislation. ■ Appropriate best practice would be followed including EA Pollution Prevention Guidelines (PPGs), which have been withdrawn but still provide good practice advice, in particular, PPG1 'General Guide to the Prevention of Pollution, PPG5 Works and maintenance in or near water, PPG6 Working at Construction and Demolition Sites and PPG21 Pollution Incident Response Planning, CIRIA Control of Water Pollution from Construction Sites and, as well as CIRIA's Environmental Good Practice on Site guidance.

Description of avoidance and/or mitigation measures

Nature of proposals	No mitigation is required in relation to the European Site.
Location	N/A
Evidence for effectiveness	N/A
Mechanism for delivery (legal conditions, restrictions or other legally enforceable obligations)	N/A

Characteristics of European Site(s)

Name of European Site and its EU Code	The European Site under consideration is Durham Coast SAC (EU code UK0030140).
Location and distance of the European Site from the proposed works	The European Site is located on the north-east coast of England approximately 2km south of the mouth of the River Tyne. The nearest point of the European Site is located at NZ838664, located c. 12km directly from the Scheme and c. 25km downstream of the Scheme via the River Team and the River Tyne.

Characteristics of European Site(s)	
	The River Team currently flows under the Scheme at approximately NZ249585. The location of this crossing point will remain unchanged.
European Site size	389.61 hectares
Key features of the European Site including the primary reasons for selection and any other qualifying interests	<p>Annex I habitats that are a primary reason for selection of this site:</p> <p>Vegetated sea cliffs of the Atlantic and Baltic Coasts</p> <p>The Durham Coast is the only example of vegetated sea cliffs on magnesian limestone exposures in the UK. These cliffs extend along the North Sea coast for over 20km from South Shields southwards to Blackhall Rocks. Their vegetation is unique in the British Isles and consists of a complex mosaic of paramaritime, mesotrophic and calcicolous grasslands, tall-herb fen, seepage flushes and wind-pruned scrub. Within these habitats rare species of contrasting phytogeographic distributions often grow together forming unusual and species-rich communities of high scientific interest. The communities present on the sea cliffs are largely maintained by natural processes including exposure to sea spray, erosion and slippage of the soft magnesian limestone bedrock and overlying glacial drifts, as well as localised flushing by calcareous water.</p>
Vulnerability of the European Site – any information available from the standard data forms on potential effect pathways	<p>The Durham Coast Natura 2000 – Standard Data Form:</p> <p>The following ‘threats and pressures’ to the Durham Coast designated site are identified and ranked as ‘high’:</p> <p>Human induced changes in hydraulic conditions (J02), Invasive non-native species (I01), Other human intrusions and disturbances (G05), Abiotic (slow) natural processes (K01), Fertilisation (A08), Forest and Plantation management & use (B02), Modification of cultivation practices (A02), Improved access to site (D05), and Mowing/cutting of grassland (A03).</p> <p>Run-off from roads or pollution from upstream construction activities are not identified as a specific threat.</p>
European Site conservation objectives – where these are readily available	European Site Conservation Objectives for Durham Coast SAC (UK0030140). Publication date: 27 November 2018, and supplementary advice dated 21 January 2019.

Characteristics of European Site(s)

With regard to the SAC and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features' listed below), and subject to natural change;

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

The extent and distribution of qualifying natural habitats,

The structure and function (including typical species) of qualifying natural habitats, and

The supporting processes on which the qualifying natural habitats rely.

Qualifying Features:

Vegetated sea cliffs of the Atlantic and Baltic coasts

The supplementary advice provides more detailed site-specific information in relation to the ecological features present and their specific vulnerabilities as listed above.

Although Durham Coast SAC was not included within the Draft HRA submitted to Natural England the effect pathways are considered similar and it has been assessed using the same approach and method as Northumbria Coast SPA and Ramsar.

Assessment Criteria

The Scheme Footprint is from junction 65 (Birtley) (approximate grid reference NZ281567) to junction 67 (Coal House) (approximate grid reference NZ249585).

The European Site is situated over 12km north-east from the Scheme. Therefore, no impacts from noise, lighting, odour, emissions or changes in air quality are anticipated on any of the qualifying features of the site as a result of the Scheme.

The European Site is approximately 25km downstream from the Scheme via the River Team and River Tyne. Given the intervening distance, no impacts on any of the qualifying features of the European Site are anticipated as a result from changes in water quality or potential pollution/contamination incidents.

Upgrade works to the A1 between Scotswood and North Brunton are proposed to commence in March 2020. This section of the A1 crosses a number of minor

Characteristics of European Site(s)

watercourses including the Ouse Burn which are connected to the River Tyne and subsequently the designated site. At this stage of the scheme it is assumed that no works are required on these watercourses (such as culvert widening) therefore no effects in combination with this Scheme are anticipated. A separate Annex C Screening Matrix has been produced for this Scheme which has identified no likely significant effects.

Chapter 15 of the ES 'Cumulative and Combined Assessment' (**Application Document Reference TR010031/APP/6.1**) confirms the absence of likely significant cumulative effects upon the European Site, as well as detailing the methodology used. This conclusion has also been viewed and approved by Natural England through their review of the Draft HRA Screening Assessment.

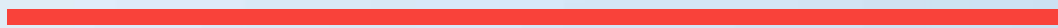
Initial Assessment

Reduction of habitat area	No Impact. The Scheme does not involve land-take within the European Site. As such, there will be no reduction in habitat area as a consequence of the works.
Disturbance to key species	No Impact. The European Site is situated over 12km from the Scheme, therefore there would be no disturbance to key species arising from human disturbance, noise, lighting, odour or emissions.
Habitat or species fragmentation	No Impact. There will be no change in habitat or species fragmentation due to the proposed works.
Reduction in species density	No Impact. There will be no reduction in species density as a result of the proposed works.
Changes in key indicators or conservation value (water quality etc.)	No Impact. No changes in key indicators of conservation value are anticipated as a result of the proposed works. Taking into consideration the intervening distance and the high dilution rate of any pollutants carried 25km downstream, no impacts to the qualifying features of the European Site are anticipated as a result of polluted surface water runoff. Therefore, no impacts on the European Site or its qualifying features are anticipated as a result of emissions from the Scheme.
Climate change	No Impact.

Initial Assessment	
	The Scheme is not considered likely to impact climate change.
Describe any likely impacts on the European Site as a whole in terms of:	
Interference with the key relationships that define the structure of the site	Not Applicable. There are no works proposed within the boundaries of the European Site and the Scheme is situated a substantial distance from the nearest European Site.
Interference with key relationships that define the function of the site	
Indicate the significance as a result of the identification of impacts set out above in terms of:	
Reduction of habitat area	Not significant.
Disturbance to key species	Not significant.
Habitat or species fragmentation	Not significant.
Loss	Not significant.
Fragmentation	Not significant.
Disruption	Not significant.
Disturbance	Not significant.
Change to key elements of the site (e.g. water quality, hydrological regime etc.)	Not significant.
Describe from the above those elements of the Scheme, or combination of elements, where the above impacts are likely to be significant or where the scale or magnitude of impacts is not known.	
No significant impacts on the Durham Coast SAC are anticipated as a result of the proposed upgrade and improvement works to the A1 between Birtley and Coal House.	
Outcome of screening stage (delete as appropriate)	Not Likely to be Significant Effects
Are the appropriate statutory environmental bodies in agreement with this conclusion (delete as appropriate and attached relevant correspondence)	This SAC was not included in the initial screening opinion asked of Natural England because it was added to the HRA subsequently for completeness.

Appendix A

PINS SCREENING MATRICES



PINS SCREENING MATRICES

POTENTIAL EFFECTS

The assessment of potential effects is presented in the form of assessment matrices in accordance with the Planning Inspectorate's Advice Note 10 – 'Habitat Regulations Assessment relevant to NSIPs.

Potential effects upon the European Sites which are considered within the assessment matrices are listed in **Table C-4** below:

Table C-4 Effects considered within the screening matrices for each European Site

Designation	Effects Described in Submission Information	Presented in Screening Matrices as
Northumbria Coast SPA UK9006131	Habitat loss	Habitat loss
	Displacement from noise Displacement from lighting, odour or emissions Displacement from visual disturbance	Displacement
	Waterborne pollution	Pollution
Northumbria Coast Ramsar UK11049	Habitat loss	Habitat loss
	Displacement from noise Displacement from lighting, odour or emissions Displacement from visual disturbance	Displacement
	Waterborne pollution	Pollution
Durham Coast SAC UK0030140	Habitat loss	Habitat loss
	Displacement from noise Displacement from lighting, odour or emissions Displacement from visual disturbance	Displacement
	Waterborne pollution	Pollution

SCREENING MATRICES

The European sites included within the screening assessment are:

- Northumbria Coast SPA
 - Northumbria Coast Ramsar
-

■ Durham Coast SAC

Matrix Key:

✓ = Likely significant effect cannot be excluded

✗ = Likely significant effect can be excluded

C = Construction

O = Operation

D = Decommissioning

Table A-5 - HRA screening matrix: Northumbria Coast SPA

Name of European site and designation: Northumbria Coast SPA												
EU Code: UK9006131												
Distance to NSIP: >13km to the Scheme in a straight line and c. 23km to the Scheme via the River Team and River Tyne.												
European site features	Likely effects of NSIP											
<i>Effect</i>	<i>Habitat Loss</i>			<i>Displacement</i>			<i>Pollution</i>			<i>In combination effects</i>		
<i>Stage of Development</i>	<i>C</i>	<i>O</i>	<i>D</i>	<i>C</i>	<i>O</i>	<i>D</i>	<i>C</i>	<i>O</i>	<i>D</i>	<i>C</i>	<i>O</i>	<i>D</i>
Annex I species present during the breeding season:												
Little Tern <i>Sterna albifrons</i> , 40 pairs representing at least 1.7% of the breeding population in Great Britain (five year peak mean 1991/2 - 1995/6).	x ^a	x ^b	x ^c	x ^d	x ^e	x ^f	x ^g	x ^h	x ⁱ	x ^j	x ^k	x ^l
Arctic Tern <i>Sterna paradisaea</i> , 1,773 breeding pairs representing at least 3% of the breeding population in Great Britain (five year peak mean 2013-2017).	x ^a	x ^b	x ^c	x ^d	x ^e	x ^f	x ^g	x ^h	x ⁱ	x ^j	x ^k	x ^l
Migratory species present over winter:												

Name of European site and designation: Northumbria Coast SPA												
EU Code: UK9006131												
Distance to NSIP: >13km to the Scheme in a straight line and c. 23km to the Scheme via the River Team and River Tyne.												
European site features	Likely effects of NSIP											
Effect	Habitat Loss			Displacement			Pollution			In combination effects		
<i>Stage of Development</i>	<i>C</i>	<i>O</i>	<i>D</i>	<i>C</i>	<i>O</i>	<i>D</i>	<i>C</i>	<i>O</i>	<i>D</i>	<i>C</i>	<i>O</i>	<i>D</i>
Purple Sandpiper <i>Calidris maritima</i> , 763 individuals representing at least 1.5% of the wintering Eastern Atlantic - wintering population (five year peak mean 1991/2 - 1995/6).	✗ ^a	✗ ^b	✗ ^c	✗ ^d	✗ ^e	✗ ^f	✗ ^g	✗ ^h	✗ ⁱ	✗ ^j	✗ ^k	✗ ^l
Turnstone <i>Arenaria interpres</i> , 1,456 individuals representing at least 2.1% of the wintering Western Palearctic - wintering population (five year peak mean 1991/2 - 1995/6).	✗ ^a	✗ ^b	✗ ^c	✗ ^d	✗ ^e	✗ ^f	✗ ^g	✗ ^h	✗ ⁱ	✗ ^j	✗ ^k	✗ ^l

Evidence:

^a Construction activities, including routes for movement of construction vehicles, would not occur within the European Site. No habitats within the European Site would be lost as a result of construction activities.

- ^b Operation of the Scheme does not require land take from the European Site. No habitat loss from within the European Site would occur as a result of operational activities.
- ^c Although details of decommissioning methods cannot be made at this stage, it is not considered necessary that decommissioning would require land from the European Site. Decommissioning of the Scheme would therefore not give rise to any loss of habitats from the European Site.
- ^d The European Site is situated over 13km from the Scheme, therefore there would be no disturbance to key species arising from human disturbance, noise, lighting, odour or emissions during construction of the Scheme.
- ^e The European Site is situated over 13km from the Scheme, therefore there would be no disturbance to key species arising from human disturbance, noise, lighting, odour or emissions during operation of the Scheme.
- ^f The European Site is situated over 13km from the Scheme, therefore there would be no disturbance to key species arising from human disturbance, noise, lighting, odour or emissions during decommissioning.
- ^g Although the European Site is linked to the Scheme hydrologically via the River Team and River Tyne, this hydrological link is around 23km in length. Over this distance any effects arising from water pollution caused by the Scheme would have no discernable impact. There is therefore no functional pollution pathway from the Scheme to the European Site. Notwithstanding this, best practice measures will be implemented within the CEMP to reduce any risk of pollution incidents, contamination of watercourses or increase in suspended sediment occurring during construction of the Scheme.
- ^h Although the European Site is linked to the Scheme hydrologically via the River Team and River Tyne, this hydrological link is around 23km in length. Over this distance any effects arising from water pollution caused by the Scheme would have no discernable impact. There is therefore no functional pollution pathway from the Scheme to the European Site. Notwithstanding this, best practice measures will be implemented within the CEMP to reduce any risk of pollution incidents, contamination of watercourses or increase in suspended sediment occurring during operation of the Scheme.
- ⁱ Although the European Site is linked to the Scheme hydrologically via the River Team and River Tyne, this hydrological link is around 23km in length. Over this distance any effects arising from water pollution caused by the Scheme would have no discernable impact. There is therefore no functional pollution pathway from the Scheme to the European Site. Notwithstanding this, best practice measures will
-

be implemented within the CEMP to reduce any risk of pollution incidents, contamination of watercourses or increase in suspended sediment occurring during decommissioning of the Scheme.

^k As the Scheme would have no risk of adverse effects on the European Site or its qualifying resources alone, there would be no In-combination effects of the Scheme that would have effects on the European Site. No in-combination effects would occur during construction of the Scheme.

^l As the Scheme would have no risk of adverse effects on the European Site or its qualifying resources alone, there would be no In-combination effects of the Scheme that would have effects on the European Site. No in-combination effects would occur during operation of the Scheme.

^m As the Scheme would have no risk of adverse effects on the European Site or its qualifying resources alone, there would be no In-combination effects of the Scheme that would have effects on the European Site. No in-combination effects would occur during decommissioning of the Scheme.

Table A-6 - HRA Screening Matrix: Northumbria Coast Ramsar

Name of European site and designation: Northumbria Coast Ramsar												
EU Code: UK11049												
Distance to NSIP: >13km to the Scheme in a straight line and c. 23km to the Scheme via the River Team and River Tyne.												
European site features	Likely effects of NSIP											
Effect	Habitat Loss			Displacement			Pollution			In combination effects		
<i>Stage of Development</i>	<i>C</i>	<i>O</i>	<i>D</i>	<i>C</i>	<i>O</i>	<i>D</i>	<i>C</i>	<i>O</i>	<i>D</i>	<i>C</i>	<i>O</i>	<i>D</i>
Ramsar criterion 6 – species/populations occurring at levels of international importance. Qualifying Species/populations (as identified at designation): Species regularly supported during the breeding season:												
Little tern <i>Sterna albifrons</i> , W Europe 43 apparently occupied nests, representing an average of 2.2% of the GB population (Seabird 2000 Census).	✗ ^a	✗ ^b	✗ ^c	✗ ^d	✗ ^e	✗ ^f	✗ ^g	✗ ^h	✗ ⁱ	✗ ^j	✗ ^k	✗ ^l
Species with peak counts in winter:												
Purple sandpiper <i>Calidris maritima</i> , E Atlantic – wintering 291 individuals, representing an average of 1.6% of the GB	✗ ^a	✗ ^b	✗ ^c	✗ ^d	✗ ^e	✗ ^f	✗ ^g	✗ ^h	✗ ⁱ	✗ ^j	✗ ^k	✗ ^l

Name of European site and designation: Northumbria Coast Ramsar												
EU Code: UK11049												
Distance to NSIP: >13km to the Scheme in a straight line and c. 23km to the Scheme via the River Team and River Tyne.												
European site features	Likely effects of NSIP											
Effect	Habitat Loss			Displacement			Pollution			In combination effects		
<i>Stage of Development</i>	<i>C</i>	<i>O</i>	<i>D</i>	<i>C</i>	<i>O</i>	<i>D</i>	<i>C</i>	<i>O</i>	<i>D</i>	<i>C</i>	<i>O</i>	<i>D</i>
population (five-year peak mean 1998/9-2002/3)												
Turnstone <i>Arenaria interpres</i> , NE Canada, Greenland/W Europe & NW Africa 978 individuals, representing an average of 1% of the population (five-year peak mean 1998/9-2002/3).	x ^a	x ^b	x ^c	x ^d	x ^e	x ^f	x ^g	x ^h	x ⁱ	x ^j	x ^k	x ^l

Evidence:

^a Construction activities, including routes for movement of construction vehicles, would not occur within the European Site. No habitats within the European Site would be lost as a result of construction activities.

^b Operation of the Scheme does not require land take from the European Site. No habitat loss from within the European Site would occur as a result of operational activities.

^c Although details of decommissioning methods cannot be made at this stage, it is not considered necessary that decommissioning would require land from the European Site. Decommissioning of the Scheme would therefore not give rise to any loss of habitats from the European Site.

^d The European Site is situated over 13km from the Scheme, therefore there would be no disturbance to key species arising from human disturbance, noise, lighting, odour or emissions during construction of the Scheme.

^e The European Site is situated over 13km from the Scheme, therefore there would be no disturbance to key species arising from human disturbance, noise, lighting, odour or emissions during operation of the Scheme.

^f The European Site is situated over 13km from the Scheme, therefore there would be no disturbance to key species arising from human disturbance, noise, lighting, odour or emissions during decommissioning.

^g Although the European Site is linked to the Scheme hydrologically via the River Team and River Tyne, this hydrological link is around 23km in length. Over this distance any effects arising from water pollution caused by the Scheme would have no discernable impact. There is therefore no functional pollution pathway from the scheme to the European Site. Notwithstanding this, best practice measures will be implemented within the CEMP to reduce any risk of pollution incidents, contamination of watercourses or increase in suspended sediment occurring during construction of the Scheme.

^h Although the European Site is linked to the Scheme hydrologically via the River Team and River Tyne, this hydrological link is around 23km in length. Over this distance any effects arising from water pollution caused by the Scheme would have no discernable impact. There is therefore no functional pollution pathway from the Scheme to the European Site. Notwithstanding this, best practice measures will be implemented within the CEMP to reduce any risk of pollution incidents, contamination of watercourses or increase in suspended sediment occurring during operation of the Scheme.

ⁱ Although the European Site is linked to the Scheme hydrologically via the River Team and River Tyne, this hydrological link is around 23km in length. Over this distance any effects arising from water pollution caused by the Scheme would have no discernable impact. There is therefore no functional pollution pathway from the Scheme to the European Site. Notwithstanding this, best practice measures will be implemented within the CEMP to reduce any risk of pollution incidents, contamination of watercourses or increase in suspended sediment occurring during decommissioning of the Scheme.

^k As the Scheme would have no risk of adverse effects on the European Site or its qualifying resources alone, there would be no In-combination effects of the Scheme that would have effects on the European Site. No in-combination effects would occur during construction of the Scheme.

^l As the Scheme would have no risk of adverse effects on the European Site or its qualifying resources alone, there would be no In-combination effects of the Scheme that would have effects on the European Site. No in-combination effects would occur during operation of the Scheme.

^m As the Scheme would have no risk of adverse effects on the European Site or its qualifying resources alone, there would be no In-combination effects of the Scheme that would have effects on the European Site. No in-combination effects would occur during decommissioning of the Scheme.

Table A-7 - HRA Screening Matrix: DURHAM Coast SAC

Name of European site and designation: Durham Coast SAC														
EU Code: UK0030140														
Distance to NSIP: >12km to the Scheme in a straight line and c. 25km to the Scheme via the River Team and River Tyne.														
European site features			Likely effects of NSIP											
<i>Effect</i>			<i>Habitat Loss</i>			<i>Displacement</i>			<i>Pollution</i>			<i>In combination effects</i>		
<i>Stage of Development</i>			<i>C</i>	<i>O</i>	<i>D</i>	<i>C</i>	<i>O</i>	<i>D</i>	<i>C</i>	<i>O</i>	<i>D</i>	<i>C</i>	<i>O</i>	<i>D</i>
Annex I habitats that are a primary reason for selection of this site:														
Vegetated sea cliffs of the Atlantic and Baltic Coasts			✘ ^a	✘ ^b	✘ ^c	✘ ^d	✘ ^e	✘ ^f	✘ ^g	✘ ^h	✘ ⁱ	✘ ^j	✘ ^k	✘ ^l

Evidence:

^a Construction activities, including routes for movement of construction vehicles, would not occur within the European Site. No habitats within the European Site would be lost as a result of construction activities.

^b Operation of the Scheme does not require land take from the European Site. No habitat loss from within the European Site would occur as a result of operational activities.

^c Although details of decommissioning methods cannot be made at this stage, it is not considered necessary that decommissioning would require land from the European Site. Decommissioning of the Scheme would therefore not give rise to any loss of habitats from the European Site.

^d The European Site is situated over 12km from the Scheme, therefore there would be no disturbance to key species arising from human disturbance, noise, lighting, odour or emissions during construction of the Scheme.

^e The European Site is situated over 12km from the Scheme, therefore there would be no disturbance to key species arising from human disturbance, noise, lighting, odour or emissions during operation of the Scheme.

^f The European Site is situated over 12km from the Scheme, therefore there would be no disturbance to key species arising from human disturbance, noise, lighting, odour or emissions during decommissioning.

^g The European Site is not at risk from the adverse effects of water pollution. Regardless, best practice measures will be implemented within the CEMP to reduce any risk of pollution incidents, contamination of watercourses or increase in suspended sediment occurring during construction of the Scheme.

^h The European Site is not at risk from the adverse effects of water pollution. Regardless, best practice measures will be implemented within the CEMP to reduce any risk of pollution incidents, contamination of watercourses or increase in suspended sediment occurring during operation of the Scheme.

ⁱ The European Site is not at risk from the adverse effects of water pollution. Regardless, best practice measures will be implemented within the CEMP to reduce any risk of pollution incidents, contamination of watercourses or increase in suspended sediment occurring during decommissioning of the Scheme.

^k As the Scheme would have no risk of adverse effects on the European Site or its qualifying resources alone, there would be no In-combination effects of the Scheme that would have effects on the European Site. No in-combination effects would occur during construction of the Scheme.

^l As the Scheme would have no risk of adverse effects on the European Site or its qualifying resources alone, there would be no In-combination effects of the Scheme that would have effects on the European Site. No in-combination effects would occur during operation of the Scheme.

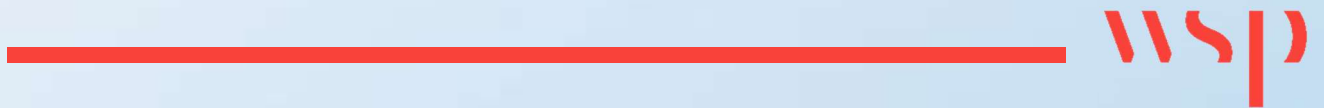


^m As the Scheme would have no risk of adverse effects on the European Site or its qualifying resources alone, there would be no In-combination effects of the Scheme that would have effects on the European Site. No in-combination effects would occur during decommissioning of the Scheme.

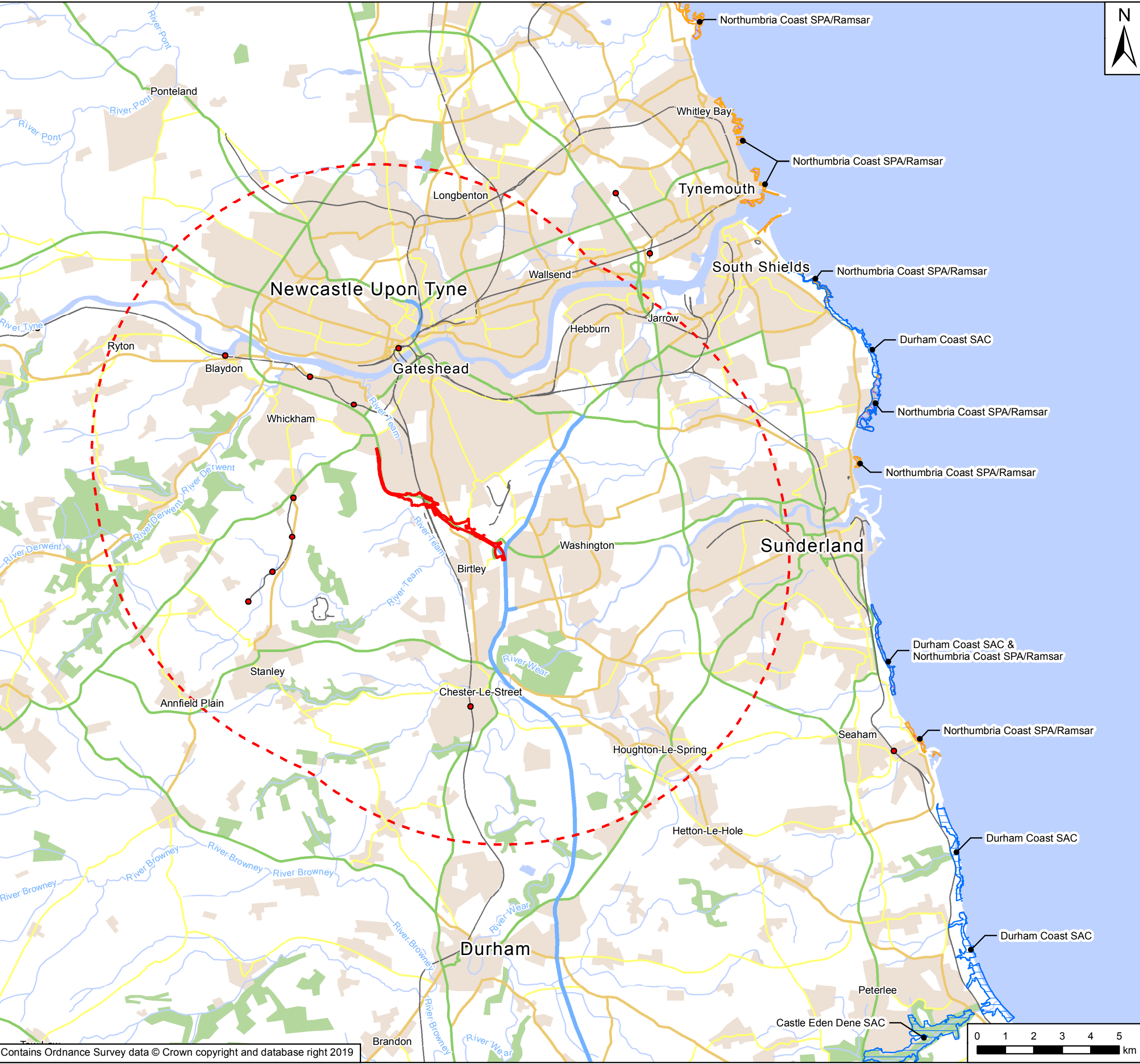


Appendix B

FIGURE 1: LOCATION OF DESIGNATED SITES



User Name: UKGDH001 Date Saved: 25/07/2019 10:01:08
 Document Path: \\uk.wsgroup.com\central\data\Projects\700419x\70041947 - A1BCH PCF Stage 3 and 4\03 Shared\EIA and flood risk\01 Models\GIS\MXD\Environmental Statement\Ecology Reports\HRA Report\Figure 2 - Location of Designated Sites.mxd



Key

- Scheme Footprint
- 10km Radius From Scheme Footprint
- Durham Coast Special Area of Conservation
- Northumbria Coast Special Protection Area
- Northumbria Coast Ramsar Site

P04	Jul 2019	Fourth Issue	GH	JR	KS
P03	Apr 2019	Third Issue	GH	JR	KS
P02	Mar 2019	Second Issue	GH	JR	KS
P01	Dec 2018	First Issue	GH	JR	NJA
Rev	Date	Description	By	Chk'd	App'd
Suitability					Status

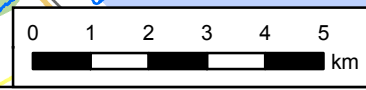
PINS Reference Number: **TR010031**



Project Title: **A1 Birtley to Coal House Scheme**

Drawing Title: **Figure 1 Location of Designated Sites**

Scale	1:130,000	Drawn	GH	Checked	JR	Approved	KS	Authorised	NJA
Original Size	A3	Date	Dec 2018	Date	Dec 2018	Date	Dec 2018	Date	Dec 2018
Drawing Number	HE551462	Originator	WSP	Volume	6.3	Revision		P04	
B2CH		PW Stage Code							
Section	Type	ID	Direction	Type	Role	Number			



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