South Tees Development Corporation

Grangetown Prairie Remediation Site

Habitats Regulations Assessment: Stage 1 Screening and Stage 2 Appropriate Assessment

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Appendices

Executive Summary

This document has been prepared by Ove Arup and Partners Ltd (Arup) on behalf of South Tees Development Corporation (STDC), in connection with a planning application for proposed remediation of the Grangetown Prairie site. This report details the Habitats Regulations Assessment (HRA) Stage 1 and Stage 2 assessments for the proposed Grangetown Prairie remediation works.

Stage 1 - Screening

There are seven internationally important designated sites within 20km of the proposed development site. The North York Moors Special Area of Conservation (SAC) and Special Protection Area (SPA), Durham Coast SAC and the Northumbria Coast SPA and Ramsar were scoped out of further assessment due to their distance from the proposed site and lack of direct impact pathways.

The Teesmouth and Cleveland Coast SPA and Ramsar is hydrologically connected to the proposed development site through the Holme Beck, Cross Connector culvert and Knitting Wife Beck culvert and has the potential to be polluted during remediation of the proposed development site. **Therefore, this possible effect on the Teesmouth and Cleveland Coast SPA and Ramsar was scoped into Appropriate Assessment (AA).** Three waterbird species, that are considered part of the internationally important assemblage of the Teesmouth and Cleveland Coast SPA and Ramsar, were identified as utilising the ponds within the proposed development site. Following a review of data provided by Industry Nature Conservation Association (INCA) any potential impacts from the loss of ponds within the proposed development site have been scoped out of further assessment.

In-combination effects with the proposed Energy Recovery Facility (ERF) development have been scoped out of further assessment.

If the Eston Road Highway Scheme and the proposed development are in progress at the same time, there is the potential for adverse in-combination effects from increased dust and pollution entering Holme Beck, the Cross Connector culvert and/or Knitting Wife Beck, and through their hydrological connection, affecting the integrity of the Teesmouth and Cleveland Coast SPA and Ramsar site. **Possible in-combination effects from the Eston Road Highway Scheme are therefore scoped into the AA.**

It is possible that the proposed Eston Road Highway Scheme, which has recently been submitted for outline planning but has yet to be formally determined, may be granted planning permission and be in place or under construction, before the remediation works are started. This will result in a change in baseline, as a currently culverted section of the Holme Beck will be daylighted as part of the Eston Road Highway Scheme. If this becomes the case, the likely effects will remain the same, however the risk of polluting the Holme Beck during remediation works will increase because a longer section of Holme Beck will be open.

Stage 2 – Appropriate Assessment

The construction works will be undertaken using best practice construction methods and will be managed through a Phasing Plan and a Construction Environmental Management Plan (CEMP). Due to the distance of the proposed development works from the Teesmouth and Cleveland Coast SPA and Ramsar, and implementation of best practice construction methods, it is considered that **with implementation of a Phasing Plan and CEMP, there will be no significant effects, from the proposed development, either alone or in-combination with the Eston Road Highway Scheme, on the integrity of the Teesmouth and Cleveland Coast SPA and Ramsar**.

It is considered likely that no further stages of the HRA process will be required.

1 Introduction

1.1 Overview

This document has been prepared by Ove Arup and Partners Ltd (Arup) on behalf of South Tees Development Corporation (STDC), in connection with a planning application for the proposed remediation of the Grangetown Prairie site (hereafter referred to as the 'proposed development').

This report provides information to inform both Stage 1 (Screening) and Stage 2 (Appropriate Assessment [AA]) of a Habitats Regulations Assessment (HRA). It has been prepared to inform the 'competent authority', Redcar and Cleveland Borough Council (RCBC) about the implications of the proposed development on nearby internationally important sites, as required under Regulation 63 of The Conservation of Habitats and Species Regulations 2017 (hereafter referred to as the 'Habitats Regulations')[1]. The report has been prepared in accordance with the Habitats Regulations.

Sections 4 to 9 of this report include the first stage of the HRA process; a statement to inform the HRA screening process for the proposed development.

Section 10 of this report comprises the second stage of the HRA process; a statement to inform an AA for the proposed development.

[1] The National Archives. *The Conservation of Habitats and Species Regulations 2017.* Available: http://www.legislation.gov.uk/uksi/2017/1012/contents/made. Accessed 21 May 2020.

2 The Habitats Regulations Assessment Process

2.1 Overview

Figure 1 provides and overview of the HRA process for projects within or with the potential to affect internationally important sites.

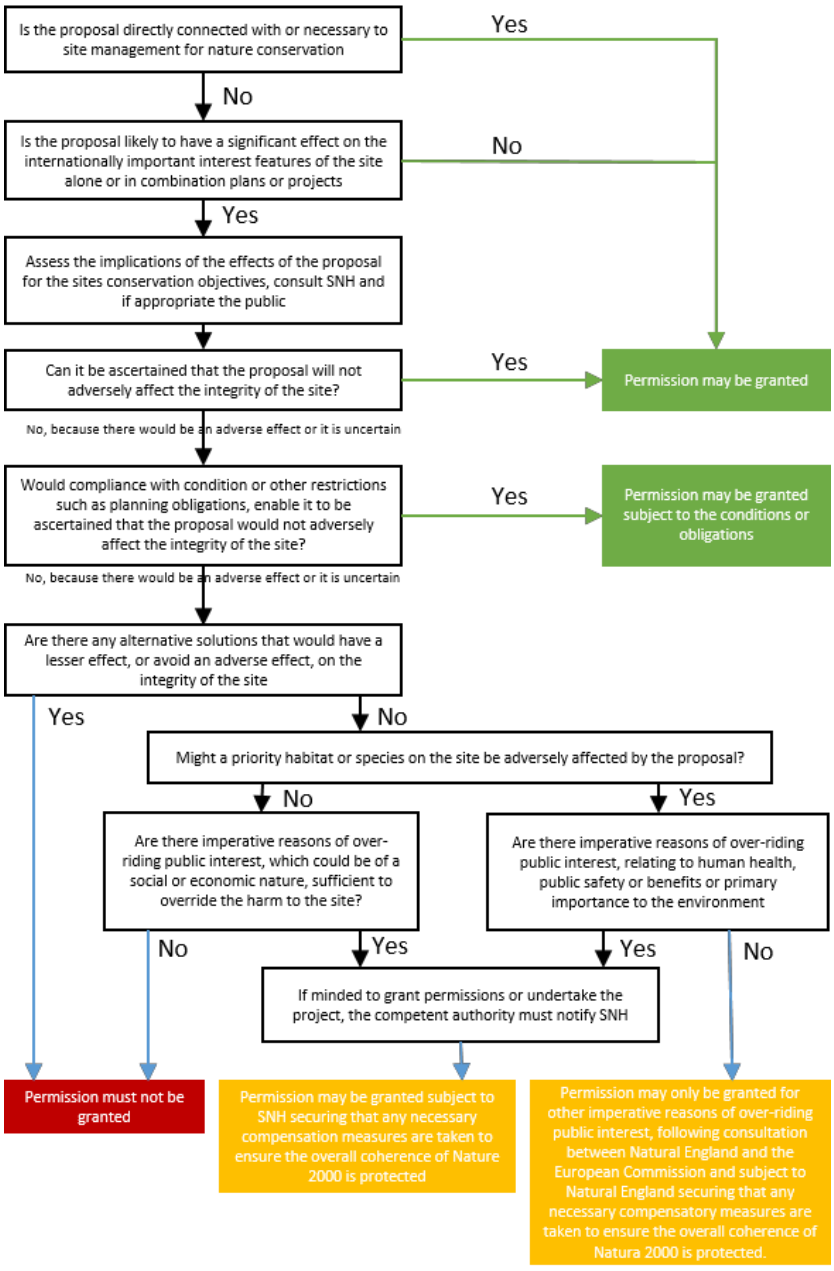


Figure 1: The Habitats Regulations Assessment Process[2]

[2] Tyldesley D. (2011) *Assessing Projects under the Habitats Directive: Guidance for Competent Authorities.* Countryside Council for Wales [now Natural Resources Wales], Bangor.

Regulation 63 of The Conservation of Habitats and Species Regulations 2017[1] (hereby referred to as the 'Habitat Regulations') requires a competent authority to make an 'appropriate assessment' of the implications of a plan or project for that site in view of its conservation objectives, before deciding to undertake or give consent for a plan or project which: (a) is likely to have a significant effect on a internationally important site (either alone or in combination with other plans or project); and, (b) is not directly connected with or necessary to the management of that site.

In light of the conclusions of the assessment, the competent authority may proceed with or consent to the plan or project only after having ascertained that it would not adversely affect the integrity of the internationally important site.

All plans and projects should identify any such possible effects early in the plan/project making process and then either alter the plan/project to avoid them or introduce mitigation measures to the point where no adverse effects occur. The competent authority is to agree to the plan or project only after having ascertained that it would not adversely affect the integrity of the site concerned and, if appropriate, having obtained the opinion of the general public.

The assessment of a plan or project under the Habitats Regulations can be split into several sections as shown in Figure 1. There are effectively four stages to the assessment, comprising:

- **Stage 1 – Screening**: This is the assessment of the likelihood of a plan or project having a significant effect on an internationally important site or its features. This is the trigger for the need for an Appropriate Assessment as set out in Regulation 61(1);
- **Stage 2 - Appropriate Assessment**: This is the detailed consideration of the potential effects of the plan or project in relation to the conservation objectives for the internationally important site to determine if there is likely to be an adverse effect on the integrity of the site (i.e. an effect that would compromise the site meeting its conservation objectives). Providing it can be demonstrated that with appropriate mitigation measures the plan or project would not give rise to an adverse effect on the integrity of an internationally important site, the plan or project can proceed;
- **Stage 3 - Consideration of Alternatives**: Where it cannot be demonstrated that the project could give rise to an adverse effect on the integrity of a internationally important site, or there is uncertainty, the assessment would need to consider if there were any other alternatives to the plan or project that would not give rise to adverse effects on the integrity of the internationally important site; and
- **Stage 4 – Reasons of Overriding Public Interest:** If there are no alternatives, Stage 4 would then consider if there are any imperative reasons of overriding public interest, and whether there were any compensatory measures that might be required.

3 Proposed Development Description

3.1 Proposed Development Site Overview

The proposed development site is located within the South Tees Development Corporation Area (STDC) land zone known as Grangetown Prairie[3]. The Grangetown Prairie site is largely vacant but has a long history of iron and steel work uses and was extensively occupied by buildings and freight rail infrastructure. Former uses included the Cleveland Iron and Steel Works, where the heavy end operations (coke ovens, iron making and steel making) were located along the western periphery of the Grangetown Prairie site, with mills dominating the central and eastern zones.

The proposed development red line boundary (see Appendix A) includes a part of the land area covered by a separate proposed development known as 'Eston Road Highway Scheme.' As the Eston Road Highway Scheme has yet to be determined, the proposed development site boundary currently covers this development area. The baseline of the proposed development site and the potential impacts and mitigation will be assessed with the land within the Eston Road Highway Scheme included. The in-combination effects section of this report (see section 7) discusses the baseline and potential impacts in the event that the Eston Road Highway Scheme is in place, or in the process of being constructed, when the remediation works are undertaken.

The Holme Beck is located within the proposed development site and runs along the eastern boundary of Eston Road continuing up through the proposed development site. The Holme Beck is largely culverted through the proposed development site but is open for approximately 150m on the south end of Eston Road near the A66 junction. Where open, Holme Beck consists of vertical sides made of stone.

Two other culverted watercourses run through the proposed development site, the Cross Connector, which enters the proposed development site in the south east and connects to the second culverted watercourse, the Knitting Wife Beck which runs along the eastern boundary of the proposed development site. These culverts are illustrated in Appendix B.

3.2 Proposed Development

The proposed development is the remediation of the proposed development site. This will include the removal and/or treatment of contaminated soils and the removal of redundant structures within the proposed development site to prepare the area for future developments. Soils stored in other areas of the STDC site may be used within the proposed development site.

[3] South Tees Development Corporation (November 2019) South Tees Regeneration Master Plan. https://www.southteesdc.com/wp-content/uploads/2020/01/South-Tees-Master-Plan-Nov-19.2.pdf Accessed 12 May 2020.

The proposed development may include the daylighting of the Holme Beck, Cross Connector and/or Knitting Wife Beck culverts. The proposed development may also include the daylighting of the Cross Connector and Knitting Wife Beck. At this time, it is unclear which sections of these culverts may be opened. The detailed daylighting plans will be provided at a later stage in the planning process. Where possible, the daylighting works are likely to include the removal of the stone sides of the culverts and provision of more naturalised banks.

The proposed phasing and dig depths of the remediation works are illustrated in Appendix B.

3.3 Remediation

Relevant components of the proposed development construction include:

- Removal and replacement of contaminated soils to a depth of up to 2.5 meters below ground level (mbgl);
    - Materials that have been excavated and require remediation of contaminants will be segregated and treated to make suitable for re-use. Treatment of these materials will take place within a designated area of the proposed development site where hardstanding remains in situ;
- Where materials such as scrap metals or highly contaminated soils can not be treated, these will be removed from the proposed development site and taken to a licenced treatment facility;
- Excavations will be backfilled and compacted to an agreed criterion;
- Removal of old structures and obstructions, including the filling in of old basements and removal and flattening of the redundant railway line;
    - Excavated structures and obstructions will be segregated by material type (i.e. concrete will be segregated from brick) before being crushed and graded for reuse;
- Removal of existing vegetation within the proposed development site; and
- Potential in-channel works to open up and daylight the Holme Beck, Cross Connector and/or Knitting Wife Beck culverts.

These elements of construction are likely to lead to:

- Generation of some dust, which will be controlled by standard environmental management control methods (e.g. wheel washing and road brushing) to be defined within the Construction Environmental Management Plan (CEMP);
- Generation of noise and vibration, which will be temporary and avoided or minimised through implementation of the CEMP. The CEMP would include restrictions and targets for specific work activities, including monitoring. If required, appropriate mitigation measures to deal with any noise and vibration impacts would be put in place around the proposed development site;

- Any groundwater recovered from excavations will be treated as required and disposed of under duty of care and using best practice guidelines;
- Emissions from on-site plant and construction vehicles, which would have a minor adverse, temporary effect on the environment and require no mitigation other than standard best practice for construction sites; and
- A low risk of leachates or the escape of products/by-products that may constitute a contaminant in the environment, to be managed through best practice construction management techniques in line with the CEMP.

4 Stage 1 - Screening

4.1 Methodology

4.1.1 Desk Study and Evidence Gathering

In order to understand the potential implications for internationally important sites from the proposed development, it is necessary to identify those sites that are located close to the proposed development or provide a pathway for effect on internationally important sites.

All internationally important sites within a 20km radius of the proposed development were identified. Once these internationally important sites and the pathway for an effect had been identified, the pathway was investigated further through a desk study review. The ecological data available was used to support the assessment to determine the likelihood for a significant effect.

The ecological data reviewed to inform Stage 1 of the HRA process comprised:

- Information on internationally important designated sites available through Natural England Open Data[4];
- Internationally important designated site data sheets available from the Joint Nature Conservation Committee (JNCC)[5, 6, 7, 8, 9, 10];
- Updated information regarding internationally important designated sites available from Natural England's Designated Sites View[11];
- Industry Nature Conservation Association (INCA) Preliminary Ecological Appraisal (PEA) Grangetown Prairie[12];

[4]Natural England Open Data. https://naturalengland-defra.opendata.arcgis.com/ Accessed 5 May 2020.
[5] JNCC. *Northumbria Coast Special Protection Area Standard Data Form*. Available: http://jncc.defra.gov.uk/pdf/SPA/UK9006131.pdf Accessed 5 May 2020.
[6] JNCC. *Northumbria Coast Ramsar Information Sheet.* Available: http://jncc.defra.gov.uk/pdf/RIS/UK11049.pdf Accessed 5 May 2020..
[7] JNCC. *Durham Coast Special Area of Conservation Standard Data Form.* Available: http://jncc.defra.gov.uk/ProtectedSites/SACselection/n2kforms/UK0030140.pdf Accessed 5 May 2020.
[8] JNCC. *Northumberland Marine Special Protection Area Information Sheet*. Available: https://jncc.gov.uk/jncc-assets/SPA-N2K/UK9020325.pdf Accessed 5 May 2020.
[9] JNCC. North York Moors Designated Special Area of Conservation. https://sac.jncc.gov.uk/site/UK0030228. Accessed 21 May 2020.
[10] JNCC. North York Moors Special Protection Area. https://jncc.gov.uk/jncc-assets/SPA-N2K/UK9006161.pdf. Accessed 21 May 2020.
[11] NE. *Designated Sites View: Northumbria Coast Special Protection Area.* Available: https://designatedsites.naturalengland.org.uk/Marine/MarineSiteDetail.aspx?SiteCode=UK9006131 Accessed 5 May 2020.
[12] INCA (May 2018) Preliminary Ecological Appraisal Grangetown Prairie. Received 22 January 2020.

- INCA Nesting Bird Checks[13]; and
- INCA HRA Screening Report for ground preparation works within STDC[14].

4.1.2 Consultation

As the remediation of the proposed development site will likely require the movement of earth and storage of soils, there is the potential that soils from the wider STDC site will be brought from these areas and used within the proposed development site.

Consultation was undertaken by INCA in July 2019 with Andrew Whitehead from Natural England to determine if there was the potential for likely significant effects from temporary storage of materials in six locations across wider site owned by STDC.

4.1.3 Zone of Influence

This report considers whether any internationally important sites within approximately 20km of the proposed development could be potentially be affected by it. This distance from the proposed development is precautionary and was determined by ecological and construction effect features, such as species mobility distances and distances at which air and hydrological pollution events could have a significant effect.

4.1.4 Other Projects and Plans

Two additional developments have been considered in this assessment, namely the Energy Recover Facility (ERF)[15], in relation to in-combination effects (see section 7) and the proposed Eston Road Highway Scheme, in relation to both in-combination effects and a change in baseline (see Section 8). Both of these proposed developments sit within the Grangetown Prairie land zone.

[13] Following consultation with INCA ecologists, the nesting bird check 2020 results were provided to Arup.
[14] INCA (May 2019) Information to Inform Screening for a Habitats Regulations Assessment of Ground Preparation Works. Report ID INCA 201916.
[15] JBA Consulting (December 2019) Energy Recovery Plant: Habitats Regulations Assessment (HRA) Screening Report.

5 Internationally Important Sites under Consideration

Seven internationally important sites are present within 20km of the proposed development, including three Special Protection Areas (SPA), two Special Areas of Conservation (SAC), and two Ramsar sites.

These are summarised in Table 1, with locations of these internationally important sites illustrated in Appendix C[16].

Table 1: Internationally important sites within 20km of the proposed development site.

Internationally Important Site	Designation	Distance from Proposed Development	Reason for Designation
Teesmouth and Cleveland Coast[17]	SPA	1.3km north west	The extensions to the Teesmouth and Cleveland Coast SPA were formally classified on 16 January 2020. The formal designation and boundaries of the extension have not been released but are detailed in the Consultation Report[18]. Designated for important populations of breeding avocet (*Recurvirostra avosetta*), common tern (*Sterna hirundo*) and little tern (*Sterna albifrons*). As well as, important populations of non-breeding sandwich tern (*Thalasseus sandvicensis*), ringed plover (*Charadrius hiaticula*, knot (*Calidris canutus*), redshank (*Tringa totanus tetanus*) and ruff (*Calidris pugnax*). The Salthome RSPB Reserve is part of the wider Teesmouth and Cleveland Coast SPA. Also designated for an important assemblage of over-wintering wetland birds. See Section 5.1
	Ramsar	1.6km north west	The extensions to the Teesmouth and Cleveland Coast Ramsar were formally classified on 16 January 2020. The formal designation and boundaries of the extension have not been released but are detailed in the Consultation Report.[18]

[16] The updated boundary for the Teesmouth and Cleveland Coast SPA was not available through Natural England Open Data at the time of writing this report. The DEFRA Consultation Report was reviewed to understand the new extent of the SPA. The SPA boundary pictured within Appendix C is the extent of the pSPA boundary.
[17] DEFRA. Teesmouth and Cleveland Coast SPA, Ramsar and SSSI. https://consult.defra.gov.uk/natural-england-marine/teesmouth-and-cleveland-coast-potential-sp/ Accessed on 7 May 2020.
[18] Natural England (March 2019) Teesmouth and Cleveland Coast potential Special Protection Area (pSPA) and proposed Ramsar Site (pRamsar): Report of Consultation by Natural England, 2019. https://consult.defra.gov.uk/natural-england-marine/teesmouth-and-cleveland-coast-potential-sp/supporting_documents/Teesmouth%20and%20Cleveland%20Coast%20Consultation%20Report%20February%202020.pdf. Accessed 12 May 2020.

Internationally Important Site	Designation	Distance from Proposed Development	Reason for Designation
			Wetland of international importance. Designated under Ramsar criterion 5[19] for assemblages of international important numbers of waterbirds and criterion 6 for regularly supporting 1% of the individuals in a population of one species of waterbird. Also designated for peak counts of common redshank in spring and autumn, and wintering red knot (*Calidris canutus islandica*). See Section 5.2
North York Moors	SAC[9]	9.6km south	Site supports the Annex I habitats: Northern Atlantic wet heaths with cross-leaved heath (*Erica tetralix*); and Internationally important dry heaths. Site supports the Annex I habitat, but is not a primary reason for selection of the site: Blanket bogs. See Section 5.3
	SPA[10]	9.6km south	Site supports internationally important population of breeding merlin (*Falco columbarius*) and golden plover (*Pluvialis apricaria*). See Section 5.4
Durham Coast	SAC[7]	16.9km north	Site supports the Annex I habitat: Vegetated sea cliffs of the Atlantic and Baltic Coasts. See Section 5.5
Northumbria Coast	SPA[5]	17.0km north	Site supports internationally important population of breeding Arctic tern (*Sterna paradisaea*) and little tern. Site supports internationally important population of non-breeding purple sandpiper (*Calidris maritima*) and turnstone (*Arenaria interpres*). See Section 5.5
	Ramsar[6]	17.0km north	Site supports internationally important population of breeding little tern. Site supports internationally important population of non-breeding purple sandpiper and turnstone. See Section 5.7

[19] Ramsar Convention of Wetlands (Ramsar, Iran, 1971) The Ramsar Sites Criteria. https://www.ramsar.org/sites/default/files/documents/library/ramsarsites_criteria_eng.pdf Accessed 7 May 2020.

5.1 Teesmouth and Cleveland Coast SPA

The extensions to the Teesmouth and Cleveland Coast SPA were formally classified on 16 January 2020. The SPA is now considered to be 12,210.62ha in size, and 1.3km from the proposed remediation site. The following alterations were made to the final SPA boundary[1618]:

- Exclusion of the upper reaches of the Lackenby Channel (Drainage Cut), Billingham Beck, Normanby Beck, Ormesby Beck, Old River Tees Beck, the Fleet and Stainsby Beck within the pSPA only;
- Exclusion of the Warrenby Reedbeds area of Coatham Marsh from pSPA and Ramsar; and
- Minor amendments to the boundary to address mapping errors and anomalies to pSPA and Ramsar.

The Teesmouth and Cleveland Coast SPA qualifies under Article 4.1 by regularly supporting populations of Internationally important importance of the following Annex 1 species:

- **Little tern**, of which a mean of 81 breeding pairs are present within the site, representing at least 4.3% of the breeding population in Great Britain;
- **Common tern**, of which a mean of 399 breeding pairs are present within the site, representing at least 4.0% of the breeding population of Great Britain; and
- **Pied avocet**, of which a mean of 18 breeding pairs are present within the site, representing at least 1.2% of the breeding population of Great Britain.

Under Article 4.2, qualifying overwintering species comprise:

- **Sandwich tern,** of which a mean of 1,900 individuals are present within the site over winter, representing at least 1.3% of the Western Internationally important/Western African wintering population;
- **Ruff**, of which a mean of 19 individuals are present within the site over winter, representing at least 2.4% of the Great Britain wintering population;
- **Red knot**, of which a mean of 5,509 individuals are present within the site over winter, representing at least 1.6% of the North-eastern Canadian/Greenlandic/Icelandic/UK wintering population; and
- **Common redshank**, of which a mean of 1,648 individuals are present within the site over winter, representing at least 1.1% of the East Atlantic wintering population.

Teesmouth and Cleveland Coast SPA also qualifies under Article 4.3 by regularly supporting a waterbird assemblage of international importance (i.e. more than 20,000 individuals), as the site supports an average of 26,014 individuals.

5.2 Teesmouth and Cleveland Coast Ramsar

The extensions to the Teesmouth and Cleveland Coast Ramsar was formally classified on 16 January 2020. The Ramsar is now considered to be 2,065.21ha in size. See Section 5.1 for more detail on final alterations to the SPA and Ramsar boundaries[18].

Teesmouth and Cleveland Coast proposed Ramsar fulfils Ramsar criterion 6, as it supports particular species occurring at levels of international importance:

- **Little tern**, of which a mean of 81 breeding pairs are present within the site, representing at least 4.3% of the breeding population in Great Britain;
- **Common tern**, of which a mean of 399 breeding pairs are present within the site, representing at least 4.0% of the breeding population of Great Britain;
- **Pied avocet**, of which a mean of 18 breeding pairs are present within the site, representing at least 1.2% of the breeding population of Great Britain;
- **Sandwich tern**, of which a mean of 1,900 individuals are present within the site over winter, representing at least 1.3% of the Western Internationally important/Western African wintering population;
- **Ruff**, of which a mean of 19 individuals are present within the site over winter, representing at least 2.4% of the Great Britain wintering population;
- **Red knot**, of which a mean of 5,509 individuals are present within the site over winter, representing at least 1.6% of the North-eastern Canadian/Greenlandic/Icelandic/UK wintering population; and
- **Common redshank**, of which a mean of 1,648 individuals are present within the site over winter, representing at least 1.1% of the East Atlantic wintering population.

Teesmouth and Cleveland Coast proposed Ramsar fulfils Ramsar criterion 5, as it regularly supports a waterbird assemblage of international importance (i.e. more than 20,000 individual waterbirds). The designated site supports an average of 26,786 individuals.

5.3 North York Moors SAC

North York Moors SAC covers 44,053ha and is designated for its Annex I habitat, Northern Atlantic wet heaths with *Erica tetralix*, the largest continuous tract of upland heather moorland in England. This Annex 1 habitat is found on the eastern and northern moors where the soil is less free draining. On the western, southern and central moors where the soil is free draining, the site contains the Annex I habitat, Internationally important dry heaths.

The site also contains blanket bogs, which are recognised as an Annex I qualifying feature, but not a primary reason for selection of this SAC site.

5.4 North York Moors SPA

The North York Moors SPA covers 44,087ha and contains the largest continuous tract of heather moorland in England[20].

The SPA qualifies under Article 4.1 by regularly supporting populations of Internationally important importance of the following Annex 1 species:

- **Merlin** of which a mean of 35-40 breeding pairs are present within the site, representing at least 2.7% of the breeding population in Great Britain; and
- **Golden plover** of which a mean of 526-706 breeding pairs are present within the site, representing at least 2.3% of the breeding population in Great Britain.

In addition, this site supports a rich upland breeding bird assemblage of short-eared owl (*Asio flammeus*), peregrine (*Falco peregrinus*) and hen harrier (*Circus cyaneus*) (all Annex I species), together with redshank, red grouse (*Lagopus lagopus scoticus*) and a nationally important population of curlew (*Numenius arquata*).

5.5 Durham Coast SAC

Durham Coast SAC covers 390ha and is designated for the presence of one Annex I habitat; vegetated sea cliffs of the Atlantic and Baltic Coasts.

Durham Coast SAC 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 20 km 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.

5.6 Northumbria Coast SPA

Northumbria Coast SPA covers 1,097ha and includes much of the coastline between the Tees and Tweed estuaries. The site consists mostly of discrete sections of rocky shore with associated boulder and cobble beaches, artificial pier structures and small sections of sandy beach.

[20] Natural England. Internationally important Site Conservation Objectives North York Moors SPA (UK9006161) http://publications.naturalengland.org.uk/publication/6207512114102272 Accessed 21 May 2020.

Northumbria Coast SPA qualifies under Article 4.1 by regularly supporting populations of Internationally important importance of the following Annex 1 species:

- **Arctic tern**, of which a mean of 1,549 breeding pairs are present within the site, representing at least 2.92% of the breeding population in Great Britain[21]; and
- **Little tern**, of which a mean of 40 breeding pairs are present within the site, representing at least 1.7% of the breeding population in Great Britain.

Under Article 4.2, qualifying overwintering species comprise:

- **Purple sandpiper**, of which a mean of 787 individuals are present within the site over winter, representing at least 1.6% of the Eastern Atlantic wintering population; and
- **Turnstone**, of which a mean of 1,739 individuals are present within the site over winter, representing at least 2.6% of the Western Palearctic wintering population.

5.7 Northumbria Coast Ramsar

Northumbria Coast Ramsar covers 1,108ha and includes much of the coastline between the Tees and Tweed estuaries. The Ramsar site covers much the same habitat included within the Northumbria Coast SPA.

Northumbria Coast Ramsar fulfils Ramsar criterion 6, as it supports particular species occurring at levels of international importance:

- **Little tern**, of which a mean of 40 breeding pairs are present within the site, representing at least 1.7% of the breeding population in Great Britain;
- **Purple sandpiper**, of which a mean of 787 individuals are present within the site over winter, representing at least 1.6% of the Eastern Atlantic wintering population; and
- **Turnstone**, of which a mean of 1,739 individuals are present within the site over winter, representing at least 2.6% of the Western Palearctic wintering population.

[21] Northumbria Coast SPA was amended on 29 January 2017 to include Arctic tern as a Qualifying Feature of the SPA.

5.8 Conservation Objectives

5.8.1 SPA and Ramsar Sites

The conservation objectives of Teesmouth and Cleveland Coast SPA[22] and Ramsar[23], North York Moors SPA[20] and Northumbria Coast SPA[24] are to "*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; and,*
- *the distribution of the qualifying features within the site."*

Conservation objectives of Northumbria Coast Ramsar and Teesmouth and Cleveland Coast Ramsar[23] sites are not readily available.

5.8.2 SAC Sites

The conservation objectives of North York Moors SAC[25] and Durham Coast SAC[26] are to *"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."*

[22] Natural England. Internationally important Site Conservation Objectives for Teesmouth and Cleveland Coast pSPA. Available: http://publications.naturalengland.org.uk/publication/6619918699069440 Accessed 13 May 2020.
[23] The conservation objectives of the Teesmouth and Cleveland Coast SPA and Ramsar are considered to be the same as the objectives given for the pSPA and pRamsar.
[24] Natural England. Internationally important Site Conservation Objectives for Northumbria Coast SPA. Available: http://publications.naturalengland.org.uk/publication/6372874327687168 Accessed 13 May 2020.
[25] Natural England. Internationally important Site Conservation Objectives for North York Moors SAC. Available: http://publications.naturalengland.org.uk/publication/6048216608931840 Accessed 13 May 2020.
[26] Natural England. Internationally important Site Conservation Objectives for Durham Coast SAC. Available: http://publications.naturalengland.org.uk/publication/4949450761961472 Accessed 13 May 2020.

6 Checking for Likelihood of a Significant Effect

This initial assessment considers whether the proposed development is directly connected with, or necessary to, the management of the internationally important sites listed in Table 1 for nature conservation. It also checks whether the proposed development would be likely to have an effect and whether the effect could be significant.

Each relevant internationally important site is considered in turn in Sections 6.2 to 6.5.

6.1 Consultation and Desk Study Data

A HRA was undertaken in May 2019 by INCA which assessed the potential impact to the Teesmouth and Cleveland Coast pSPA and Ramsar[27] from the temporary storage and permanent use of spoil arisings at various locations across the STDC site[14]. As soils from one of these six locations may be transported and used within the proposed development site, this HRA was reviewed as part of this assessment.

Six locations were assessed with the closest located approximately 100m from the pSPA, and the other locations between 230m and 1km from the parts of the pSPA which has the potential to provide a significant function for pSPA designating bird species. Any likely significant effects were screened out.

This report was provided to Natural England, with a response received on 1 July 2019, stating that Natural England was satisfied with the assessment and agreed that an AA was not required and that there were no likely significant effects from storage or use of materials. The potential impacts from storage or use of soils in other areas of the STDC site have therefore, not been assessed further in this HRA.

INCA ecologists provided their results of the nesting bird checks undertaken in 2020 as well as their incidental records and professional opinion of the proposed development site due to their ongoing ecological surveys of the proposed development site. The INCA ecologists noted that "*the only SPA interest features (in this case waterbird assemblage species) we have so far encountered in our nesting bird check visits were Shelduck and Mallard, both in low single figures, using the small wetland areas at* [National Grid Reference (NGR)] *NZ 54488 21454 and NZ 54421 21432. In autumn and winter these areas might also hold Snipe."* It was also noted that shelduck was only a possible breeding species but has not been confirmed to be breeding within the proposed development site.

The 2018 PEA identified that the ponds within the proposed development site likely varied in size and depth throughout the year and contained little to no submerged vegetation that would be suitable for foraging birds. As well, these

[27] At the time of the INCA 2019 report, the Teesmouth and Cleveland Coast SPA and Ramsar was still classified as a pSPA and Ramsar.

ponds contained a narrow fringe of common reed (*Phragmites australis*) which would likely not provide suitable coverage for birds to nest.

Following a review of the 2020 data provided by INCA and the 2018 PEA, it has been considered that the ponds within the proposed development site are of poor quality and not likely to be used by or appropriate for foraging, nesting and/or roosting by SPA and Ramsar qualifying bird species. *This potential impact has been scoped out of AA.*

6.2 Teesmouth and Cleveland Coast SPA and Ramsar

The proposed development will not result in any direct land-take of the Teesmouth and Cleveland Coast SPA and Ramsar during the remediation works. Remediation is limited to the proposed development site boundary with no permanent or temporary land-take from the internationally important site required to facilitate the works.

The proposed development site contains the Holme Beck, Cross Connector and Knitting Wife Beck which are connected to the Cleveland channel, which is then connected to the Lackenby Channel which flows directly into the River Tees and thus the Teesmouth and Cleveland Coast SPA and Ramsar. The Holme Beck remains primarily culverted within the proposed development site but is un-culverted and open for approximately 150m to on the south end of Eston Road near the A66 junction. The Cross Connector and Knitting Wife Beck are completely culverted within the proposed development site.

The proposed development works may include the daylighting of the Holme Beck, Cross Connector culvert and/or Knitting Wife Beck culbert.

There is therefore a potential impact pathway through which this internationally important site could be affected by the proposed development. On a precautionary approach, this impact is considered to be a direct impact to the Teesmouth and Cleveland Coast SPA and Ramsar.

During remediation, there is the potential for contaminated soil or accidental pollution to enter the watercourse.

Any accidental pollution events or contamination of the watercourse could:

- destroy and/or disturb the habitats used by the qualifying features of the SPA and Ramsar site (bird species identified in Sections 5.1 and 5.2) for foraging, commuting and/or roosting; and/or
- kill invertebrate species that are a foraging resource for the qualifying features.

6.3 North York Moors SAC and SPA

The proposed development will not result in any direct loss to the designating features of the North York Moors SAC and SPA during the remediation works.

Both the North York Moors SAC and SPA are 9.6km south of the proposed development site at the closest point. There are a number of large housing estates, agricultural fields and major roadways between the proposed development site and the designated sites. The remediation works in the proposed development are therefore highly unlikely to result in direct disturbance of designating features within the SAC and SPA itself. Any possible direct disturbance caused by the proposed development is likely to be attenuated over this distance.

The proposed development works are minimal in nature and are located within an area that is highly industrialised and regularly active with other works. The proposed development site is considered to contain little to no suitable habitat for the qualifying features (merlin and golden plover) of the North York Moors SPA. The proposed development site may contain some suitable habitat for golden plover, however these species have not been recorded within the proposed development site and much more suitable habitat can be found within the Salthome RSPB reserve or other areas within the STDC site making it unlikely that the proposed development site would be used by the golden plover designated as part of the North York Moors SAC and SPA.

It is therefore considered that there is no impact pathway and the North Moors SAC and SPA will not be impacted directly or indirectly from the remediation works within the proposed development site.

No AA of this designated site is required.

6.4 Durham Coast SAC

The proposed development will not result in any direct loss to the designating features of the Durham Coast SAC through the remediation works.

The Durham Coast SAC is over 17km north of the proposed development site. Remediation works within the proposed development site are therefore highly unlikely to result in direct disturbance of the vegetated sea cliffs within the SAC itself.

Any possible indirect disturbance (e.g. pollution) caused by the proposed development is likely to be attenuated over this distance. It is therefore considered that there is no impact pathway and the Durham Coast SAC will not be directly or indirectly impacted from the remediation works within the proposed development site.

No AA of this aspect is required.

6.5 Northumbria Coast SPA and Ramsar

The proposed development will not result in any direct loss to the designating features of the Northumbria Coast SPA or Ramsar through the remediation works.

Both the Northumbria Coast SPA and Ramsar are over 17km north of the proposed development site. Remediation works in the proposed development site are therefore highly unlikely to result in direct disturbance of designating features within the SPA or Ramsar.

Any possible indirect disturbance (e.g. pollution) caused by the proposed development is likely to be attenuated over this distance. It is therefore considered that there is no impact pathway and the Northumbria Coast SPA and Ramsar will not be directly or indirectly impacted from the remediation works within the proposed development site.

No AA of this aspect is required.

7 Assessment of In-combination Effects

7.1 Energy Recovery Facility

The proposed ERF development covers an area of approximately 10ha (NGR NZ54312145) and will be capable of processing up to 450,000 tonnes of waste per annum.

As outlined in the Environmental Statement for this development, it has been assumed that the remediation of the Grangetown Prairie site, where the ERF will be developed, will be remediated prior to the ERF construction. It is therefore considered that the ERF will not be constructed at the same time as proposed development site remediation works. The proposed development site remediation works and the ERF will have to separately control any potential pollution impacts.

A HRA screening report was produced in December 2019 for the ERF and considered the risk of pollution to the Teesmouth and Cleveland Coast SPA and Ramsar site from construction and operation of the proposed development site. The HRA concluded that there would be no likely significant effect and pollution to the watercourse would either be insignificant or would be controlled in the overarching design of the facility or during construction. The HRA therefore concluded that with mitigation there were no likely significant effects from the proposed ERF development on the Teesmouth and Cleveland Coast SPA and Ramsar sites. In-combination effects were not anticipated from the proposed ERF development. In summary, no AA was required for the proposed ERF development.

It is therefore considered, that as the two developments will not occur at the same time, the proposed ERF development will control pollution to the SPA and Ramsar in the overarching design of the facility and the proposed development site will separately control pollution impacts, no additional mitigation will be required to specifically control in-combination effects from the proposed ERF development and the Grangetown Prairie proposed development site.

In-combination effects from the proposed ERF development have therefore *not been scoped into the AA.*

7.2 Eston Road Highway Scheme

The proposed Eston Road Highway Scheme has recently been submitted for outline planning but has yet to be formally determined. The red line boundary of this scheme sits partially within the red line boundary of the Grangetown Prairie Remediation Scheme and consists of Eston Road and the eastern end of Middlesbrough Road East. The 150m open section of the Holme Beck sits within the Eston Road Highway Scheme boundary with a further 500m of culverted section sitting within the scheme boundary.

As part of the Eston Road Highway Scheme, the Holme Beck will be un-culverted and daylighted, the watercourse will be further naturalised with a sloped and vegetated bank and redesigned channel. Through the provision of a SuDS pond and implementation of a CEMP, the HRA of this work concluded that the Eston Road Highway Scheme would have no significant impact to the Teesmouth and Cleveland Coast SPA and Ramsar.

If, however, both the Eston Road Highway Scheme and the proposed development are in progress at the same time, it is possible that all three culverts could be daylighted simultaneously. This increases the potential for adverse in-combination effects from increased dust and pollution entering Holme Beck, Cross Connector and Knitting Wife Beck, affecting the integrity of the Teesmouth and Cleveland Coast SPA and Ramsar site.

Possible in-combination effects from the Eston Road Highway Scheme are therefore scoped into the AA.

8 Change in Baseline

8.1 Eston Road Highway Scheme

If the Eston Road Highway Scheme progresses ahead of the proposed development remediation works, appropriate mitigation will have been put into place to prevent impacts to the Teesmouth and Cleveland Coast SPA and Ramsar through contamination of the Holme Beck. The mitigation measures proposed for the Eston Road Highway Scheme include a CEMP, SuDS pond and other associated drainage works.

However, it should be noted that part of the culverted section of the Holme Beck will be daylighted as part of the Eston Road Highway Scheme. If the Eston Road Highway Scheme progresses ahead of the proposed development remediation works, there is the potential for an increased risk of contamination of Holme Beck from the proposed development remediation works along the entire length of the stretch of Holme Beck within the red line boundary.

Although the proposed development remediation works will not occur directly adjacent or within the daylighted Holme Beck, there is the potential that construction related dust or leaks could also reach and impact this watercourse and thus the Teesmouth and Cleveland Coast SPA and Ramsar.

Mitigation measures to control pollution of the Holme Beck are discussed in Section 10.3.

9 Summary

There are seven internationally important sites present within 20km of the proposed development, the Teesmouth and Cleveland Coast SPA and Ramsar, North York Moors SAC and SPA, Durham Coast SAC and Northumbria Coast SPA and Ramsar.

Given the distance and lack of suitable habitats for designating bird species [where relevant] within the proposed development site, and lack of connectivity between the proposed development site and the North York Moors SAC and SPA, Durham Coast SAC and Northumbria Coast SPA and Ramsar, these internationally important sites have been scoped out of further assessment.

Possible impacts of remediation works that were considered in relation to their possible effects on the Teesmouth and Cleveland Coast SPA and Ramsar were pollution and contamination of the Holme Beck, Cross Connector and/or Knitting Wife Beck which are hydrologically connected to the River Tees, and thus the Teesmouth and Cleveland Coast SPA and Ramsar located 1.3km away.

Any accidental spillage events or contamination of the watercourse during remediation could:

- destroy and/or disturb the habitats used by the qualifying features of the SPA and Ramsar site (bird species identified in Sections 5.1 and 5.2) for foraging, commuting and/or roosting; and/or
- kill invertebrate species that are a foraging resource for the qualifying features.

For this reason, the Teesmouth and Cleveland Coast SPA and Ramsar have been scoped into the AA.

It is possible that the proposed Eston Road Highway Scheme, which has recently been submitted for outline planning but has yet to be formally determined, may be granted planning permission and be in place or under construction, before the remediation works are started. This will result in a change in baseline, as a currently culverted section of the Holme Beck will be daylighted as part of the Eston Road Highway Scheme. If this becomes the case, the likely effects will remain the same, however the risk of polluting the Holme Beck during remediation works will increase because a longer section of Holme Beck will be open.

Following a review of the data provided by INCA, any potential impacts from the loss of ponds within the proposed development site has been scoped out of further assessment.

Following the consultation response from Natural England, the potential impact from soil storage in other areas of the STDC and use of other soils from STDC within the proposed development site have not been assessed further in this HRA.

10 Stage 2 – Appropriate Assessment

Following the conclusion of potential disturbance or likely significant effects to the Teesmouth and Cleveland Coast SPA and Ramsar in the Screening Stage, further assessment has been undertaken. The following section comprises Stage 2 of the HRA process, the AA.

10.1 Historical and Baseline Conditions

As detailed in Section 3, the wider STDC site was a very active industrial site prior to 2015, when the SSI went into liquidation and a large portion of works within the STDC site stopped. Despite this, a number of industrial businesses are still active within the wider STDC site.

The Holme Beck runs along Eston Road through the proposed development site. The Cross Connector and Knitting Wife Beck run along the southern and eastern boundary of the proposed development site. Once these watercourses leave the Grangetown Prairie site, they are connected to the Cleveland Channel, which then flows in to the Lackenby Channel, the water flows next to the PD Ports Teesport site and the active SLEMS landfill and waste management facilities.

The habitats within the proposed development site primarily consist of open mosaic habitat, sparsely vegetated grassland, ponds, scrub and areas of hardstanding. The ponds within the proposed development site have little to know submerged or edge vegetation. It is therefore considered that the habitats within the proposed development site are not suitable for the coastal/ estuarine birds for which the Teesmouth and Cleveland Coast SPA and Ramsar are designated.

It is considered that the historic conditions of the proposed development site were likely worse than those of the current baseline. As detailed in Section 3, the proposed construction works are to remediate the proposed development site, removing much of the contamination that is currently present within the soils. Similarly, as a large portion of Holme Beck and the entirety of the Cross Connector and Knitting Wife Beck are culverted, any daylighting of these watercourses is likely to improve the ecological value of the proposed development site.

10.2 Methodology

The purpose of the AA is to undertake an objective scientific assessment of the implications for the internationally important sites' qualifying features potentially affected by the project in light of their conservation objectives. It is a transparent and iterative process, which is fully documented in this report. It provides the information necessary for RCBC to assess whether the project has an adverse effect on the integrity of internationally important sites.

Where significant effects have been identified during screening, or the significance of effects are uncertain, further consideration has been given to the potential for these effects to be of a sufficient scale and magnitude to hinder the

features of the internationally important sites from meeting their conservation objectives. This stage in the process also takes account of mitigation measures.

Professional judgement has been used in the interpretation of results in relation to assessment of effects, the significance of effects and consequences for the conservation objectives of internationally important sites. A precautionary assessment has been applied in line with current guidance, whereby an effect is deemed significant if the effect cannot be ruled out on the basis of objective information.

With respect to Teesmouth and Cleveland Coast SPA and Ramsar, the AA provides an assessment of the effects of the project in relation to the conservation objectives, outlines any further mitigation measures, and then concludes whether the project is considered likely to have an adverse impact on the integrity of Teesmouth and Cleveland Coast SPA and Ramsar internationally important.

10.3 Assessment of Effects

10.3.1 Likely Significant Effects – Without Mitigation

The construction works will occur 1.3km and 1.6km from the Teesmouth and Cleveland Coast SPA and Ramsar respectively, but the proposed development site is hydrologically connected to the internationally important sites through the Holme Beck, Cross Connector and Knitting Wife Beck.

During remediation, there is the potential for contaminated soil or accidental pollution to enter the Holme Beck. If Holme Beck, Cross Connector and/or Knitting Wife Beck are daylighted as part of the proposed development, the potential for contaminated soil or accidental pollution entering these watercourses increases. Any accidental pollution events or contamination of these watercourses could destroy and/or disturb the habitats used by the qualifying features of the SPA and Ramsar site (bird species identified in Sections 5.1 and 5.2) for foraging, commuting and/or roosting; and/or kill invertebrate species that are a foraging resource for the qualifying features.

Without mitigation, this potential significant effect cannot be scoped out at AA.

If the Eston Road Highway Scheme is implemented before remediation occurs, a 750m stretch of Holme Beck will be daylighted. This will result in a change in baseline. If this becomes the case, the likely effects of remediation will remain the same, however the risk of polluting the Holme Beck during remediation works will increase because a longer section of Holme Beck will be open.

10.3.2 Likely Significant Effects – With Mitigation

To ensure no significant effects on the integrity of the Teesmouth and Cleveland Coast SPA and Ramsar site, the following mitigation needs to be implemented:

- Provision and adherence to a Phasing Plan; and
- Provision and adherence to a CEMP.

10.3.2.1 Phasing Plan

Any daylighting works will include a phasing plan which will include details on:

- the decontamination of surrounding soils to ensure highly contaminated soils are removed in proximity to the culverts prior to the daylighting works; and
- timing of the works to ensure all daylighting works occur at an appropriate time (i.e. seasonal constraints of specific SPA and/or Ramsar bird species) to minimise the potential construction related pollutants occurring in a number of locations entering the River Tees at the same time.

A suitably qualified ecologist and water specialist will be consulted when writing any phasing plans.

10.3.2.2 Construction Environmental Management Plan

Any contamination that might be generated during construction (e.g. dust or disturbance of contaminated spoil) will be temporary. The construction environment will be controlled through the implementation of a CEMP.

The CEMP will set out the standards and procedures to which the developer/ contractor will adhere to, in order to manage the potential environmental impacts of construction works. The construction environment will also be managed through the implementation of the CEMP, which will set out methodologies to prevent and mitigate any accidents including but not limited to spills, storage of soils and control of construction related dust.

The CEMP will be in line with the Environment Agency's (EA) 'Pollution Prevention for Businesses' which details how construction sites can avoid causing pollution from construction related activities such as oil storage and/or spills and contamination of water[28]. A pollution incident response plan will be implemented as part of this CEMP.

Due to the distance of the proposed development works from the Teesmouth and Cleveland Coast SPA and Ramsar, it is considered that with implementation of a Phasing Plan and a CEMP, there will be no significant effect on the integrity of the Teesmouth and Cleveland Coast SPA and Ramsar.

10.3.3 In-combination Effects

Pollution entering the Holme Beck, Cross Connector and/or the Knitting Wife Beck from the proposed development site will be controlled through the implementation of a CEMP. Similarly, the Eston Road Highway Scheme has proposed the implementation of a CEMP and a SuDS pond to mitigate any pollution impacts from the scheme on the Teesmouth and Cleveland Coast SPA

[28] DEFRA and Environment Agency (2 May 2019) Guidance: Pollution Prevention for Businesses. https://www.gov.uk/guidance/pollution-prevention-for-businesses. Accessed 22 May 2020.

and Ramsar. These CEMPs will detail how any potential dust, spills or leakages will need to be managed within each of the proposed development sites.

There is the potential that these two developments could occur at separate times or at the same time, however the mitigation for both schemes separately or in-combination is considered sufficient to prevent any significant effects to the Teesmouth and Cleveland Coast SPA and Ramsar site.

Therefore, it is considered that there will be no significant in-combination effect on the integrity of the Teesmouth and Cleveland Coast SPA and Ramsar.

10.4 Summary

Based on the information provided in Section 10.3, it is considered that **with implementation of a Phasing Plan and CEMP, there will likely be no significant effects** on the integrity of the Teesmouth and Cleveland Coast SPA and Ramsar from the proposed development, either alone or in-combination with the Eston Road Highway Scheme.

It is considered likely that no further stages of the HRA process will be required.

Appendix A

Red Line Boundary for the Proposed Development Site

Legend

- Proposed Development Site Red Line Boundary
- Proposed Eston Road Highway Scheme Boundary
- STDC Site Boundary

Map Name	Appendix A - Proposed Development Site Red Line Boundary
Map Number	-
Discipline	Environment & Biodiversity

Date:10/06/2020 Scale at A3: 1:7,000

Grangetown Prairie Remediation

Redheugh House, Teesdale South, Thornaby Place,
Stockton on Tees, TS17 6SG
Tel +44 1642 356 590 | www.arup.com

Appendix B

Proposed Development Site Phasing and Estimated Remediation Dig Depths

Legend

Remedial Excavations

- Up to 1.5 mbgl
- Up to 2.5 mbgl
- Up to 4 mbgl
- Up to 5 mbgl

Culvert Routes (From Plans)

- Holme Beck (Open)
- Holme Beck (Culvert)
- Cross Connector (Culvert)
- Knitting Wife Beck (Culvert)

Site Plans

Redline

- Prairie

Notes:

Works to daylight Holme Beck to be confirmed.

Routes of Holme Beck, Cross Connector and Knitting Wife Beck taken from STDC drawings 42220 and PX90320. Actual locations should be confirmed before excavation.

CONTACT ARCADIS IN CASE OF ANY QUERIES.

N

Title: Prairie - Estimated Dig Depths - Prairie Site

Site: Redcar Steelworks - Prairie

Client:
South Tees Developement Corperation

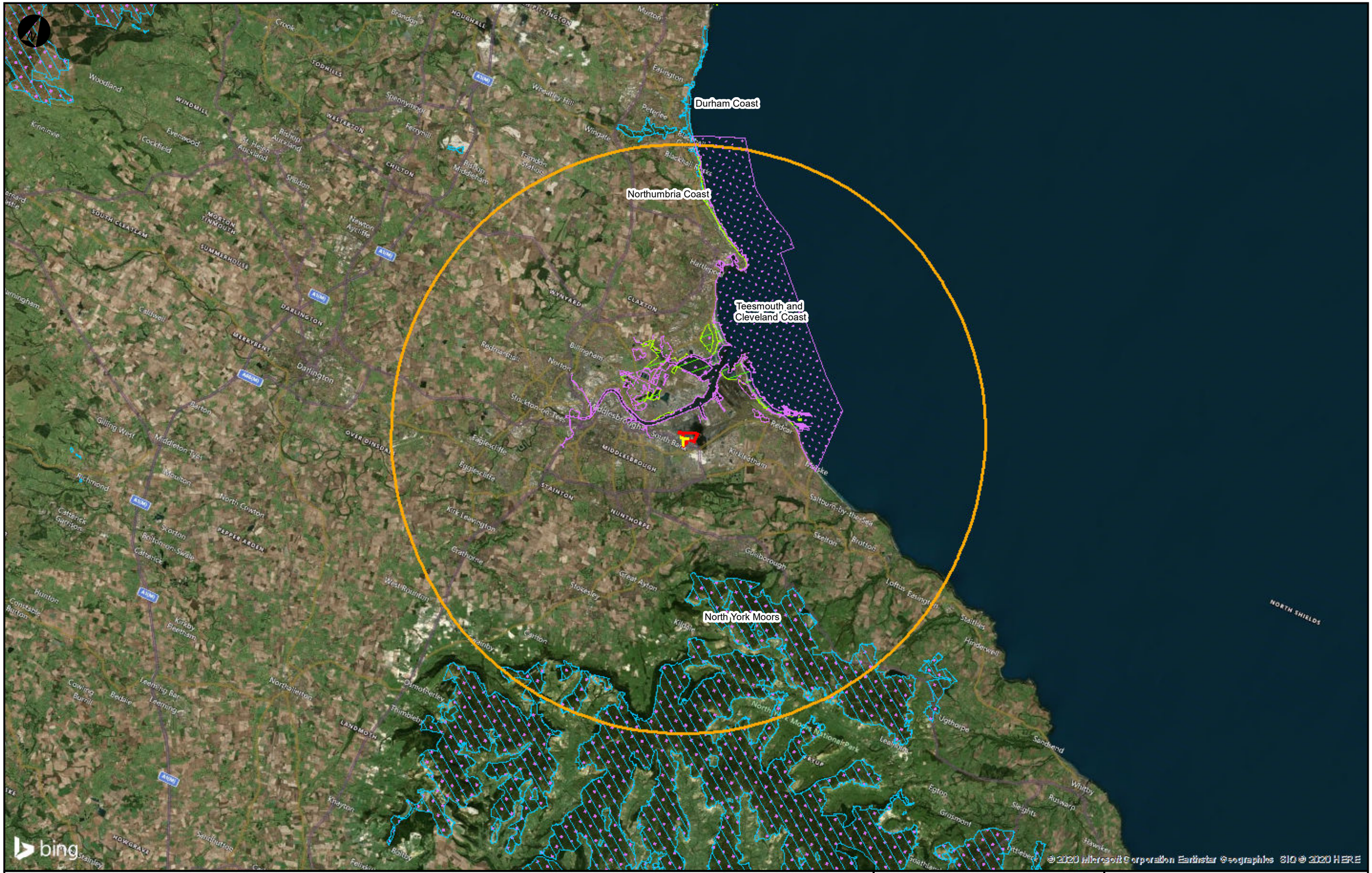
Project:
10035117

Date: 10/06/2020
Drawn By: JALM
DRG No: 10035117-AUK-XX-XX-DR-ZZ-0075-03-Prairie_Rem_Ex

ARCADIS Design & Consultancy for natural and built assets

Appendix C

Map of Internationally Important Sites under Consideration



Legend

- Proposed Development Site Red Line Boundary
- Proposed Eston Road Highway Scheme Boundary
- Special Area of Conservation
- Special Protection Areas
- Ramsar
- 20km Buffer

* The updated boundary for the Teesmouth and Cleveland Coast SPA was not available at the time of writing this report

Map Name: Appendix C- Internationally Important Sites within 20km

Map Number: -

Discipline: Environment & Biodiversity

Date:23/06/2020

Scale at A3: 1:239,539

Grangetown Prairie Remediation

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