

# LONG ACRES ENVIRONMENTAL STATEMENT

VOLUME 2: CHAPTER B

SITE DESCRIPTION AND SCHEME PROPOSALS

**Long Acres, South Tees**  
**Volume 2: Environmental  
Statement (December 2020)**

**Chapter B: Site Description and Scheme Proposals**

**Lichfields**  
**The St Nicholas Building**  
**St Nicholas Street**  
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## **B1.0 Introduction**

**B1.1** This Environmental Statement ('ES') Chapter describes the site and its relationship to the wider South Tees Development Corporation Area ('STDC') area (hereafter referred to as the 'Teesworks area'), sets out the background to the proposals, provides a description of the development, explains the scheme assumptions that have formed the basis of this Environmental Impact Assessment ('EIA'), and considers the design rationale underpinning the proposals, providing an indication as to why alternative schemes have not been taken forward.

**B1.2** This chapter is structured as follows:

- 1 **Section B2.0:** provides a description of the site;
- 2 **Section B3.0:** provides a description of the site's location and surroundings within the Teesworks area;
- 3 **Section B4.0:** provides information on the background to the development;
- 4 **Section B5.0:** sets out the planning policy context relevant to the development of the site and assessment of environmental effects;
- 5 **Section B6.0:** provides a description of the proposed development;
- 6 **Section B7.0:** summarises the construction methodology that has been used as the basis for identifying potential environmental effects during the construction period within technical chapters of the ES;
- 7 **Section B8.0:** summarises the 'embedded' primary and tertiary mitigation;
- 8 **Section B9.0:** discusses the design evolution and alternatives considered to the proposed development including a consideration of their potential environmental effects. Consideration is also given to the 'no development scenario';
- 9 **Section B10.0:** provides abbreviations; and
- 10 **Section B11.0:** sets out the references included within the chapter.

**B1.3** This Chapter is supported by the following Appendices:

- 1 **Appendix B1:** Existing on-site Infrastructure;
- 2 **Appendix B2:** Sensitive Receptors Plan; and
- 3 **Appendix B3:** Planning Drawings, including Parameters Plan and an Indicative Arrangement Plan.

## **B1.4 About the Author**

**B1.5** This ES has been coordinated by Katie Brown, Heather Overhead and Melissa Wilson all Senior Planners at Lichfields. Katie is a Practitioner Member of the Institute of Environmental Management and Assessment ('IEMA') and has 3 years' experience in co-ordinating EIAs for a range of major development projects across the United Kingdom ('UK'). Heather is working towards her EIA Practitioner membership of IEMA and has 1 year of experience in EIA projects. Melissa is working towards her EIA Practitioner membership of IEMA and has 2 years of experience in EIA projects. Their coordination role included the production of this chapter of the ES. Kate McGill, Associate Director at Lichfields, and Practitioner Member of IEMA, has reviewed this chapter in accordance with the EIA Regulation requirements. Kate has over 10 years of experience of co-ordinating EIAs for a range of development projects.

**B1.6** All involved in the coordination of this ES are also Chartered Planners of the Royal Town Planning Institute ('RTPI').

**B2.0**

## Site Description

**B2.1**

This section provides a description of the site's characteristics. It is supported by figures and appendices to aid the understanding of the site.

Figure B2.1 Development Site



### Development Site

**B2.2**

The development site is 67 ha in size. It is predominantly brownfield former industrial land and is free of active use and built development. It contains a licenced landfill site and is bisected by the Fleet watercourse as well as a road and rail line, as discussed in further detail below.

**B2.3**

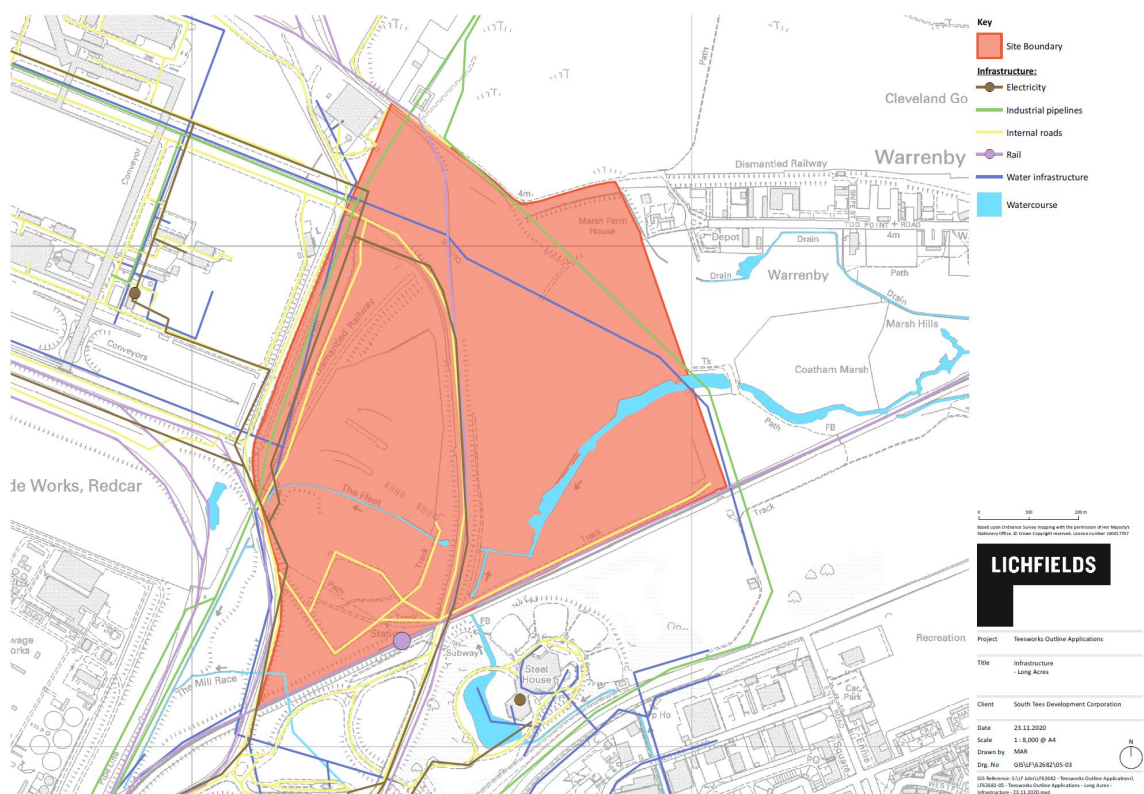
The development site is triangular in shape and its boundaries are defined by the existing surrounding infrastructure – roads and rail line. The site was previously partially occupied by the Warrenby iron and steel works and in part has been previously used as a licenced landfill for the disposal of by-products from iron and steel making, principally slag.

**B2.4**

Whilst the site is free from built structures, it contains a number of permanent roads and rail lines. This includes the former Hot Metals Transfer Railway line and adjacent road which cross the site from south to north and has an embankment which is 10m above ordnance datum ('AOD') at the southern end and 4m above surrounding ground level, which gradually lowers to meet existing ground levels at its northern end. The Fleet watercourse crosses the site in an east west direction, although it arcs in a southerly direction before heading in a north west direction.

- B2.5 The area to the east of the former Hot Metals Transfer Railway line and north of the Fleet watercourse was previously used as a landfill (referred to as CLE31) and is now a steep sided mound with a flat plateau at 19.5m AOD. The ground levels surrounding the mound vary from 7.5m AOD to 9m AOD. The ground cover on the plateau is principally the slag material from the landfill use, with the sides of the mound and beyond being covered in grasses and shrub type vegetation, with some trees alongside the former railway line and the Fleet.
- B2.6 The area to the south of the Fleet watercourse and north of the Darlington to Saltburn Railway line is a flat area that was prepared as a landfill site, but never used as such. There is very little variation in the ground levels which are circa 6m AOD throughout. The ground cover in this area is a mixture of bare ground and vegetation which comprises mainly grasses and scrub, and also includes a small clump of trees.
- B2.7 The area to the west of the former Hot Metals Transfer Railway line contains former internal road infrastructure at its southern end, and otherwise the ground cover is a mixture of grass and scrub-type vegetation interspersed with areas of bare ground comprising materials associated with former uses. The ground levels in this area variable according to on-site infrastructure and range from 11m AOD at the road embankment on the north western boundary of the site to 6m AOD in a relatively large flat area in the centre of this part of the site.
- B2.8 Figure B2.2 below depicts existing on-site infrastructure. Full versions of the individual components of this map are also included at **Appendix B1**. Much of this is associated either with the previous industrial uses on site or the wider industries within the surrounding Teesworks area.

Figure B2.2 On Site Infrastructure



- B2.9 An internal private road network exists across the whole of the Teesworks area and some of these roads are located within the development site. These include a road running in a north south direction alongside the route of the former Hot Metals Transfer Railway line, which

branches in a westerly direction in the northern part of the site. A small internal road network is also present in the south western corner of the site.

- B2.10 Historically, a freight rail network operated across the Teesworks area, parts of which are still operational. The former Hot Metal Transfer Railway crosses the site, in a north south direction. The Darlington to Saltburn Railway line, which provides the south east boundary of the site is an operational passenger railway line and, the Redcar British Steel station, from which services are currently suspended, is located on the boundary of the site, just to the south east of the intersection between the two railway lines.
- B2.11 National grid electricity infrastructure is present throughout the Teesworks area, and specifically, a high voltage power transmission line crosses under the site in a north south direction under the route of the internal road.
- B2.12 A number of watercourses are present across the Teesworks area. In relation to the site, the Fleet watercourse enters the site in a westerly direction from Coatham Marsh and arcs round in south westerly direction. It is then culverted in a north westerly direction under the former Hot Metals Transfer Railway and internal road and emerges on the other side where it continues in a straight culvert in a north west direction. Outside of the site, the Fleet continues in a culvert heading south until it discharges into Dabholm Gut.
- B2.13 The Teesworks area contains a large network of critical industrial utility infrastructure, which is shown on the Figure B2.2 (in green) and at **Appendix B1**. The operational RWE Breagh high pressure gas pipeline crosses the northern part of the site in a north-west south-east direction.
- B2.14 The Teesworks area contains various water infrastructure associated as shown above in Figure B2.2 (dark blue) and in full in **Appendix B1**. Water infrastructure present on the site comprises potable water supply pipes and an industrial water mains, both of which cross the northern part of the site in a north-west south-east direction.
- B2.15 The majority of the site is located within Flood Zone 1 and is thus land assessed by the Environment Agency ('EA') as having less than 1 in 1,000 annual probability of river or sea flooding. The culverted part of The Fleet and its immediate surrounds, along with two areas either side of the southern end of the road and railway embankment are designated as Flood Zone 2 by the Environment Agency, which is assessed as having between a 1 in 100 and 1 in 1,000 annual probability of flooding.
- B2.16 There are no designated heritage assets within the site, and it does not contribute to the setting of any listed building. There are no undesignated heritage assets on site, although there is potential for some of local importance relating to the 19<sup>th</sup> century steelworks, below ground.
- B2.17 There are no Public Rights of Way ('PROW') within the site. The site is not within an Air Quality Management Area ('AQMA').
- B2.18 In respect of habitat and ecology, there are no designated sites within the development site.

## **B3.0 Site Location and Surroundings**

B3.1 This section of the chapter provides details on the site's location and surroundings. It concludes by summarising the sensitive receptors for the EIA.

### **Site Location**

B3.2 The site is located within the north east part of the Teesworks area and approximately 2.4km north west of Redcar town centre and 8.8km north east of Middlesbrough town centre. It is around 0.8km south from the coast and around 2.8km south east of the bank of the River Tees.

B3.3 It is located within the north eastern part of the Teesworks area and is the area identified as the 'Teardrop site and CLE31' in the STDC Master Plan (p. 33). In relation to the wider Teesworks area, it lies to the south east of the 'Redcar Works Complex', to the west of 'Coatham Marsh' and to the north of the 'Redcar Steel House and surrounding area'.

B3.4 The site is immediately bounded by:

- The Darlington to Saltburn Railway line to the south east;
- A private internal road and open industrial land to the north west;
- A section of the former Hot Metal Transfer railway line, open land and South Gare Road to the north; and
- The boundary wall of Marsh Farm House and adjacent industrial unit and by open land to the north east.

B3.5 The site's location and its surroundings are shown on Figure B2.1 below. A Site Location Plan is included at **Appendix A1** of this ES.

### **Surroundings**

B3.6 An aerial photograph of the site and its wider surroundings is provided below (Figure B3.1).



Figure B3.1 The Site and Surroundings



- B3.7 Much of the site’s immediate surroundings comprise vacant industrial land associated with the former iron and steel making industries at South Tees. Directly south east of the site is the Darlington to Saltburn Railway line and beyond this is the former Steel House office complex which, although no longer in use, still contains office buildings and associated infrastructure such as roads and car parking. To the south of this is the A1085 Trunk Road and Trunk Road Roundabout; beyond to the south east this lies a small industrial estate and the residential area of Dormanstown, while to the south west is the Wilton International complex and the site of the Anglo American Materials Handling Facility, which has not yet been constructed.
- B3.8 To the east of the site, and extending south to the A1085 is a relatively large area of open space which is designated as the Coatham Marsh Local Wildlife Site (‘LWS’), part of which is within the Teesmouth and Cleveland Coast Special Protection Area (‘SPA’), Ramsar Site and Site of Special Scientific Interest (‘SSSI’) designations. To the north of Coatham Marsh is a small industrial area known as Warrenby, and to the east is the residential area of Coatham. Beyond Warrenby and extending along the coastline is the area known as South Gare and Coatham Sands; comprising the dunes and coastline which are included in the Teesmouth and Cleveland Coast SPA, Ramsar Site and Site of Special Scientific Interest (‘SSSI’).
- B3.9 To the north west of the site is the former Redcar Works Complex which was home to British Steel Corporation’s iron making complex which is sparsely populated with large scale redundant plant and buildings such as the Raw Materials Handling facility, the Sinter Plant and extensive conveyor systems. Beyond this area is the Redcar Bulk Terminal which is in use for handling bulk materials.

- B3.10 South of the former Redcar works complex is the Bran Sands Lagoon, an area formerly used for landfill and the operational Northumbrian Water ('NWL') Bran Sands effluent treatment plant. To the south east of this is a channel called Dabholm Gut and then Teesport which is operated by PD Ports. As one of the largest ports in the UK, it includes two container terminals, three general cargo berths, three Ro-Ro berths, rail sidings and extensive areas of warehousing and open storage areas.
- B3.11 To the south west of the site is the area previously occupied by the Warrenby iron and steel works, although it is now free from built structures, and beyond this to the south is the operational British Steel Teesside Beam Mill facility, although the area nearest the site used for external storage of associated products.
- B3.12 Other operations and operators within the Teesworks area include Redcar Bulk Terminal, Tarmac, Sembcorp and British Steel.

### **Access and Connectivity**

- B3.13 The development site does not have any direct connections to the public highway network; however, it is well served by the internal STDC road network (see paragraph B2.15 and Figure B2.2). Whilst Tod Point Road runs along part of the northern boundary of the site, there is no access into the site from it and it is not proposed to create an access. The closest link to the local road network is at the Trunk Road Roundabout (also known as Steel House Roundabout) which is 400m south of the site and is on the A1085 Trunk Road. This road provides connectivity to the local road network and the surrounding residential areas at Redcar to the east, and Grangetown, South Bank, Teesville and Berwick Hills to the west. The A1085 also connects directly to the A66 which links into the strategic road network via the A19 and A1M.
- B3.14 The A66 links to Middlesbrough, Stockton-on-Tees and Darlington to the west, while the A19 links to Hartlepool, Peterlee and Sunderland to the north, and to Thirsk and York to the south. The A19 and A1(M) provide north-south links into the strategic road network.
- B3.15 Darlington Station is located approximately 18 miles to the south west. The station is on the East Coast Mainline which provides north-south rail links to London Kings Cross and to Durham, Newcastle and beyond. Darlington Station is connected directly to the Teesworks area via the Tees Valley line which connects Darlington to Saltburn. There are three stations on this rail line within the Teesworks area; the Redcar British Steel Station, located within the southern extent of the site, where services have been suspended since 2019; the South Bank Station, to the south west of the site, which is operational; and Grangetown station to the south west of the site which has been closed for a number of years.
- B3.16 Teesside International airport provides national and international air connectivity to the region. The airport is located approximately 15 miles to the south west, is within a 30-minute drive of the Teesworks area and is adjacent to the Teesside Airport train station which is on the Tees Valley rail line.
- B3.17 Walking and cycling facilities in the vicinity of the site and the surrounding area are limited. The Teesdale Way PROW runs parallel to the South Bank railway line. The nearest National Cycle Route ('NCR') is Route 1 (NCR1) which runs across Redcar Road and parallel to Middlesbrough Road, approximately 1.3km (linear distance) to the south of the site. NCR1 provides strategic connections between Saltburn, Marske, Redcar and Middlesbrough.
- B3.18 There are currently no bus services in the immediate vicinity of the site.

## **Environmental Designations**

- B3.19 The surrounding environmental designations to the development site are shown on the map of Potential Sensitive Receptors at **Appendix B2**.
- B3.20 The Teesmouth and Cleveland Coast SPA, Ramsar Site and SSSI designations cover areas of land to the east and north of the site including the coastline, and extend to cover the River Tees, Bran Sands Lagoon and Dabholm Gut. The closest part of the designated sites is at Coatham Marsh, which is immediately adjacent to the east of the site. Coatham Marsh is important for its wetland habitats supporting non-breeding waterbirds. More widely, the areas covered by the designations include intertidal sand and mudflat, saltmarsh and freshwater grazing marsh, saline lagoons, sand dune and shingle, rocky shore and shallow coastal waters that are able to support national and international bird species.
- B3.21 The area known as Coatham Marsh, to the east and south east of the site is also designated as an LWS and is partially covered by the Teesmouth and Cleveland Coast SPA, Ramsar Site and SSSI designations. Eston Pumping Station LWS is 0.6km south west of the closest boundary of the site and is designated for its mosaic of habitats including Urban Grassland, a form of brownfield habitat.
- B3.22 The nearest AQMA to the site is the Scarborough AQMA, which is located around the village of Staithes, approximately 13 miles to the south east of the site.

## **Heritage Receptors**

- B3.23 The nearest listed buildings are a Grade II listed barn and stable to the north-west of Marsh Farmhouse (List UID: 1139620) and the Grade II listed Marsh Farmhouse and Farm Cottage (List UID: 1160308), which are located 35m to the north east of the site. The site's setting does not contribute to the significance of Marsh Farmhouse or the barn and stable block, which was largely separated from its wider agricultural context over a hundred years ago with the expansion of industry in the surrounding area. The immediate setting of the heritage assets is degraded and characterised by light industrial uses to the north and east. A large bund (approximately 20m above ground level) within the site, which is to be retained, physically and visually separates the potentially developable area of the site from the heritage assets.
- B3.24 The nearest conservation area is the Coatham Conservation area, which is approximately 0.7 miles to the east of the site and is physically and visually separated from it by the Warrenby industrial area.

## **Residential and Leisure Receptors**

- B3.25 The closest residential receptor to the site is a single dwelling – Marsh Farmhouse, located 45m east of the northern part of the site. This is separated from the site by an area used for engineering repairs. The houses in the residential area of Dormanstown are 600m south east of the site and are separated from it by the former Steel House complex, the A1085 and an industrial estate. The residential area of Coatham is around 900m to the north east of the site.
- B3.26 Cleveland Golf Club, a links golf course falling within the Teesmouth and Cleveland Coast SSSI is located 50m to the north east of the site at its closest point, although the majority of it is separated from the site by the Warrenby industrial area.

## Summary of Sensitive Receptors

- B3.27 In light of the information presented in the above two sections of the chapter and with an understanding of the site and its surroundings, the following receptors are likely to be those most likely to be sensitive to the impacts arising from the development:
- 1 Users of the highway network: A1085 Trunk Road, A1053, A174, West Coatham Lane and the A1042 Kirkleatham Lane;
  - 2 Designated sites - including Teesmouth and Cleveland Coast SPA and Ramsar Site and Teesmouth and Cleveland Coast SSSI;
  - 3 Landscape Character Areas – including industrial, urban, intertidal estuary, coast and peninsula, Coatham Marsh, Eston Hills, Salthouse Wetlands, rural and urban green space;
  - 4 Nearby sensitive viewpoints;
  - 5 Surrounding built environment;
  - 6 Nearby residential receptors, including those in South Bank, Grangetown, Old Lackenby/Eston, Newport, Middlesborough, North Ormesby. Dormantown and Redcar and the mobile home travellers' site at King's George Terrace, mobile homes site at Redcar Beach front and Marsh Farmhouse;
  - 7 Redcar beachfront;
  - 8 Surface water including the River Tees estuary, Holme Beck Culvert, Boundary Beck Culvert, Kinkerdale Beck Culvert, the Mill Race Culvert and Knitting Wife Culvert;
  - 9 Ground water including Mercia Mudstone and Superficial Aquifer;
  - 10 Regional landfill void capacity;
  - 11 Regional materials availability;
  - 12 Waste Management Facilities;
  - 13 Construction and Operational employment;
  - 14 Construction workers;
  - 15 Off-site Human Health Receptor;
  - 16 Construction and Operational Economic output;
  - 17 National and local carbon targets and GHG emissions;
  - 18 Below ground heritage assets - Redcar Iron Works from late 19th Century;
  - 19 On-site habitats including open mosaic habitats, 'other neutral grassland', 'ruderal/ephemeral', dune grassland and watercourse;
  - 20 On-site species including bats, breeding birds, reptiles, common toad, dingy skipper butterfly, grayling butterfly, invertebrates, brown hare and European Eel;
  - 21 Eston Pumping Station Local Wildlife Site; and
  - 22 Coatham Marsh Local Wildlife Site.
- B3.28 A sensitive receptors plan is included at **Appendix B2** of this ES.
- B3.29 Further consideration of the receptors is provided in Chapter C to O of the ES.

## **B4.0 Background to the Development**

- B4.1 Chapter A of this ES sets out information on STDC as the applicant of this outline planning application. This section provides further information regarding STDC, its Master Plan and how the proposed development site sits within this regeneration strategy and amongst wider development in the area. It also sets out a planning history for the site.
- B4.2 As set out in Chapter A, STDC is the third Mayoral Development Corporation to be established. It was created in August 2017 by the then Secretary of State for Communities and Local Government pursuant to Section 198 of the Localism Act 2011 (Ref 1) at the request of the Tees Valley Combined Authority (“TVCA”) and was established by The South Tees Development Corporation (Establishment) Order 2017 (Ref 2).
- B4.3 Prior to the establishment of the STDC, the area was used in the iron and steel making industry which had been present on Teesside for approximately 170 years. However, the liquidation of Sahaviriya Steel Industries (“SSI”) in October 2015 caused an end to the majority of the industry on Teesside. The loss of this heavy industry left large areas of land, within what is now the Teesworks area, vacant or under used with ground contamination and built structures associated with that heavy industry.
- B4.4 STDC was established as the public sector vehicle for delivering area-wide, economic regeneration in the area to augment the wider economic growth plans of the Tees Valley. The extent of the Teesworks area covers approximately 1,800 ha and is shown in blue on Figure B4.1 below. The site boundary is also marked in red on this figure.

Figure B4.1 The Site in the Teesworks Area



## STDC Master Plan (2019)

- B4.5 STDC produced its Master Plan (Ref 3) to support development of the area through the local plan-making and planning application processes. The Master Plan sets out the vision for transforming the Teesworks area into a world-class, modern, large-scale industrial business park. It provides a flexible development framework where land plots can be established in a variety of sizes to meet different occupier needs in the most efficient manner possible.
- B4.6 It identifies five distinct ‘zones’ within the Teesworks area using the area’s opportunities and constraints alongside the Master Plan’s vision. The majority of this development site is located within the ‘Northeast Industrial Zone’. This zone is identified as having the potential for (though not restricted to) advanced manufacturing, research and development, testing and laboratory services and industrial and technology training. The Masterplan recognises the existing bridge links over pipelines and passenger rail and the existing passenger rail stations as assets and opportunities for the area.
- B4.7 In conjunction with the Master Plan, STDC is also in the process of developing area wide co-ordinated strategies in relation to the following topics, to aid Teesworks in its effective delivery of development:
- Transport;
  - Environment and Biodiversity;
  - Port Facilities and Logistics;
  - Water and Flood Risk Management;
  - Energy and Utilities;
  - Ground Remediation;

- Materials and Waste;
- Demolition and Salvage;
- Construction Logistics; and
- Open Space, Public Realm, Heritage and Placemaking.

B4.8 These strategies will serve to inform decisions by Teesworks as to how to effectively plan and deliver development and will, therefore, be beneficial over the lifetime of the Teesworks regeneration project. It is expected that the strategies will be considered by Teesworks at the detailed design stage of development being brought forward pursuant to any approval of this outline planning application as explained, where relevant, in chapters of this ES.

## **Commercial Overview and Market Demand**

B4.9 The scale and location of the Teesworks area provide significant economic opportunities and it is within this context that the proposed development is intended to be delivered.

B4.10 As set out in Chapter A of this ES (paragraph A2.8-A2.9) the planning application for the proposed development is one of five outline planning applications in the Teesworks area being submitted by STDC simultaneously. The cumulative effects of this proposed development, alongside the other four outline applications and other committed and proposed developments in the wider area will be robustly tested within the cumulative effects chapter of this ES (e.g. Chapter N) and the cumulative effects chapters of the other four ESs. The applications are being prepared by the same project teams who have been in regular dialogue to discuss and agree the scope of each EIA and approach to cumulative effects and mitigation.

B4.11 The simultaneous submission of the five outline planning applications will allow the Council to consider the impact of each scheme with full awareness of the likely impacts arising from the scale of development proposed overall. This provides a transparent and robust approach which recognises the potential for the impacts of the schemes to have cumulative effects, whilst allowing the site-specific matters and impacts to be addressed by each application.

B4.12 The locations of the four other outline applications being submitted by STDC are shown in Figure B.4.2 and details of the schemes proposed are set out in Table B.4.1 below.

Figure B4.2 The Teesworks Application Sites



Table B4.1 Other Teesworks Applications

Site	Site Area	Use Classes Proposed	Maximum quantum of Floorspace proposed	Maximum development height proposed
Dorman Point	57.8	B2/B8 with ancillary E (offices)	139,353 sqm (gross)	46.8m AOD
Lackenby	35.8	B2/B8 with ancillary E (offices)	92,903 sqm (gross)	46m AOD
The Foundry	133.5	B2/B8 with ancillary E (offices)	464,515 sqm (gross)	46.2m AOD
Steel House	24.4	E (Office use)	15,794 sqm (gross)	33.8m AOD

### Other Developments in the Area

B4.13 Whilst a planning history of the application site is set out below, there are other developments in, or likely to affect, the Teesworks area that are of a scale or nature that will influence the development of the area as a whole. These are discussed below, while the full list of schemes considered in the cumulative assessment is provided in Chapter A, Section A.4: Scope of the EIA (see Table A4.1).

B4.14 The other developments relevant to the overall development of the Teesworks area are:

- York Potash Project:** The York Potash Project comprises the development of a new underground mine for the winning and working of polyhalite and its handling and transportation to a new harbour facility for export to the international marketplace. The overall project is made up of a number of component parts, for which different consents have been granted including a Development Consent Order ('DCO') (No. 772 made on



20/07/16) and a number of key planning permissions (including R/2017/0906/OOM, R/2018/0139/VC and R/2014/0627/FFM). Together the consents allow for the winning and working of polyhalite and the construction of associated infrastructure (such as a Minehead at Doves Nest Farm and an underground tunnel), a new harbour facility at Bran Sands, a new Mineral Handling Facility on land adjacent to the Wilton International Complex, an overhead conveyor on land between Wilton International Complex and Bran Sands and a new storage facility at Bran Sands.

- **South Industrial Zone:** Outline planning consent (Ref. R/2020/0357/OOM) was granted on 3 December 2020, for up to 418,000sqm of flexible general industry and storage and distribution uses at land at South Industrial Zone in the Teesworks area. As the consent is for outline planning permission with all matter reserved (except for access) it provides flexibility in terms of the layout, scale and quantum of development within the established parameters. The parameters are such that they would allow development for use by the offshore wind industry if the commercial opportunity arises.
- **River Tees Quay:** On 9<sup>th</sup> November 2020 STDC submitted two detailed planning applications relating to the demolition of the existing wharf, jetties and other minor infrastructure along the riverbank at South Bank, capital dredging to create a berth pocket and construction and operation of a new solid piled quay set back into the riverbank. Due to the scale of the proposed quay and the multiple land ownerships involved it is to be constructed in two phases. Consequently, STDC has submitted two separate planning applications: one for the phase 1 quay and the other for the phase 2 area. There is a small overlap between the phase 1 and 2 areas where an element of dredging will need to take place as part of each phase. Separate applications have been made to the Marine Management Organisation ('MMO') for the Marine Licences necessary for the associated dredging of the approach channel and berth pocket and the disposal of the dredged material at sea. STDC is intending to commence phased construction of the facility during 2021 to enable the first section of the quay to be in operation by 2023 (an approximately three-year construction phase). Phase 1 would result in a quay length of up to 700m. The quay would be extended up to the full 1,300m (equating to a total useable berth length of 1,050m) as required in phase 2, based on market demands.
- **Net Zero Teesside:** In February 2019 Oil and Gas Climate Institute ('OGCI') Climate Investment Holdings LLP submitted an application for a scoping opinion to the secretary of state under the Infrastructure Planning Environmental Impact Assessment Regulations 2017 for a proposed full chain Carbon Capture Usage and Storage ('CCUS') project. The proposed project, known as Net Zero Teesside ('NZT'), will consist of an electricity generating station with up to three gas fired units that will be fitted with carbon capture technology. The carbon capture element of the project will capture and export CO<sub>2</sub> from the proposed development to an offshore storage location. The carbon capture technology will be powered by the generating station which will provide surplus electricity to the grid. It is proposed to locate the generating station element of the project within the land identified as Redcar Works Complex in the STDC Master Plan, directly to the south east of the development proposed in 'The Foundry' scheme described above. The proposed application boundary of the NZT scheme overlaps to differing extents with the planning application boundaries of the five planning applications described above. In relation to the site, which is the subject of this ES, the peripheral parts of the western side of the site are within the proposed application boundary of the NZT scheme, and a spur forming part of the proposed NZT site cuts across the eastern side of the site. Teesworks is working with OGCI to ensure that both the NZT project and the development proposed in this application are compatible both in terms of physical arrangement and programmes for construction / delivery. Teesworks is providing information sufficient to enable OGCI to factor in this outline

planning application as an assumed commitment into any Environmental Assessment prepared to accompany the DCO application. Given that a draft DCO has not yet been submitted, the NZT development has been scoped out of further assessment in the Cumulative and Residual Effects Chapter of this ES.

- **Demolitions:** Some of the other sites in the Teesworks area, where outline planning applications are simultaneously submitted, contain a number of redundant structures associated with the area's former use for iron and steel making. Most of these structures will need to be demolished for other proposed schemes, to go ahead. It is envisaged that consent for their demolition will mostly be obtained by way of the Prior Approval process where the method of demolition and site restoration would be fully established, assessed, mitigated and controlled through that consenting process. In certain instances, where appropriate, screening will be carried out to establish any need for Habitat Regulations and Environmental Impact Assessments relating to those demolition schemes.

## Planning History

- B4.15 Development proposals at the site are largely historic by their nature, however the following are relevant to this EIA.
- B4.16 Planning permission was approved by Redcar and Cleveland Borough Council ('RCBC') on 27<sup>th</sup> September 2019 (reference. R/2019/0427/FFM) for the following development:
- "Demolition of structures and engineering operations associated with ground preparation and the temporary storage of soils and its final use in the remediation and preparation of land for regeneration and development."*
- B4.17 This application included most of the site which is the subject of this ES and much of the surrounding area within the control of STDC. It sought detailed planning permission for engineering operations associated with two distinct elements of ground preparations works across the Teesworks area. Firstly, for engineering operations associated with the temporary storage of soils in mounds, and secondly for its final use in the remediation and preparation of land (including most of the site) for redevelopment in line with the STDC Master Plan.
- B4.18 This permission is of relevance to this EIA insofar as it grants permission for the storage of soil in two mounds on the site. At the time of preparing this Statement, the permission has not been implemented and the existing baseline position regarding earthworks has been taken into account in this EIA. Further information on earthworks are included within the Section B7.0 of this chapter.

## B5.0 **Development and Policy Background**

B5.1 This section provides an overview of planning policy relevant to the determination of the planning application and to the consideration of environmental effects of the proposed development.

B5.2 A more detailed appraisal of all relevant policy is provided in the technical Chapters C to M of this ES, as well as in the Planning Statement which forms a standalone document to this submission.

### **Planning Policy Context**

#### **Statutory Development Plan**

B5.3 The statutory development plan for RCBC currently comprises:

- Redcar and Cleveland Local Plan (adopted May 2018) (Ref 4); and
- The Tees Valley Joint Minerals and Waste Development Plan Documents, comprising:
  - a Minerals and Waste Core Strategy DPD (adopted September 2011) (Ref 5); and
  - b Minerals and Waste Policies and Sites DPD (adopted September 2011) (Ref 6).

B5.4 The western half of the site is identified in the Redcar and Cleveland Local Plan as being within the Teesworks area (Policy LS4), whilst the eastern half is within a Green Wedge (Policy N2) and outside of the identified 'Development Limits' (Policy SD3). Parts of the northern and eastern edges of the site abut or are close to the boundaries of the Teesmouth and Cleveland Coast Special Protection Area ('SPA') Ramsar site and SSSI, potential impacts to which are considered by Policy N4 (Biodiversity and Geological Conservation).

#### **Policy LS 4 (South Tees Spatial Strategy)**

B5.5 Policy LS 4 (South Tees Spatial Strategy) of the adopted Local Plan sets out a series of key economic, environmental and connectivity objectives for the Teesworks area. Those of particular relevance include the following:

*'a. deliver significant economic growth and job opportunities through the South Tees Development Corporation and Tees Valley Enterprise Zone at Wilton International and South Bank Wharf;*

*b. support the regeneration of the South Tees Development Corporation area through implementing the South Tees Area Supplementary Planning Document;*

*e. support the expansion and protection of the port and logistics sector;*

*f. improve existing employment areas and provide a range of modern commercial premises that meet contemporary business requirements including the target sectors of the South Tees Area Supplementary Planning Document;*

*h. give the area an identity and make it attractive to inward investment;*

*j. support the existing steel industries and take a lead role in supporting the future regeneration of former steel sites as part of the South Tees Development Corporation;*

*l. encourage clean and more efficient industry in the South Tees area to help reduce carbon dioxide emissions and risk of environmental pollution;*

- o. improve and maintain access links between South Tees and the strategic road network;*
- u. maintain and enhance walking and cycling routes from nearby towns to the South Tees employment areas;*
- w. enhance the environmental quality of employment through well planned boundary treatments;*
- x. secure decontamination and redevelopment of potentially contaminated land;*
- y. protect European sites, and safeguard and improve sites of biodiversity interest particularly along the River Tees and the estuary and encourage integrated habitat creation and management;*
- z. enhance the environmental quality of the River Tees and coastline;*
- aa. safeguard and enhance the significance of buildings, sites, settings and areas of heritage and cultural importance including the 'Dorman Long' tower at South Bank Coke Ovens supporting its adaptation to enable alternative uses; and*
- ab. encourage improvements to access, interpretation and wildlife conservation and biodiversity across the area.*

#### **Policy N2 (Green Infrastructure)**

- B5.6 Policy N2 (Green Infrastructure) of the Local Plan aims to protect and enhance the borough's green infrastructure network. It provides a restrictive approach to development within 'green wedges' as defined on the Policies Map, which it describes as '*open areas within the main built-up area, but outside of development limits...and are valuable for local amenity, recreation and wildlife*'. It states that development within green wedges will only be allowed where it complies with a set of criteria.

#### **Policy SD3 (Development Limits)**

- B5.7 Policy SD3 (Development Limits) of the Local Plan takes a positive different approach to development proposals within the 'development limits' (as defined on the Policies Map) and aims to restrict certain development outside of the 'development limits'.

#### **Policy N4 (Biodiversity and Geological Conservation)**

- B5.8 Policy N4 (Biodiversity and Geological Conservation) of the Local Plan aims to protect and enhance the borough's biodiversity and geological resources. In relation to the Teesmouth and Cleveland Coast SPA and Ramsar site, it requires an Appropriate Assessment ('AA') for development that may have a significant effect. In such cases, for the development to be permitted the AA must demonstrate that, taking into account mitigation, it would not result in adverse effects on the site's integrity. In relation to the Teesmouth and Cleveland Coast SSSI, development which would have an adverse effect on the site's notified interest features will be resisted.
- B5.9 A full schedule of the relevant planning policies is provided within the standalone Planning Statement which accompanies the outline planning application. That Planning Statement assesses the proposals against the statutory development plan policies and other material considerations in order to establish the acceptability of the development in respect of planning policy.

## Other Material Considerations

### National Planning Policy Framework (2019)

- B5.10 The National Planning Policy Framework ('NPPF') (Ref 7) is a material consideration in the determination of planning applications.
- B5.11 The NPPF contains the Government's planning policies for England. The NPPF states that planning policies and decisions should play an active role in guiding development towards sustainable solutions and in doing so should take local circumstances into account to reflect the needs and opportunities of each area (paragraph 9 and 10).
- B5.12 It promotes sustainable growth and Chapter 6 (Building a Strong and Competitive Economy) puts significant weight on the need to support economic growth and productively, taking into account local business needs and wider opportunities for development. The NPPF recognises this as particularly important where Britain can be a global leader in driving innovation.
- B5.13 Chapter 6 of the NPPF also recognises that planning policies and decisions should recognise and address the specific locational requirements of different sectors, including storage and distribution operations at a variety of scales and suitable accessible locations.
- B5.14 The storage and distribution service sector is therefore recognised as a key economic sector in its own right, employing high levels of people directly. Its essential role in supporting other key sectors that rely on efficient movements of goods is also widely acknowledged.
- B5.15 Chapter 15 (Conserving and enhancing the natural environment) at paragraph 175 provides a set of principles which should be applied in the determination of planning applications, which, at point (d), include *'development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse impact on it...should not normally be permitted.'* In reference to SPAs and Ramsar Sites, paragraph 177 states that the presumption in favour of development, which is at the heart of the framework, *'does not apply where the plan or project is likely to a significant effect on a habitats site...unless an Appropriate Assessment has concluded that the plan or project will not adversely affect the integrity of the site.'*
- B5.16 The relevant NPPF chapters comprise:
- Chapter 6: Building a Strong and Competitive Economy;
  - Chapter 9: Promoting sustainable transport;
  - Chapter 11: Making efficient use of land;
  - Chapter 14: Meeting the challenges of climate change, flooding and coastal change; and
  - Chapter 15: Conserving and enhancing the natural environment.

### The South Tees Area Supplementary Development Plan (SPD) (May 2018)

- B5.17 The South Tees Area Supplementary Planning Document ('SPD') (Ref 8), prepared by RCBC, supports the economic and physical regeneration of the South Tees Area. It sets out the vision and core objectives for the area and provides greater detail on how adopted planning policies will be interpreted. The SPD is supported by the South Tees Regeneration Masterplan (details of this are summarised below), which has been prepared by STDC and is a background study to the SPD.
- B5.18 The SPD includes a vision for the transformation of the area into *"...a hotbed of new industry and enterprise for the Tees Valley..."* with the creation of 20,000 new jobs focussing on higher skilled sectors centred on *"...manufacturing innovation and advanced technologies..."* whilst achieving the remediation of land and safeguarding biodiversity.

- B5.19 The SPD includes a number of Strategic Development Principles intended to guide planning applications associated with the redevelopment of the Teesworks area. Those of particular relevance to the proposed development include:
- STDC1 (Regeneration Priorities): provides a series of priorities for the South Tees area in line with the SPD's Vision and Objectives. These include a strong alignment with the Government's Industrial Strategy, a co-ordinated world class offer, promotion and support for the expansion of existing port facilities, support for uses associated with advanced manufacturing, the low carbon and circular economy and for the creation of high-skilled employment and to support development which makes the best use of available land and existing infrastructure;
  - STDC 4 (Economic Development Strategy): supports opportunities for specialist industries as well as the growth and expansion of existing operators and development proposals that will increase the attractiveness of the area for new users;
  - STDC 7 (Natural Environmental Protection and Enhancement): requires development proposals to respond to their environmental setting and to protect, and where possible enhance, biodiversity and geodiversity interests;
  - STDC8 (Preserving Heritage Assets): provides protection for retention of assets of heritage or cultural importance;
  - STDC9 (Site Remediation): expects remediation of land to be proportionate, based on a risk assessment and proposed future uses, and, where appropriate to provide for environmental betterment;
  - STDC10 (Utilities): expects new development to be adequately supported in terms of utilities and any necessary infrastructure; and
  - STDC12: (North East Industrial Zone): supports (though does not restrict) development proposals relating to advanced manufacturing, research and development, testing and laboratory services and industrial and technology training.

### **South Tees Regeneration Master Plan**

- B5.20 As has previously been discussed in this Chapter of the ES, the South Tees Regeneration Master Plan was published in November 2019. The Master Plan does not form part of the statutory development plan though it has closely informed the preparation of, and is aligned with, that statutory policy framework.
- B5.21 The Master Plan identifies the application site as being part of the Northeast Industrial Zone (as referenced above) and sets out a development overview for the area.
- B5.22 It identifies the Northeast Industrial Zone as having the below assets and opportunities:
- Approximately 348 acres of available land;
  - Existing bridge links across pipeline and entry road for potential connection to the Central Industrial Zone;
  - Existing bridge link over passenger rail for potential link between north east parcels;
  - Existing ecological diversity;
  - Existing former British Steel headquarters building (Steel House);
  - Close proximity to power grid connections; and
  - Existing passenger rail station.

- B5.23      The Master Plan sets out that the goal for the Northeast Industrial Zone is to activate underutilised land within the Teesworks area where new imaginative uses can incubate and become scalable. It also identifies that redevelopment of the zone will need to balance the importance of new manufacturing and job creation with the beauty and integrity of the North Sea coastal environment.

## B6.0 **Description of Development**

B6.1 This ES relates to the proposed development of general industrial and storage or distribution facilities floorspace, with ancillary office accommodation, parking and associated works. It also assesses the principle of realigning the Fleet watercourse.

B6.2 The description of development is as follows:

*“Outline planning application for the development of up to 185,806 sqm (gross) of general industry (Use Class B2) and storage or distribution facilities (Use Class B8) with office accommodation (Use Class e), HGV and car parking, works to watercourses including realignment and associated infrastructure works. All matters reserved”*

### **Development Parameters**

B6.3 Since the application is submitted in outline, and until the accommodation requirements of end-users are known, the final layout and scale of buildings cannot be established. The EIA is therefore supported by a Parameters Plan which is submitted for approval and this is included at **Appendix B3**. This Plan provides details of the scheme’s fixed development parameters (including Potential Development Areas, maximum building height parameters and indicative vehicular access points and potential areas of access / egress into and out of the site).

B6.4 Subsequent reserved matters applications will be required to be submitted in accordance with the Parameters Plan and it is anticipated that a planning condition will be attached to any outline planning permission requiring such. The parameters therefore provide flexibility regarding how the site will ultimately be developed whilst providing all parties with a sufficient level of certainty about the development in order to undertake the appropriate level of EIA.

B6.5 End users are likely to comprise typical manufacturing and storage or distribution occupiers.

B6.6 Further details on the development parameters on which the environmental assessment has been based on are set out below.

### **Land Use and Floorspace**

B6.7 The parameters establish a maximum floorspace of up to 185,806sqm of B2 (General Industry) and B8 (Storage or Distribution) uses alongside offices. For the purpose of the ES, a maximum of 10% of the overall floorspace will be for office use (Use Class E) likely to be integral to the industrial uses.

B6.8 The Parameters Plan establishes a development zone within which built development will be delivered. The plan identifies an area of in the north east of the development site which will not be subject to built development. For the purposes of this ES, it is assumed that this will be retained and potentially enhanced in terms of its habitat and biodiversity value.

B6.9 An Indicative Arrangement Plan and an associated 3d modelling plan are included at **Appendix B3** and these shows one option as to how the development could be built out. This plan is for indicative purposes only and is not being submitted for approval.

B6.10 As set out in section B2: Site Description, the site contains a range of utility infrastructure and the final site layout may necessitate the diversion of some of this infrastructure or to retain it and for the layout of the scheme to incorporate stand-off distances and access areas necessary to protect and maintain the apparatus.



### **Maximum Development and Building Height**

- B6.11 For the purpose of this EIA, the maximum development height at the site will be 43.5m AOD within all of the Potential Development Area marked on the Parameters Plan. The maximum building height will be 36m above prevailing ground level. These figures take account of the proposed site levels and earthworks (see below) and allows for roof-mounted plant but not for any chimney stacks.

### **Site Levels**

- B6.12 For the purpose of this EIA, the minimum finished floor level ('FFL') will be 5.2m AOD.

### **Earthworks**

- B6.13 The EIA is based on the assumption that development will be cut and fill neutral within the wider Teesworks area.

### **Building Design**

- B6.14 The detailed design and specification will respond to end users' requirements and market demand. Notwithstanding this, the Design and Access Statement submitted as part of this application sets out key design principles, examples and indicative images. It is anticipated that the building design will adopt a contemporary and modern architecture and the colour palette will be sympathetic to the site's surroundings.
- B6.15 Teesworks is in the process of producing a Design Guide for Developments which it will consider when drawing up reserved matters.

### **Access and Parking**

- B6.16 The Parameter Plan shows a point of access into the site from the south via an existing road bridge across the Darlington-Saltburn rail line. The Parameters Plan also shows the areas along the boundary of the site (the western boundary) where additional access points could be brought forward when the layout of the scheme is known (See **Appendix B3**).
- B6.17 The site will be constructed with at least one vehicular access point from the internal estate roads within Teesworks and which in turn connect with the public highway such as at the Steel House roundabout on the Trunk Road.
- B6.18 The site will also include internal access road(s) and parking and servicing areas for each development plot, which will come forwards in phases as and when development is brought forward at the site.

### **Hours of Operation**

- B6.19 For the purposes of this ES, it has been assumed that all uses will operate 24 hours a day/7, seven days a week. This is considered typical for uses in the STDC and Redcar area and are therefore considered a reasonable worst-case scenario.

### **Drainage and Water Courses**

- B6.20 All surface water runoff within the site will require sustainable urban drainage system ('SuDS') treatment and attenuation prior to discharge.
- B6.21 Whilst at this stage proposals are not fixed; it may be necessary to divert the existing Fleet watercourse. The description of development allows for this, although no details are provided at this stage.

B6.22 It is assumed that any works to the watercourse will be undertaken either prior to the start on site or during the initial phases of the proposed development.

### **Sustainability**

B6.23 The scheme will seek to achieve Building Research Establishment Environmental Assessment Method ('BREEAM') 'Very Good' throughout the construction and operational stages of development. Whilst the exact sustainability credentials of the scheme will be established at the reserved matters stage, it is anticipated that the following measures could be implemented:

- Encourage a reduction in CO<sub>2</sub> emissions, monitor energy and waste consumption and consider energy generation;
- Future occupiers of the proposed development will be encouraged to consider the benefit of cooperating to manage resources, environmental issues, energy generation, logistics, green technology, local education and resources;
- Building design will consider the need to reduce the vulnerability of the development to climate change through the implementation of sustainable design;
- Contractors will consider using local suppliers, recycled materials and will be required to implement a Construction Environmental Management Plan ('CEMP') which will be monitored throughout the construction phase of development;
- All building materials and products will be sourced, where practical, from suppliers who manufacture with certified environmental management systems and timber will be Forest Stewardship Council ('FSC') certified, where possible; and
- Adoption of Framework Travel Plan ('FTP') and specific Occupier Travel Plans to promote sustainable modes of travel in accordance with STDC's emerging transport strategy.

## B7.0 Construction Methodology

B7.1 This section describes the key construction parameters that have been assessed as part of this EIA.

### Development Phasing

B7.2 The proposed developments will be brought forward in phases based on market demand for the employment uses proposed. The site is being brought forward by Teesworks.

B7.3 A phasing schedule is set out in Table B7.1 below which has been used for the purposes of assessment. This provides a basis for making assumptions as to the quantum of floorspace that could be delivered each year across the whole construction period.

B7.4 Based on the phasing schedule set out in Table B7.1 the construction period for the site is as follows:

- Construction commences in 2022 with first floorspace delivered in 2023; and
- Construction period totals 11 years with completion anticipated in 2033.

Table B7.1 Phasing Schedule: Long Acres

Year	Floorspace to be Delivered (sqm)
2022	
2023	18,581
2024	34,374
2025	
2026	
2027	69,677
2028	
2029	
2030	
2031	8,361
2032	46,452
2033	8,361
Total	185,806

B7.5 Each technical chapter C-M outlines the relevance of the phasing schedule to the assessment of effects (See Section 5.0 of Chapters C to M).

### Programme of Works

B7.6 The programme of works is based on the availability of existing transport infrastructure, access arrangements, the environmental context of the site, the need or otherwise to divert the Fleet on site and the need to prepare the site given the existing uses on site (such as the licenced landfill). The site is free from built structures.

B7.7 The first phase of development will include the delivery of site preparation works and construction access arrangements. Preparation works at this site will include site levelling and the removal and remediation of the existing licenced landfill on site. For the purpose of the EIA it is assumed this will take up to 6 months. Construction works are assumed to commence in 2022.

- B7.8 The subsequent phases of development will deliver a proportion of the employment units and their associated infrastructure (based on market demand).
- B7.9 For the purpose of this EIA, sufficient assessment will be provided to enable a decision to be reached as to whether the principle of the Fleet's realignment is acceptable and to identify any necessary mitigation.
- B7.10 As set out in the accompanying Parameters Plan, the required retention of the RWE Breagh High Pressure Gas Pipeline and its associated easements will be designed into the final layout proposals for the site. The Parameters plan includes an area proposed to be free from built development.
- B7.11 Electricity pylons, overhead lines and utility and water infrastructure are present on site. The requirement or otherwise to protect or move these will be discussed with statutory consultees. It is anticipated any works required to these elements on site will be undertaken in the first phase of development.
- B7.12 For the purpose of this EIA it has not been assumed that the Hot Metals Railway that extends into part of the site will be removed.
- B7.13 For the purpose of this EIA, it is assumed that the development life of the site will be a minimum of 50 years and there are no plans to decommission the proposed developments. No assessment of decommissioning will therefore be undertaken as it would not be reasonable to try and undertake an assessment of the environmental impacts at this time.

## **Development Works**

- B7.14 The key stages of the construction works are set out below.

### **Pre-Commencement**

- B7.15 Prior to the commencement of development, and where needed and required by planning condition, further site and ground investigation surveys will be undertaken in order to identify the need, or otherwise, for additional survey work and / or remediation work. This stage of work will include consultation with electricity and utility providers to agree a position on the existing on-site infrastructure. It will also include the submission of details for the diversion of The Fleet.

### **Site Preparation**

- B7.16 Site hoarding, fencing, plants, machinery, lighting and mitigation measures will be erected and brought onto the site. Mitigation and protective fencing will be required around areas of land not being developed and around electricity pylons and infrastructure located on site. Specific ecologically certified measures will be put in place to separate the development site for the Teesmouth and Cleveland Coast SPA, Ramsar Site and SSSI and the Coatham Marsh LWS. Specific mitigation measures will also be required to protect The Fleet and the easements and area surrounding the high voltage pressure cable.
- B7.17 The site preparation works will include the creation of construction access and compound. For the purpose of this EIA it is assumed that there will be one main construction compound for the Teesworks area and, when developed, the site will have its own individual site compound, or compounds for each development plot, where necessary. STDC is in the process of defining a Teesworks wide construction strategy.
- B7.18 The construction compound(s) will include offices for contractors and sub-contractors, toilet facilities, a first aid room, meeting and training room(s), site storage and cycle and parking facilities. Waste, fuel and material storage areas will also be constructed in order to allow for the

safe storage and collection of materials to and from site in accordance with environmental permits. Best practice construction methods will be set out in accordance with the Framework Construction Environmental Management Plan ('FCEMP'). No overnight staff accommodation is proposed.

- B7.19 As above, this stage of the development may include the diversion of the Fleet, the exact details of which will be approved at the discharge of conditions stage of the planning process.

### **Enabling and Ground Works**

- B7.20 As part of this stage of the development, works will include site levelling and the removal and remediation of the existing licenced landfill – CLE31.

- B7.21 For the purpose of this EIA process it is assumed that the site will produce an element of site won material that cannot be accommodated on site, particularly from the CLE31 licenced landfill part of the site. It is assumed that all material will be retained and reused within the Teesworks area (and treated where necessary). Where necessary, further information will be submitted at the reserved matters stage of the planning process.

- B7.22 It is assumed that all hazardous and non-hazardous waste will go to the Highfield Landfill Site at the South Bank site.

### **Access and Highways Works**

- B7.23 For the purposes of EIA, it is assumed that access onto the public highway will be obtained from the Steel House roundabout, also known as the Trunk Road roundabout which is on the A1085 Trunk Road. Further details on this assumption are included in Chapter C (Transport).

- B7.24 Internal access roads will also be constructed to provide connections to buildings once built. For the site, this will be constructed (insofar as necessary) as part of the first phase of the development and completed on a phased basis thereafter as and when development comes forward. Each building will include its own associated infrastructure, including car parking facilities.

### **Drainage**

- B7.25 Once detailed drainage strategies are agreed with RCBC and statutory consultees these will either be developed on a site wide basis or as each development plot is brought forward for development.

### **Building Foundations and Construction**

- B7.26 For the purpose of this EIA, it is assumed that all construction works will be undertaken using piling. Because of current ground conditions at the site, work is ongoing to understand the appropriate type of piling and a piling risk assessment will be undertaken prior to construction starting on site. This EIA assumption will assess the worst-case scenario.

### **Building Materials**

- B7.27 Materials are anticipated to include steel, timber, metal and those associated with the construction of warehouses. Where possible, materials will be sourced from local construction companies to reduce the need for deliveries and transport times. An opportunity exists to source materials from within the Teesworks area and its existing manufacturers and steel works. The exact pallet of materials will be based on occupier requirements and will be agreed with the Council at the reserved matters stage of the planning process.

- B7.28 Building materials will be stored at the on-site compound(s) and they will be ordered when each warehouse is constructed to avoid the need for excess material on site.
- B7.29 Construction of the developments will require the use of large cranes, tower / mobile cranes, scaffolding and hoists. It is also assumed that dumper trucks, forklifts, heavy goods vehicles, generators, pumps and compressors will be used throughout the construction period.
- B7.30 All temporary construction works will be designed to meet engineering and safety standards. All works will be coordinated daily to ensure the safety and wellbeing of personnel on site.

### **Hours of Work**

- B7.31 Construction is envisaged to take place 24 hours a day, 7 days a week.

### **Framework Construction Environmental Management Plan ('CEMP')**

- B7.32 A Framework CEMP is being designed into the scheme as tertiary mitigation and will therefore form part of the embedded mitigation for the proposed developments. It is proposed that the measures and key principles set out within the FCEMP will be taken forward in detailed CEMPs for each phase and this will be secured by an appropriately worded planning condition. The mitigation measures/key principles within the CEMP are taken into account in each technical assessment when assessing potential effects, rather than being assessed as part of the residual effects.
- B7.33 The Framework CEMP key principles/mitigation measures are as follows.

### **Site Management and Communication**

- 1 All construction activities will be undertaken by industry certified contractors and specialists for each phase of the construction process. This will be managed and coordinated by the Site Project and Environment Coordinator for the site or each development plot who will be responsible for the health and safety on site.
- 2 All work will be subject to a risk assessment and method statement and these will be reviewed in order to accord with best practice standards. Where relevant, these will be required to mitigate the impacts of the development, including site specific measures as set out within the technical chapters of this ES.
- 3 All contractors and personnel entering the site will be required to show the relevant permits, and, upon request, will be required to provide proof of compliance with waste and pollution regulations.
- 4 A stakeholder communication plan will be developed for all those working on site;
- 5 Name(s) and contact details of personnel accountable for environmental considerations on the site boundary will be displayed at the site compound (this may be the environment manager / engineer or the site manager);
- 6 Contact information for the head or regional office of each contractor will be displayed at the construction compound; and
- 7 A CTMP will be produced to manage the suitable delivery of goods and materials to and from the site.

### **Site Preparation**

- 1 The erection of site hoarding and best practice construction techniques will be utilised throughout all of construction phase of development;

- 2 The careful siting and management of material stockpiles welfare buildings and other temporary structures;
- 3 The construction site layout will be planned so that machinery and dust causing activities including stockpiling are located away from receptors, as far as is possible;
- 4 Solid screens or barriers shall be erected around dusty activities or at the site boundary which are at least as high as any stockpiles on site;
- 5 Operations on site will be fully enclosed, where possible, when there is a high potential for dust production;
- 6 The location and orientation of site offices and buildings should be considered in order to maximise the separation distance and screening provided from site operations to noise sensitive receptors; and
- 7 Welfare facilities will be provided to support on site staff. Temporary connections to the public sewer network for disposal of foul water should be made where possible. Where this is not possible hygienic portable facilities will be used.

### **Transport**

- 1 A CTMP will be implemented either at a site level or for each development phase. This will identify the scale of construction traffic across the construction programme and provide details including the proposed access arrangements for construction vehicles and staff, any necessary highway works and any changes to traffic orders to accommodate construction traffic.

### **Biodiversity and Ecology**

- 1 Mitigation will be included to prevent and mitigate against any accidents, including but not limited to, spills, storage of soils and control of construction related dust and the construction of site hoarding to reduce the impact on ecological sensitive receptors;
- 8 Measures will be implemented to prevent sediment, dust, surface water run-off and other substances from entering watercourses;
- 9 Removal of trees, scrub, wetland habitat or areas of grassland or open mosaic habitat that may support nesting birds should be undertaken outside of nesting season (March to August inclusive), unless the habitats are first checked by a suitably qualified ecologist, who confirms in writing to the local planning authority ('LPA') that no nesting birds are present); and
- 10 Measures will be implemented to prevent the spread of invasive non-native plant species, as listed under either Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) or the Invasive Alien Species (Enforcement and Permitting) Order 2019.

### **Noise and Vibration**

- 1 During construction, works will be undertaken using best practice measures, including (as necessary), the use of quiet plant equipment and their correct maintenance;
- 2 All plant, equipment and vehicles will be fitted with appropriate noise suppression equipment to reduce noise levels as far as is practicable;
- 3 In-cab communication systems will be employed removing the impact of short duration horn use;
- 4 Generators and compressors should be located within suitable acoustic enclosures that do not affect the ventilation requirements or restrict access for maintenance; and

- 5 A regular and effective plant and equipment maintenance programme be implemented to ensure equipment is operating according to manufacturer's specification and to ensure they are the quietest available for the task.

### **Air Quality and Dust Management**

B7.34 Mitigation measures applicable to high risk sites outlined in the IAQM Guidance on the Assessment of Dust from Demolition and Construction will be employed at the proposed development site, including:

#### **General**

- 1 Display the name and contact details of person(s) accountable for air quality and dust issues on the site boundary. This may be the environment manager/engineer or the site manager;
- 2 Develop and implement a stakeholder communications plan that includes community engagement before work commences on site;
- 3 Develop and implement a Dust Management Plan, which will include measures to control other emissions, approved by the local authority; and
- 4 Display the head or regional office contact information.

#### **Site Management**

- 5 Record all dust and air quality complaints, identify cause(s), take appropriate measures to reduce emissions in a timely manner and record the measures taken;
- 6 Make the complaints log available to the local authority when asked; and
- 7 Record any exceptional incidents that cause dust and/or air emissions, both on- or off-site and the action(s) taken to resolve the situation in the logbook.

#### **Monitoring**

- 8 Carry out regular site inspections to monitor compliance with the Dust Management Plan, record inspection results and make an inspection log available to the local authority, when asked;
- 9 It is highly recommended that dust deposition, dust flux, or real-time PM<sub>10</sub> continuous monitoring locations is carried out and locations agreed with the Local Authority prior to commencement. Where possible commence baseline monitoring at least three months before work commences on site or, if it a large site, before work on a phase commences. Further guidance is provided by IAQM on monitoring during demolition, earthworks and construction; and
- 10 Increase the frequency of site inspections by the person accountable for air quality and dust issues on site when activities with a high potential to produce dust are being carried out and during prolonged dry or windy conditions.

#### **Site Maintenance**

- 11 Plan site layout so that machinery and dust causing activities are located away from receptors, as far as practical or possible;
- 12 Erect solid screens or barriers around dusty activities or the site boundary that are at least as high as any stockpiles on site;



- 13 Fully enclose site or specific operations where there is a high potential for dust production and the site is active for an extensive period;
- 14 Avoid site runoff of water or mud;
- 15 Keep site fencing, barriers and scaffolding clean using wet methods;
- 16 Remove materials that have a potential to produce dust from site as soon as possible, unless being re-used on site;
- 17 Cover, seed or fence stockpiles to prevent wind whipping; and
- 18 Ensure sand and other aggregates are stored in bunded areas and are not allowed to dry out.

### **Operating Vehicle/Machinery and Sustainable Travel**

- 19 Ensure all vehicles switch off engines when stationary – no idling vehicles;
- 20 Produce a Construction Logistics Plan (Construction Traffic Management Plan) to manage the sustainable delivery of goods and materials (see Chapter C (Transport));
- 21 Implement a Travel Plan that supports and encourages sustainable travel (public transport, cycling, walking, and car-sharing) (see Chapter C (Transport)) for more details; and
- 22 Avoid the use of diesel or petrol-powered generators and use mains electricity or battery powered equipment where practicable.

### **Operations**

- 23 Only use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques, such as water sprays or local extraction;
- 24 Ensure an adequate water supply on the site for effective dust/particulate matter suppression/mitigation, using non-potable water where possible and appropriate;
- 25 Use enclosed chutes and conveyors and covered skips;
- 26 Minimise drop heights from conveyors, loading shovels, hoppers and other loading or handling equipment and use the fine water sprays on such equipment wherever appropriate;
- 27 Avoid scabbling (roughening of concrete surfaces) if possible; and
- 28 Ensure equipment is readily available on site to clean any dry spillages and clean up spillages as soon as reasonably practicable after the event using wet cleaning methods.

### **Waste Management**

- 29 Avoid bonfires and burning of waste materials.

### **Measures Specific to Earthworks**

- 30 Re-vegetate earthworks and exposed areas/soil stockpiles to stabilise surfaces as soon as practicable;
- 31 Use Hessian, mulches or trackifiers where it is not possible to re-vegetate or cover with topsoil, as soon as practicable;
- 32 Only remove the cover in small areas during work and not all at once.

### **Measures Specific to Construction**

B7.35 The following measures are considered as desirable for construction for high risk construction impacts.

- 1 Avoid scabbling (roughening of concrete surfaces) if possible; and
- 2 Ensure sand and other aggregates are stored in bunded areas and are not allowed to dry out, unless this is required for a particular process, in which case ensure that appropriate additional control measures are in place.

### **Measures Specific to Trackout**

B7.36 As with the construction and earthworks mitigation, the below measures are highly recommended by IAQM for high risk trackout impacts.

- 1 Use water-assisted dust sweeper(s) on the access and local roads, to remove, as necessary, any material tracked out of the site. This may require the sweeper being continuously in use;
- 2 Avoid dry sweeping of large areas;
- 3 Ensure vehicles entering and leaving sites are covered to prevent escape of materials during transport;
- 4 Record all inspections of haul routes and any subsequent action in a site logbook;
- 5 Implement a wheel washing system (with rumble grids to dislodge accumulated dust and mud prior to leaving the site where reasonably practicable); and
- 6 Access gates to be located at least 10 m from receptors where possible.

### **Water Management and Flooding**

- 1 The Environment Agency and Pollution Prevention Guidance will be implemented throughout the construction period;
- 2 A Construction Stage Surface Water Management Plan will be incorporated into the site so that run off can be carefully controlled using temporary drainage;
- 3 Measures will be included to reduce the risk of site pollution and contamination and details will be recorded of the soils, chemicals and oils used during the construction process;
- 4 Plant and machinery will be well maintained to reduce the risk of oil spillages or similar; and
- 5 An emergency response protocol will be developed by contractors so that any accidents of spillages are intercepted.

### **Ground Conditions**

- 1 A Health and Safety Plan ('HSP') will be produced and will include measures to minimise the generation of dust, monitoring for the accumulation of gas, dampening of ground water, ground gas monitoring and ground water and odour monitoring. This will mitigate against on-site ground conditions and air quality;
- 2 In addition, site staff will be provided with training and information relating to the risks represented by ground gas and related emergency measures (as necessary);
- 3 Subject to the confirmation of the nature and extent of contamination at the site (if any), mitigation measures to protect site workers would include on-site inductions, provision of

welfare for washing, a site smoking ban and the use of appropriate personal protective equipment ('PPE');

- 4 All site personnel should receive environmental induction training. Site specific topics should be addressed via team briefings and regular toolbox talks, to supplement the induction training;
- 5 All excavations should be assumed to be unstable. No man entry into unsupported excavations will be allowed without an appropriate risk assessment. Reference to Construction Industry Research and Information Association ('CIRIA') report 97 would be made to establish suitable means of support or battering excavation side. The performance of trench supports will be monitored by qualified personnel at agreed intervals;
- 6 Measures should be undertaken to protect site workers and to ensure the stability of excavations. For instance, trench sheet supports would be used to seal off flows, and any residual flows should be collected in sumps and removed by pumping; and
- 7 Any groundwater removed from excavations would be disposed of appropriately, and the rate of groundwater flows into excavations should be continuously monitored along with the performance of any pumping capacity.

### **Waste and Materials Management**

- 1 Waste will be designed out in the early design phases to ensure the volume of waste generated is minimised;
- 2 Actions will be taken in the early design phases to ensure the use of recycled/ reclaimed materials are maximised in line with the Waste Hierarchy; and
- 3 Any disposal of contaminated waste will be undertaken in accordance with the Waste Management Licencing Regulations 1994 and the Duty of Care Requirements;

### **Climate Change**

- 1 Measures will be included such as the sourcing of materials locally, the use of lower emissions vehicles and planning to minimise the number of journeys required to and from the site. It will also include climate change aims including the use of electrical plans, where practical and feasible.

## **B8.0 Summary of Primary and Tertiary Mitigation**

B8.1 This section describes the primary and tertiary mitigation which has been assumed to be in place when assessing the potential effects of the proposed development during the construction and operational phases.

B8.2 For clarification:

- Primary or 'embedded' mitigation includes measures and modifications that have been incorporated into the design of the proposed development at the pre-application stage. They are therefore inherent to the development.
- Tertiary mitigation includes 'best practice' measures or actions that will occur outside of the planning system in order to meet existing legislative requirements or which are considered to be standard or best practice and not site/development specific.

### **Construction Phase**

B8.3 Primary and tertiary mitigation measures assumed to be in place during the construction phase of the proposed development include:

- 1 Implementation of a Framework Construction Environmental Management Plan (the FCEMP principles outlined in paragraph B7.42 above will be conditioned and there will be a requirement to provide an updated and detailed CEMP for each development phase based on these principles);
- 2 Implementation of Construction Traffic Management Plan (as part of the FCEMP);
- 3 Further ground investigation surveys will be undertaken in order to identify the need, or otherwise, for additional remediation work. This stage of work will include, if necessary, the submission of details to divert the Fleet and any associated ground remediation necessary as part the diversion;
- 4 The hydrology of Coatham Marsh will not be affected by any works to the Fleet. A method statement for assessing works to alter or realign the on-site watercourses demonstrating this shall be submitted and approved by the Local Planning Authority prior to the approval of any detailed scheme of works to the watercourses.
- 5 All temporary construction works will be designed to meet engineering and health and safety standards;
- 6 Protective fencing to be erected around land not being developed;
- 7 Construction of construction compounds and waste, fuel and storage areas ahead of construction work commencing. Materials for active phase of development only to be stored onsite;
- 8 Hazardous and non-hazardous waste to be sent to the Highfield landfill site;
- 9 A piling risk assessment is to be prepared for each phase of development;
- 10 Construction will be. A phasing condition will be attached to the grant of any planning permission and should the phasing of the development change, this will need to be agreed in writing with the Council;
- 11 The scheme will seek to be BREEAM 'Very Good'. The sustainability credentials of the scheme will be agreed at reserved matters stage of the planning process, however those considered to be embedded during construction at this stage include:

- a Contractors will consider using local suppliers, or sourcing materials from the Teesworks area and they will be required to implement a SWMP which will be monitored throughout the construction period;
- b All building materials and products will be sourced, where practical from suppliers who manufacture with certified environmental management systems and timber will be FSC certified, where possible.

## **Operational Phase**

- B8.4 The Parameters Plan provides for the following embedded mitigation:
- 1 Maximum development area is 62.33ha, within the location shown on the Plan;
  - 2 Maximum development height within the site of 43.5m AOD
  - 3 Maximum building height is 36m above prevailing finished ground levels;
  - 4 Finished Floor Level of a minimum of 5.2m AOD;
  - 5 A minimum of 1 vehicular access point into the site; for the purposes of this EIA, it is assumed that the access will be on the south side of the site and will connect to the public highway network at the Steel House roundabout, also known as the Trunk Road roundabout which is on the A1085 Trunk Road. The Parameters Plan submitted to accompany this EIA (Appendix B3) shows the location of the access point into the site together with areas where other potential access points could be formed into the site from the surrounding internal estate roads.
- B8.5 In addition to the measures shown on the plans the following measures and principles should be conditioned and form part of the embedded mitigation of the scheme:
- 1 The overall scheme can deliver up to 185,806 sqm of B2 (General Industry) and B8 (Storage or Distribution) uses floorspace, of which a maximum of 10% of the floorspace can be used for offices;
  - 2 Buildings within the site will meet BREEAM 'Very Good' standard;
  - 3 An FTP and specific Occupier Travel Plans will be submitted for approval to promote sustainable modes of travel in accordance with STDC's emerging transport strategy;
  - 4 Junctions and internal roads to be designed and constructed in accordance with Redcar and Cleveland Borough Council Guidance; and
  - 5 Where necessary to comply with Control of Major Accident Hazards ('COMAH') and Health and Safety Executive ('HSE') requirements, levels of occupancy of buildings will be restricted and standoff distance from hazardous installations, pipes etc. will be imposed.
- B8.6 These mitigation measures will be secured through a range of planning conditions and will ensure that the development delivers the required primary and tertiary mitigation. This mitigation is taken into account in the potential effect's sections of technical Chapters C to M (e.g. the potential effects defined assume that all of the mitigation measures above form part of the development).
- B8.7 Any additional mitigation required over and above that already listed in this chapter is provided for within the mitigation section of Chapters C to M. Full details of the mitigation, monitoring and conditions are detailed in Chapter O of this ES.

**B9.0 Consideration of Alternatives and Design Evolution**

B9.1 Regulation 18 and Schedule 4(2) of the 2017 Regulations (as amended) require a description of the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by the applicant which are relevant to the proposed development and its specific characteristics and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects. This section provides a review of those alternatives that have been studied.

B9.2 In addition, Schedule 4(3) of the 2017 Regulations (as amended) requires a review of the likely effects in the event that the development does not come forward (i.e. an outline of the evolution without implementation of the development). This is known as the ‘no development scenario’.

B9.3 To comply with these requirements, this section provides a review of:

- 1 Likely effects in the event that the development does not come forward (i.e. the no development’ scenario);
- 2 Consideration of whether alternative locations would achieve the objectives of the current proposal; and
- 3 Consideration of the evolution of the design of the scheme and whether alternative forms of development would achieve the same objective.

B9.4 The assessment below provides a comparison of environmental effects of the proposed development, as described in Section B6.0, against the alternatives. The effects have been colour coded in accordance with Table B9.1 below.

Table B9.1 Key Effects of Proposed Development Compared to Alternatives

	The proposed development as outlined in Section B6 has more beneficial effects than alternative development.
	The environmental effects of the alternative development are similar to the proposed development.
	The alternative development has more beneficial effects than the proposed development.

**‘No Development’**

B9.5 In addition to the requirements of the 2017 Regulations (as amended), guidance in carrying out an EIA suggests that it is good practice to consider the evolution of the site in the absence of the proposed development (in other words the ‘do nothing’ scenario).

B9.6 If the proposed development were not to come forward, there is the possibility that the site would remain in its existing use as vacant brownfield industrial land and with the landfill remaining on site. In this scenario the existing environmental conditions would remain or evolve over the course of time. Whilst this scenario is considered highly unlikely for the reasons discussed below, for robustness the environmental effects of this scenario are summarised as follows and in Table B9.2 below.

- B9.7 A ‘no development scenario’ would not aid in delivering economic development in STDC’s vision for the site and the surrounding Teesworks area. The site forms part of the Teesworks area, which the STDC Master Plan (November 2019) and SPD (May 2018)) identify will deliver economic development, creating jobs with a focus on high skilled sectors and occupants, centred on manufacturing innovation and advanced technologies. If the development site remains as brownfield, vacant land, the significant employment and investment benefits anticipated as a result of the proposed development both during the remediation and construction and operational phases will not come forward.
- B9.8 Furthermore, if the site were not developed then associated environmental benefits would not be realised, such as those relating to the water environment and ground conditions. STDC is in the process of publishing strategies to bring forward environmental enhancements in the Teesworks area, and where possible, this proposed development will contribute to these strategies.
- B9.9 As can be seen in Table B9.2 below, there will be some receptors, which will be more adversely affected by the proposed development, than in a ‘no development’ scenario (e.g. road network, air quality, noise, waste and materials and greenhouse gases). However, these need to be considered in the context of the benefits previously outlined. Furthermore, as set out above, it is considered that a ‘no development’ scenario would be highly unlikely and instead another form of general industry and storage and distribution development is likely to come forward. This is because the site is identified within STDC’s Master Plan (November 2019) and allocated in part for industrial development in RCBC’s Local Plan policy and it is intended that the site will contribute towards delivering employment opportunities and regeneration of the Teesworks area. Teesworks has a programme of works for bringing forward all of the development sites within the Teesworks area and this site forms part of that strategy.

Table B9.2 Comparison of Proposed Development versus ‘Do Nothing’ scenario

Topic	Summary Review of Future Baseline (‘Do Nothing’ scenario)
Transport	<p>In a no development scenario the existing land use could be expected to remain, so any adverse impacts on the local road network as a result of increased traffic generated by the proposed development (increase traffic volumes / congestion) during both the construction and operational phases would not arise. The creation of new access to this part of the North Industrial Zone would also not be realised.</p> <p>Without the proposed development none of the proposed mitigation measures and benefits of the development (such as active and sustainable transport measures and potential junction improvements) would be delivered to the wider Teesworks area.</p>
Noise and Vibration	<p>Noise levels at the existing nearest noise sensitive receptors would remain similar to those currently experienced. The area is defined by used and disused industrial facilities. The nearest residential property is a single dwelling (Marah Farmhouse) located approximately 45m east of the northern part of the site. The houses in the residential area of Dormanstown are approximately 600m south east of the site and the residential area of Coatham is around 900m to the north east of the site.</p> <p>In summary, the proposed development is anticipated to generate more noise both during the construction and operational phases than in a no-development scenario (albeit negligible). Best practice measures would be implemented to keep noise to a minimum.</p>
Air Quality	The site is not located within an AQMA. It is located within an existing

Topic	Summary Review of Future Baseline ('Do Nothing' scenario)
	<p>industrial area and the sources of air pollution include existing industrial processes and air pollution from traffic emissions. If no development were to be brought forward on this site, it is expected that the current air quality conditions would remain, with the potential for small improvements subject to wider improvements to air quality anticipated more generally in the future.</p> <p>The proposed development is anticipated to only have negligible impacts when compared to the future baseline and these can be managed to the implementation of best practice measures.</p>
<p><b>Water Management and Flooding</b></p>	<p>The site is located within Flood Zone 1 and is assessed by the EA as having less than 1 in 1,000 annual probability of river or sea flooding. If no development were to occur the current flood and water management position would remain on site.</p> <p>As an existing watercourse on site, the Fleet may need to be diverted to facilitate the proposed development. These works, if necessary, will be subject to a further approvals and if implemented would manage the water conditions on site and offer the opportunity to improve the water quality within the watercourse.</p> <p>Overall therefore it is considered that water quality will be better under the proposed development scenario than the 'no development' scenario.</p>
<p><b>Ground Conditions and Remediation</b></p>	<p>In a no development scenario, the ground conditions at the site would remain as existing and there is the potential for them to worsen as a result of the existing licenced landfill. The exact baseline position is discussed in greater detail in Chapter H of this ES. In a do development scenario, any contamination present would remain and there is the possibility of the condition deteriorating further.</p> <p>The proposed development assumes that there will be a requirement to remediate the site prior to the commencement of development. In this context, the proposed development will result in ground conditions on site being better than under the no development scenario.</p>
<p><b>Socio-Economic</b></p>	<p>Significant socio-economic benefits of the scheme as proposed would not be delivered. Information on the proposed employment opportunities both during the construction and operational phases of development are discussed further in Chapter I of this ES.</p>
<p><b>Waste and Materials</b></p>	<p>Construction activities have the potential to generate a significant amount of waste. However, it is assumed for the purposes of this EIA that any site won material not able to be accommodated on site will be used and accommodated within the wider Teesworks area. For this reason, the effects on the environment in the immediate area whether or not the development was to proceed are considered to be the same. Materials will be required for the construction phase, which would not be required should the site remain undeveloped.</p> <p>Waste will also be associated with the operational phase of the development. A Waste Strategy is being brought forward for the whole Teesworks area and this will implement a sustainable strategy for the disposal of waste centred on the waste hierarchy. Operational Waste Management Plans will be required for each phase of the development.</p>



Topic	Summary Review of Future Baseline ('Do Nothing' scenario)
	Overall on the grounds that the construction phase will require the use of new materials and the operational phase will create some waste and the 'no development' scenario will generate no waste, then the effects of the proposed development on waste and materials is slightly more adverse than the 'no development' scenario.
Greenhouse Gas Emissions	Greenhouse gas emissions will be greater as a result of the proposed development (during both the construction and operational phase) than a no development scenario.
Landscape and Visual Impact	The site would remain as brownfield industrial land. At present the site is vacant industrial land so the development of it for warehouse would alter its appearance, albeit the appearance would be designed to assimilate with surrounding built development and would remove existing vacant and disused structures on site.
Ecology	<p>In the 'no development' scenario, there will be no managed change to the existing ecological baseline. Assuming that no development occurs within 10 years then it is estimated that of the Ruderal/ Ephemeral and Open Mosaic Habitat would deteriorate as vegetation growth, particularly grass, fills in the open habitats. The scrub would likewise continue to develop into young woodland, which would be beneficial in the long term but that would be a slow process with significant changes unlikely to occur in a 10-year time frame. Overall it is expected that there would be a significant reduction in biodiversity value over the site if there is no intervention.</p> <p>This EIA assumes that remediation will be necessary on site and it is therefore expected that the proposed development scenario will result in a loss of existing habitats.</p> <p>Overall, it is considered that the proposed development would result in marginally more adverse effects than the no development scenario.</p>
Below Ground Heritage	In the 'no development' scenario any below ground heritage would remain in situ. Under the proposed development scenario, the below ground heritage would be removed. However, through its removal more understanding of its significance would be understood. Overall the 'no development' scenario would have slightly less of an adverse effect on below ground heritage than the proposed development.

## Consideration of Alternative Locations

- B9.10 The proposed development site is allocated in part, as a protected employment area by RCBC and it forms a key development site for STDC within its Master Plan (November 2019) for the Teesworks area. STDC has identified this site, and others, for the second phase of development within Teesworks. The proposals are in accordance with the aspirations for the North Industrial Zone and therefore no alternative locations have been considered for the development.
- B9.11 Because of the nature of the proposals developing an alternative site outside of the Teesworks area would not fulfil the objectives of STDC or RCBC.

## Design Evolution and Alternative Design

- B9.12 The proposed use of the site (primarily for B2 and B8 uses) is in accordance with the objectives of STDC's Master Plan and RCBC's planning policy. Alternative uses, such as residential or retail or leisure uses would not be acceptable in planning policy terms and due to the location of the site within an industrial area would not be acceptable from an amenity perspective. No further assessment of alternative uses is therefore considered necessary.
- B9.13 There is no other iteration of the Parameter Plan that has been prepared, therefore no 'alternative' designs' have been considered.
- B9.14 The proposed development is a parameter led scheme and it is based on market demand. The following parameters set out in Section B6.0 of this chapter have evolved based on an understanding of environmental considerations for the site and the Teesworks area:
- 1 Proposed Floorspace:** the maximum proposed floorspace of 185,806sqm takes into account the site's ability to accommodate a particular quantum of development. It is based on the understanding that a greater level of development and associated employment generation may give rise to a greater environmental impact, including for example of the local transport network or through taller buildings with greater landscape and visual impact.  
  
The Parameters Plan submitted with this application defines a 'potential development area', which will allow for the maximum amount of floorspace to be brought forward, whilst also allowing for sufficient space for internal access roads, services yards, parking and landscaped areas, available to support and enhance biodiversity.  
  
As this site is part of the wider STDC Master Plan area, a comprehensive approach is being taken to address environmental matters at the site such as ecology and biodiversity.
  - 2 Proposed Development Height:** the maximum development height has been based on an understanding of landscape and visual impact. In deciding on the development height consideration was also given to site's surrounding context and existing industrial development. Once future occupiers are known, reserved matters applications will be submitted to RCBC and this will include information on the heights of each building. It is likely at this stage of the planning process that a variation in building heights will be introduced but will not exceed the maximum building height parameter set on the submitted Parameter Plan.
  - 3 Finished Floor Levels:** the minimum FFL of 5.2m AOD is based on consultation with the EA and on the understanding of flood risk alleviation.
  - 4 Earthworks:** for the purposes of this EIA, the earthworks are proposed to be cut and fill neutral within the Teesworks area. Any site won material that cannot be accommodated on site will stay within the Teesworks area. This parameter is anticipated to be achievable based on ground conditions, the wider Teesworks wide remediation strategy and the proposed minimum finished floor level. Further details are provided on earthworks and waste in the relevant technical chapters; however, this assumption reduces the waste associated with the construction stage of development and associated traffic, air quality and noise impacts.
  - 5 Access Arrangements:** For the purpose of this EIA it is assumed that there will be a minimum of 1 access point. For the purpose of this EIA, the transport chapter has been based on the assumption that vehicles accessing the site will connect with the public highway network at the Steel House roundabout (also known as Trunk Road roundabout).

**B10.0**

## **Abbreviations & Definitions**

1	AA	Appropriate Assessment
2	AOD	Above Ordnance Datum
3	AQMA	Air Quality Management Area
4	BREEAM	Building Research Establishment Environmental Assessment Method
5	CCUS	Carbon Capture, Utilisation and Storage
6	CEMP	Construction Environmental Management Plan
7	CIRIA	Construction Industry Research and Information Association
8	COMAH	Control of Major Accident Hazards
9	CTMP	Construction Traffic Management Plan
10	DCO	Development Consent Order
11	DMP	Dust Management Plan
12	EA	Environment Agency
13	EIA	Environmental Impact Assessment
14	ES	Environmental Statement
15	FCEMP	Framework Construction Environment Management Plan
16	FFL	Finished Floor Level
17	FSC	Forest Stewardship Council
18	FTP	Framework Travel Plan
19	HSE	Health and Safety Executive
20	HSP	Health and Safety Plan
21	IEMA	Institute of Environmental Management and Assessment
22	LPA	Local Planning Authority
23	LWS	Local Wildlife Site
24	MMO	Marine Management Organisation
25	NCR	National Cycle Route
26	NPPF	National Planning Policy Framework
27	NWL	Northumbrian Water Limited
28	NZT	Net Zero Teesside
29	OGCI	Oil and Gas Climate Initiative
30	PPE	Personal Protective Equipment
31	PROW	Public Right of Way
32	RCBC	Redcar and Cleveland Borough Council
33	RTPI	Royal Town Planning Institute
34	SPA	Special Protection Area
35	SPD	Supplementary Planning Document

36	SSI	Sahaviriya Steel Industries
37	SSSI	Site of Special Scientific Interest
38	SWMP	Site Waste Management Plan
39	STDC	South Tees Development Corporation
40	SuD	Sustainable Urban Drainage Systems
41	TVCA	Tees Valley Combined Authority
42	UID	Unique Identifier
43	UK	United Kingdom

**B11.0**

## **References**

- 1 Localism Act 2011
- 2 The South Tees Development Corporation (Establishment) Order 2017
- 3 The South Tees Development Corporation Master Plan 2019
- 4 Redcar and Cleveland Local Plan 2018)
- 5 Minerals and Waste Core Strategy DPD 2011
- 6 Minerals and Waste Policies and Sites DPD 2011
- 7 National Planning Policy Framework 2019
- 8 South Tees Area Supplementary Planning Document 2018
- 9 Wildlife and Countryside Act 1981 (as amended)
- 10 Invasive Alien Species (Enforcement and Permitting) Order 2019
- 11 CIRIA Report 97
- 12 Waste Management Licencing Regulations 1994