



# South Industrial Zone

Environmental Statement  
July 2020

Volume 2

Chapter I - Socio-Economic

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## **I10.0 References**

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## **I1.0 Introduction**

- I1.1 This Chapter of the Environmental Statement ('ES') has been prepared by Lichfields on behalf of the applicant, South Tees Development Corporation ('STDC'). It assesses the proposed development described in Chapter B and it considers the effects of the proposed development on the surrounding socio-economic context.
- I1.2 The baseline situation is considered before the likely environmental effects of the development are identified, during both the construction and operational phases of the development. Mitigation measures to reduce any negative environmental effects are identified as appropriate, before the residual environmental effects are assessed.
- I1.3 No technical appendices support this chapter.

### **About the Author**

- I1.4 This chapter has been prepared by Will Christiansen, Planner and Economics Consultant, and Ross Lillico, Economics Director, both of Lichfields. Lichfields has an extensive track record of preparing Socio-Economic Assessment in an Environmental Impact Assessment context. It has prepared more than 50 Socio-Economic Assessments over the past decade.
- I1.5 Lichfields holds corporate membership of the Institute of Economic Development (IED) with c.15 registered members, including both Ross and Will. The IED establishes the firm's professional standing, knowledge and expertise in the area of economic development practice. Employees undertake regular Continuous Professional Development (CPD).

## I2.0 Policy Context

I2.1 The following paragraphs provide a summary of key planning and economic strategy documents of relevance to the proposed development. It should be noted that only those policies and objectives relating to socio-economic matters are considered.

### National Policy

#### National Planning Policy Framework (2019)

I2.2 The Government published the revised National Planning Policy Framework (NPPF) in February 2019 (MHCLG, 2019). This is the first revision of the NPPF since 2012.

I2.3 Paragraph 7 of the NPPF outlines that:

*“the purpose of the planning system is to contribute to the achievement of sustainable development.”*

I2.4 Achieving sustainable development means that the planning system has three objectives – economic, social and environmental. The economic objective involves helping to build a strong, responsive and competitive economy by ensuring that sufficient land of the right types is available in the right places. The social objective involves supporting strong, vibrant and healthy communities with accessible services that reflect current and future needs and support communities’ health, social and cultural well-being.

I2.5 Chapter 6 of the NPPF concerns building a strong, competitive economy. Paragraph 80 sets out that:

*“planning policies and decisions should help **create the conditions in which businesses can invest, expand and adapt.**”*

I2.6 It places significant weight on the need to:

*“**support economic growth and productivity**, taking into account both local business needs and wider opportunities for development.”*

I2.7 Paragraph 82 states that:

*“planning policies and decisions should recognise and address the specific locational requirements of different sectors. This includes **making provision for clusters or networks of knowledge and data-driven, creative or high technology industries; and for storage and distribution operations at a variety of scales and in suitably accessible locations**” (Lichfields emphasis).*

### Industrial Strategy: Building a Britain fit for the future

I2.8 The Government published its Industrial Strategy in November 2017. The Strategy outlines the aspiration to create an economy that boosts productivity and earning power throughout the UK. The Strategy identifies four Grand Challenges (developments in technology set to transform industries and societies) in which the UK can play a leading role. The first of these Challenges is to put the UK at the forefront of the artificial intelligence and data revolution. In order to support rapid adoption of AI technologies at scale, the Office for AI will work initially with six priority business sectors: cybersecurity; life sciences; construction; manufacturing; energy; and agricultural technology. The Strategy identifies that manufacturing is crucial to the economy,

providing 10% of the UK's GVA (Gross Value Added), generating around 50% of exports and accounting for 70% of business-led research and development.

- 12.9 The Strategy recognises that every region in the UK has a role to play in boosting the national economy and states that the Government will continue to build the Northern Powerhouse to help create prosperous communities throughout the UK. The Government aims to do this, in part, by agreeing Local Industrial Strategies that build on local strengths and deliver economic opportunities.
- 12.10 The Strategy identifies that strong local economies around the world tend to have key attributes which include having a good supply of skilled labour; being well connected; and having land available for offices and factories.

## **Regional Policy**

### **Tees Valley Strategic Economic Plan 2016-2026**

- 1.1 The Strategic Economic Plan (SEP) sets out the growth ambitions and priorities for Tees Valley over a 10-year period. The SEP has been refreshed to create a strategy which includes priorities to improve, diversify and accelerate growth in the local economy to benefit businesses and residents.
- 1.2 As the overarching economic plan for the Tees Valley, the refreshed SEP provides a framework for economic development to deliver six growth generating themes. These themes have been devised to help deliver the SEP's target of creating 25,000 new jobs and generating £2.8 billion of additional GVA between 2016 and 2026.
- 1.3 The SEP notes that the Tees Valley has world class expertise in a number of key sectors which are vital to the health of the northern and wider UK economies. Taking account of the current composition of the Tees Valley economy, including existing employment specialisms and the potential for growth, seven priority sectors have been identified:
- 1 Advanced Manufacturing;
  - 2 Process, Chemicals and Energy;
  - 3 Logistics;
  - 4 Health and Biologics;
  - 5 Digital and Creative;
  - 6 Culture and Leisure; and
  - 7 Business and Professional Services.
- 12.11 The SEP confirms that developing these sectors is considered critical to boosting competitiveness and diversification, improving economy resilience and providing the range of jobs needed to ensure that growth across Tees Valley is both widespread and inclusive. In terms of the sectors of greatest relevance to the proposed development site, these are most likely to be advanced manufacturing, process, chemicals and energy and logistics.

### **Tees Valley Local Industrial Strategy (2019)**

- 1.4 The draft Tees Valley Local Industrial Strategy (LIS) sets out an ambitious plan to transform the economic performance of the area and drive an increase in productivity. It builds on the distinctiveness of the local economy and responds to the opportunities and challenges that subsequently arise.

- 1.5 The LIS focuses on delivering productivity growth centred on clean energy, low carbon and hydrogen, by improving performances and helping more local people into good jobs with long-term prospects.
- 1.6 The LIS identifies the following overarching ambition:
- “Tees Valley will be a global leader in clean energy, low carbon and hydrogen. The area will achieve a net zero carbon industrial cluster by 2040, providing good jobs with long-term prospects that local people can access.”*
- 1.7 The LIS confirms that the Tees Valley business base is diverse and comprises of a range of sectors characterised by different levels of maturity, productivity and labour intensity. These sectors can be broadly characterised according to the following three categories:
- **Globally Competitive Sectors:** well-established sector strengths where the Tees Valley is widely regard as benefitting from world class expertise and a business base comprised largely of globally-significant firms. Collectively, these sectors account for 14% of Tees Valley’s GVA. Local concentrations of employment and economic output are typically high in these sectors, reflecting the presence of high volumes of activity. Sectors include Chemicals and Process Industries; and Advanced Manufacturing.
  - **Regional Sector Strengths with Growth Potential:** sectors where the Tees Valley is not currently recognised as being globally competitive, but where the conditions are in place locally – or could be established – to drive growth moving forwards. This includes areas such as clean energy, low carbon and hydrogen where Tees Valley can drive growth nationally by exploiting its unique industrial cluster, research and innovation assets, and by maximising synergies between existing sector specialisms. Sectors include Clean Energy, Low Carbon and Hydrogen; Bioscience; and Digital.
  - **Enabling Sectors:** job rich sectors that account for high volumes of employment – as well as 34% of Tees Valley’s GVA – and which play an important role in supporting the effective functioning of the wider economy through the goods or services that they provide. The logistics sector, for example, supports the efficient movement of raw materials and finished products, which is beneficial to all parts of the economy. Sectors include Professional and Business Services; Logistics; and Construction.
- 12.12 The LIS also acknowledges the importance of the South Tees Development Corporation (STDC) area which is “one of the UK’s greatest development opportunities”. Once fully developed, the LIS states that the 4,500 acre site – the single biggest development opportunity in the UK and run by the only Mayoral Development Corporation outside of London – has the potential to create 20,000 jobs and generate an additional £1 billion per annum to the local economy.
- 12.13 Furthermore, maximising the potential of the STDC site is identified as being central to the LIS’s ambition to attract investment and establish a global reputation in clean energy, low carbon and hydrogen.

## Local Policy

### Redcar and Cleveland Local Plan (2018)

- 12.14 The Redcar and Cleveland Local Plan was adopted in May 2018.
- 12.15 Policy LS 4 (South Tees Spatial Strategy) states that the South Tees Spatial Strategy encompasses the following areas:
- a Wilton International;

- b South Tees Development Corporation (STDC) area (including current and former steelworks at South Tees and Redcar);
- c Teesport; and
- d South Tees Industrial Estates and Business Parks.

I2.16 In relation to the economy, Policy LS4 states that the Council and its partners will aim to deliver the following objectives (*inter alia*):

- 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 STDC area through implementing the South Tees Area Supplementary Planning Document;
- c investigate opportunities to create a new energy hub to support the offshore wind and sub-sea engineering sectors;
- d support the expansion and protection of the port and logistics sector;
- e 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;
- f give the area an identity and make it attractive to inward investment; and
- g enhance the quality and range of services and facilities that serve the needs of those working in the South Tees employment area.

### **South Tees Area Supplementary Planning Document (2018)**

I2.17 The South Tees Area Supplementary Planning Document (SPD) was adopted in May 2018. It supports the economic and physical regeneration of the South Tees Area, setting out the vision and core objectives for the area.

I2.18 The SPD sets out the following vision for the area:

*“The Vision for the South Tees regeneration programme is to see the area transformed into a hotbed of new industry and enterprise for the Tees Valley that makes a substantial contribution to the sustained economic growth and prosperity of the region and the communities it serves.*

*The Vision sees the creation of up to 20,000 new jobs. The focus is on higher skilled sectors and occupations, centred on manufacturing innovation and advanced technologies and those industries best able to deliver sustained economic prosperity for the Tees Valley and its people, while realising a jobs spectrum that offers opportunities for all. The Vision is underpinned by the aspiration for new development to make best use of existing infrastructure and available land and to deliver a high value, low carbon, diverse and inclusive circular economy for the Tees Valley.*

*The Vision sees an aspirational, modern industrial park, combining industrial, environmental, heritage and community assets in a well designed development that is safe for all users and supported by a safe and efficient transport network, which delivers enhanced connectivity to the wider Tees Valley and beyond.*



*It extends to realising a telling, positive change in the external perceptions of the South Tees Area and wider Tees Valley to potential inward investors, to achieving the remediation of land contamination and to safeguarding biodiversity and promoting and encouraging environmental improvement. In overall terms, the realised Vision for the South Tees Area will deliver an exemplar, world class industrial business park that is renowned as a destination for manufacturing excellence.”*

- 12.19 The SPD includes a number of Strategic Development Principles intended to guide planning applications associated with the redevelopment of the STDC area. Development Principle STDC 1 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.

### **South Tees Regeneration Masterplan (2019)**

- 12.20 The South Tees Regeneration Masterplan was published in November 2019. This document presents the vision, strategy and Masterplan for the regeneration of the area. The Masterplan 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.
- 12.21 The Masterplan identifies the site as being part of the South Industrial Zone (SIZ) and sets out a development overview for the area. It identifies the following target industries:
- a Port-related uses, including port-based fabrication;
  - b Offshore energy industries, including manufacturing;
  - c Materials processing and manufacturing;
  - d Contract fabrication;
  - e Potential for rig and large equipment decommissioning; and
  - f Energy generation.
- 12.22 The Masterplan identifies the site’s river boundary as offering the opportunity for a significant increase in port-capacity on the river. This opportunity enhances the potential for attracting major industries that rely on imports and exports by sea, and that serve offshore industries.
- 12.23 The Masterplan makes reference to the site’s potential market appeal with respect to the offshore wind industry. It states:

*“...the UK offshore wind industry has committed to work with UK Government on a transformative sector deal, which, by 2030, will deliver thousands of additional skilled jobs and billions of pounds worth of export opportunities. Through this deal, the industry aims to generate one third of the UK’s electricity from offshore wind by 2030.*

*In response to this emerging step change in the UK offshore wind industry, STDC has received numerous proposals from investors, including the manufacture of: gravity foundations; monopiles and transition pieces; top sides; blades; nacelles; and gearing systems. Interest has also been shown in establishing an onshore engineering base to serve Dogger Bank.*

*Presently, STDC is engaged in advanced dialogue with developers wishing to establish a new offshore wind base, inclusive of extensive port facilities, for the manufacture of all aspects of wind turbine substructures and superstructure tower assemblies. If realised, this would also offer the opportunity for significant offshore oil and gas rig decommissioning, which could produce a major feedstock for metals production projects.”*

I2.24 The Masterplan also refers to the site’s suitability for materials processing and manufacturing. It states:

*“To reflect the growth in metals recycling both in the UK and globally, along with an ever-improving sophistication in the metals recycling process, the Master Plan for the SIZ accommodates a sizeable materials processing zone that can capitalise on the proposed new port facilities to cater for imports of recyclable materials by ship. This could extend to handling metals from rig decommissioning operations carried out elsewhere on the river.*

*The large industrial shed spaces in the SIZ offer the potential for re-use, and one such use could be metals manufacturing (such as steel or aluminium) using recycled metals, subject to market conditions and project viability being conducive. However, before making any decisions in this regard, the various shed facilities will need to be carefully evaluated to determine the viability of them being re-used. The proposed materials processing zone could extend to handling and recycling composites – another growing market – along with other recyclable materials. A key aspect of the vision for South Tees is the creation of a truly circular economy, and it is therefore appropriate that the plans make provision for uses aligned with recycling and re-use of materials on a large-scale basis.”*

## I3.0 **Assessment Methodology & Significance Criteria**

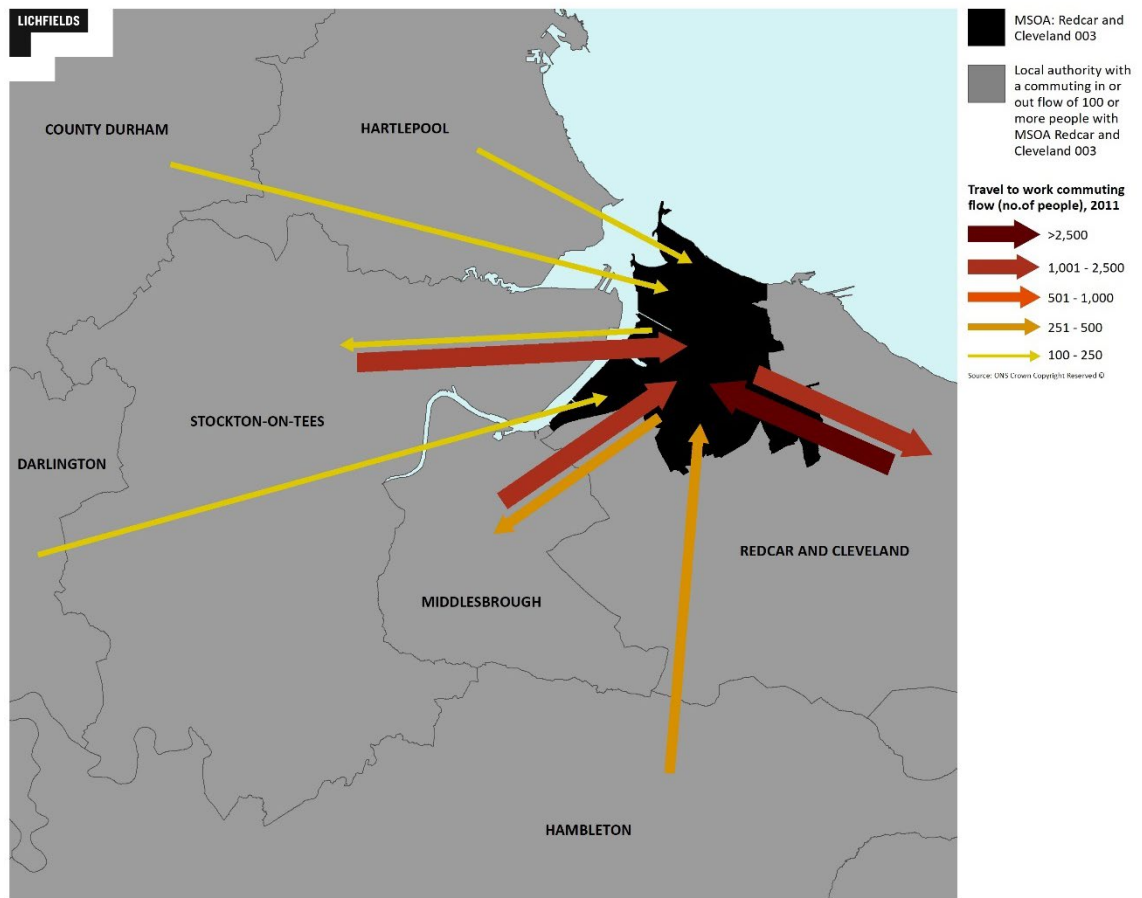
### **Assessment Methodology**

- I3.1 The section describes the methods used to assess the likely effects; the baseline conditions that exist in the surrounding area; the mitigation measures required to prevent, reduce or offset any significant adverse effects; and the likely residual effects after these measures have been adopted.
- I3.2 The assessment establishes the baseline position in terms of population, economic, employment and labour market conditions, before examining the potential effects of the proposed development and their significance. Opportunities for the mitigation of any adverse effects and the enhancement of positive effects are then considered, before the residual effects are assessed.
- I3.3 The assessment draws upon a combination of data sources, including nationally published data from the Office for National Statistics (ONS), as well as local authority statistics, Experian datasets, data from the 2011 Census and other publicly available national statistics.

### **Study Area**

- I3.4 The site comprises 430 acres (174 hectares) of land located within the South Tees Development Corporation (STDC) area and is part of the area known as South Bank/South Industrial Zone. It is located between PD Ports, Teesport and the Teesport Commerce Park. The site is located within the Redcar and Cleveland 003 Middle Super Output Area (MSOA) and lies within the Redcar and Cleveland local authority boundary.
- I3.5 The effects of the proposed development are expected to be felt across the Area of Impact (AOI). For the purposes of this assessment, the study area is the Area of Impact (AOI), which comprises of the area from which the majority of the workforce will be drawn. The current criteria<sup>1</sup> for defining travel to work areas are that:
- At least 75% of an area's resident workforce must work in the area;
  - At least 75% of the people who work in the area must live in the area; and
  - The area must have a working population of at least 3,500.
- I3.6 Applying this methodology to data from the 2011 Census relating to commuting patterns, it is possible to define the AOI as comprising Redcar and Cleveland, Middlesbrough and Stockton-on-Tees.
- I3.7 Analysis of these data (as shown in Figure I3.1), reveals that, in 2011, there were approximately 8,665 people working within the Redcar and Cleveland 003 MSOA identified above. Of these workers, 54% were resident in Redcar and Cleveland, 17% in Middlesbrough and 15% in Stockton-on-Tees. Collectively, this corresponds to 86% of people working in the area (greater than the 75% methodological threshold). Similarly, of the combined resident population across the MSOA (approximately 1,775), 60% work in Redcar and Cleveland, 20% in Middlesbrough and 10% in Stockton-on-Tees (in combination accounting for 90% of the area's residents).

Figure I3.1 Travel to work flows from MSOA Redcar and Cleveland 003



Source: Census 2011 / Lichfields analysis

I3.8 Taking the above into account, the AOI considered in relation to the various effects of the proposed development are set out in Table I3.1.

Table I3.1 Impact areas considered

Factor	Area of Impact
Construction Employment	Redcar and Cleveland, Middlesbrough and Stockton-on-Tees
Construction Economic Output	Redcar and Cleveland, Middlesbrough and Stockton-on-Tees
Operational Employment	Redcar and Cleveland, Middlesbrough and Stockton-on-Tees
Operational Economic Output	Redcar and Cleveland, Middlesbrough and Stockton-on-Tees

Source: Lichfields analysis

### Significance Criteria

I3.9 Since there are no generally accepted criteria for assessing the significance of socio-economic effects, they have been assessed based on the scale of the increase over the baseline position, as well as the nature and context of their effects. Where relevant, the location of the effect and its likely duration has been taken into account. In some cases, this cannot be quantified or measured, so the nature and context of the effects are considered more generally, taking account of qualitative factors.

I3.10 The socio-economic effects of the proposed development are identified as ‘beneficial’, ‘negligible’ or ‘adverse’ (Table I3.2).

Table I3.2 Definition of effects

Effect	Definition
Beneficial	A positive and/or advantageous effect to a Minor, Moderate or Substantial magnitude.
Negligible	No obvious significant effect to a receptor or environment.
Adverse	A negative and/or disadvantageous effect to Minor, Moderate or Substantial magnitude.

Source: Lichfields

I3.11 The terms presented in Table I3.3 are used to define the significance of the effects identified.

Table I3.3 Definition of the significance of effects

Significance	Definition
Substantial	Where the proposed development could be expected to have considerable effects (by extent, duration or magnitude) or of a more than local significance on the existing population, levels/types of employment and economic characteristics of the area.
Moderate	Where the proposed development could be expected to have a noticeable effect which may be considered significant on the existing population, level/types of employment and economic characteristics of the area.
Minor	Where the proposed development could be expected to result in a small, very short or highly localised effect on the existing population, level/types of employment and economic characteristics of the area.
Negligible	Where no discernible effect is expected as a result of the proposed development on the existing population, level/types of employment and economic characteristics of the area.

Source: Lichfields

I3.12 The duration of the socio-economic effects is considered in the context of whether it is temporary or permanent. Due to their nature, all operational effects are considered to be permanent unless otherwise stated. In terms of temporary effects, the duration can be determined to be: short term (less than 5 years); medium term (5-10 years); or long term (more than 10 years).

I3.13 The sensitivity of receptors is also considered. Sensitivity varies between receptors and in, some instances, qualified judgement is required to establish where receptors place on a scale from low sensitivity (easily adapt to change) to high sensitivity (do not easily adapt to change). In identifying sensitivity, factors including capacity to accept or respond to change and the local position, local needs and priority groups are taken into account.

I3.1 A matrix identifying the significance of the potential effects is set out in Table I3.4. Any effects assessed as being either Moderate or Substantial (as per Table I3.4) are classified as ‘significant’ in EIA terms.

Table I3.4 Matrix for determining the significance of effects

Magnitude of change/effects	Sensitivity of Receptor/Environment to Change or Effect			
	High	Medium	Low	Negligible
High	Substantial	Moderate to Substantial	Minor to Moderate	Negligible
Medium	Moderate to Substantial	Moderate	Minor	Negligible
Low	Minor to Moderate	Minor	Negligible to Minor	Negligible
Negligible	Negligible	Negligible	Negligible	Negligible

Source: Lichfields analysis

## **Consultation**

- 13.2 Lichfields has consulted with Redcar and Cleveland Borough Council on the methodology and scope of this socio-economic assessment. A response was received from the Case Officer confirming that the Council has no comments. The Council requested that discussions took place during the determination of the planning application with regards to employment, jobs and training.

## **Assumptions and Limitations**

- 13.3 The limitations of the assessment are identified, where applicable. In particular, the data used from publicly available sources has not been verified by Lichfields. Furthermore, whilst the latest available data has been used, it should be noted that many data sources are frequently updated and could be subject to change since the time of drafting or during the course of the planning application process.
- 13.4 Assumptions are also identified, where relevant, within the remaining sections of the chapter. Some of the key assumptions include:
- a The assessment of employment associated with the construction period is based on:
    - i an estimated build period provided to Lichfields by the applicant; and
    - ii an estimated build cost sourced with reference to the Building Cost Information Service (BCIS), applying both lower and upper parameters (dependent on the final apportionment of floorspace between general industrial and warehousing/distribution employment uses). Further details about this are described in Section I5.0 Potential Effects); and
  - b The assessment of direct employment generated during the operational phase of development is based upon a jobs figure provided by the applicant and supported by a range of evidence, including:
    - i The existing masterplan for the wider STDC site, which identifies distinct character areas and the likely employment yield of each (based on the anticipated scale and nature of potential end users);
    - ii Exploratory discussions with businesses interested in establishing a presence on the site, to understand their business model and the relationship between space requirements and the employment creation that flows from this; and
    - iii Analysis of the estimated employment effects generated by Green Port, Hull, as a possible comparator scheme.

## I4.0 **Baseline Conditions**

### **Existing Conditions**

I4.1 This section sets out the economic context and main socio-economic characteristics of the local area relating to the proposed development. This includes a summary of the current local economic conditions and labour market conditions within the Area of Impact (AOI) (defined as Redcar and Cleveland, Middlesbrough and Stockton-on-Tees local authorities). Where appropriate and where the availability of data permits, this is benchmarked against regional and national averages.

### **Population**

I4.2 According to the most recent population estimates<sup>ii</sup> the resident population of the AOI was 474,475 in 2018. Over the period 2008-2018 the resident population grew by 2.4% across the AOI. This was a lower rate of growth in comparison to the North East region (3.4%) and nationally (8.0%).

### **Local Economic Conditions**

#### **Employment Growth**

I4.3 An analysis of ONS Job Density data indicates that the total number of jobs in the AOI stood at 204,000 in 2018 (latest data available).

Table I4.1 2018 employment and jobs density across the AOI

Area	Total jobs	Jobs density	% Change 2008-2018
AOI	204,000	0.70	2.5%
North East	1,206,000	0.73	4.3%
Great Britain	34,850,000	0.86	13.6%

Source: ONS Jobs Density Data (2018) / ONS Mid-Year Population Estimates (2018) / Lichfields analysis

I4.4 Table I4.1 illustrates that jobs growth across the AOI during the period 2008-2018 was, at 2.5%, lower than the equivalent rate experienced regionally (4.3%) and nationally (13.6%).

I4.5 ONS Job Density data also provides a measure of the ratio of total jobs to working age residents in a given area. The most recently published data (2018) shows that the AOI has a job density ratio of 0.70, indicating that it has 70 jobs for every 100 residents of working age (aged 16-64). This is lower than the regional (0.73) average and significantly lower than the national average (0.86), highlighting the potential to deliver employment growth in the local area.

#### **Sectoral Structure**

I4.6 An analysis of Business Register and Employment Survey (BRES) data identifies that, as a proportion of total employment, the largest sectors in the AOI in 2018 were Health (17.3%), Retail (10.3%), Education (9.5%), Manufacturing (9.2%) and Business administration & support services (7.6%). Collectively, these five sectors constituted 53.8% of total employment.

I4.7 Location quotient (LQ) analysis quantifies how concentrated a particular employment sector is in an area compared to the national average. Figure I4.1 shows that, in comparison with the structure of the national economy, the following sectors are over-represented in the AOI:

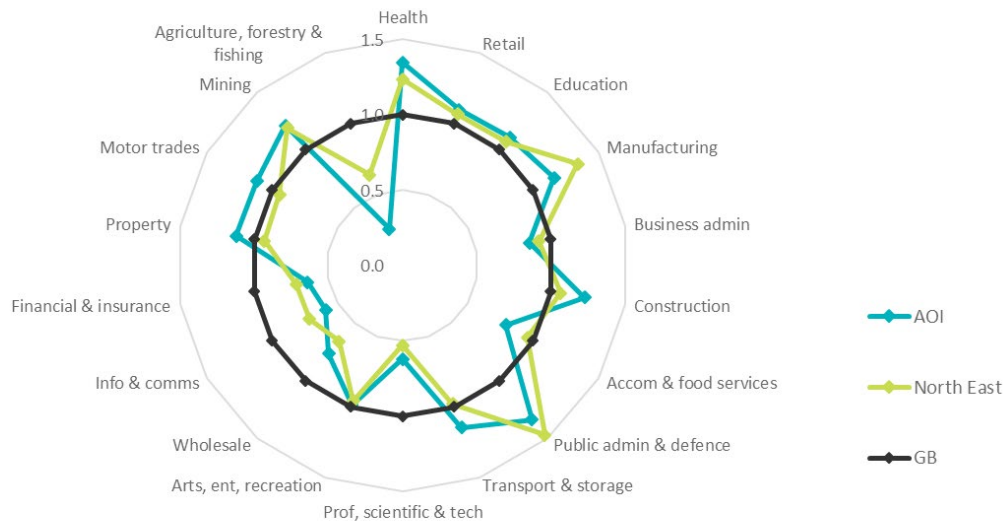
- Health (LQ 1.3, 17.3% employment);

- Public administration & defence (LQ 1.3, 5.5% employment);
- Manufacturing (LQ 1.2, 9.2% employment);
- Construction (LQ 1.2, 5.9% employment);
- Mining, quarrying & utilities (LQ 1.2, 1.6% employment);
- Retail (LQ 1.1, 10.3% employment);
- Education (LQ 1.1, 9.5% employment);
- Transport & storage (inc postal) (LQ 1.1, 5.4% employment);
- Property (LQ 1.1, 2.1% employment); and
- Motor trades (LQ 1.1, 2.1% employment);

1.8 The following sectors are under-represented locally:

- Agriculture, forestry & fishing (LQ 0.3, 0.4% employment);
- Professional, scientific & technical (LQ 0.6, 5.4% employment);
- Information & communication (LQ 0.6, 2.4% employment);
- Financial & insurance (LQ 0.6, 2.1% employment);
- Accommodation & food services (LQ 0.8, 5.9% employment);
- Wholesale (LQ 0.8, 3.0% employment); and
- Business administration & support services (LQ 0.9, 7.6% employment).

Figure I4.1 Employment representation by sector (location quotient analysis)



Source: BRES (2018) / Lichfields analysis

14.8 Table I4.2 provides a summary of employment change within the AOI by sector over the period 2009-2018. This is shown in proportionate terms, in order to facilitate a comparison with the regional and national performance. From this it can be seen that:

- Information & communication, Arts, entertainment, recreation & other services, Wholesale, Agriculture, forestry & fishing and Financial & insurance (shown in green in



Table I4.2) all experienced stronger proportionate levels of growth in the AOI compared to regional and national averages; whilst conversely

- b Health, Accommodation & food services, Transport & storage (inc. postal), Motor trades, Education, Manufacturing, Retail, Mining, quarrying & utilities, Construction and Professional, scientific & technical (shown in red in Table I4.2) experienced higher proportionate levels of decline than the regional and national averages.

Table I4.2 Employment change in proportionate terms (2009-2018)

Industry	AOI	North East	GB
Information & communication	55.2%	18.5%	22.8%
Business administration & support services	43.6%	49.2%	29.7%
Arts, entertainment, recreation & other services	32.0%	14.6%	9.8%
Wholesale	24.7%	3.7%	7.8%
Agriculture, forestry & fishing	15.4%	-8.3%	1.2%
Health	12.3%	15.4%	13.3%
Property	9.9%	5.6%	22.2%
Accommodation & food services	7.3%	13.0%	23.6%
Transport & storage (inc postal)	5.3%	13.6%	14.6%
Motor trades	4.1%	5.6%	17.4%
Financial & insurance	3.2%	-3.7%	-2.6%
Education	-5.4%	1.0%	4.9%
Manufacturing	-8.1%	0.0%	0.3%
Retail	-9.5%	-2.7%	-1.5%
Mining, quarrying & utilities	-14.5%	13.3%	25.7%
Construction	-21.4%	-15.2%	2.0%
Public administration & defence	-22.6%	-27.5%	-14.0%
Professional, scientific & technical	-24.5%	-20.6%	30.9%
<b>All sector average (total employment)</b>	<b>-7.7%</b>	<b>3.2%</b>	<b>10.6%</b>

Source: BRES (2018) / Lichfields analysis

I4.9 In terms of those sectors likely to be of greatest relevance to the proposed development, the following can be observed from Table I4.2:

- Manufacturing: employment in the AOI decline substantially (-8.1%) despite remaining relatively static at the regional and national level; and
- Transport and logistics (inc. postal): employment in the AOI increased (5.3%) albeit at a rate below the regional and national level.

### Business Growth

I4.10 ONS UK Business Count data show that the number of active enterprises in the AOI increased from 8,900 to 11,950 over the period 2010-2019. This represents a growth rate of 34.3%. This is higher than the percentage increase observed regionally (26.1%) and nationally (30.1%).

I4.11 The AOI's rate of business growth has been underpinned by strong growth in Micro firms (38.2%) – exceeding the regional (28.3%) and national (31.3%) growth rates. Similarly, growth in Large firms (22.2%) exceeded the regional (16.9%) and national (21.5%) growth rates. The AOI experienced growth in both Small (10.6%) and Medium-sized (9.8%) firms but were lower in comparison to the regional and national equivalents (see Table I4.3).

Table I4.3 Business growth rate in the AOI 2010-2019

Employment Sizeband	AOI	North East	Great Britain
Micro (0 to 9)	38.2%	28.3%	31.3%
Small (10 to 49)	10.6%	12.7%	20.1%
Medium-sized (50 to 249)	9.8%	15.2%	25.2%
Large (250+)	22.2%	16.9%	21.5%
<b>Total</b>	<b>34.3%</b>	<b>26.1%</b>	<b>30.1%</b>

Source: ONS UK Business Counts / Lichfields analysis

## Labour Market Conditions

### Economic Activity

I4.12 Annual Population Survey data from the most recent full year (2019)<sup>iii</sup> indicates that the economic activity rate (i.e. the share of working-age residents either in or seeking employment) across the AOI is 72.2%. This is lower than the regional (75.0%) and national (78.9%) economic activity rates.

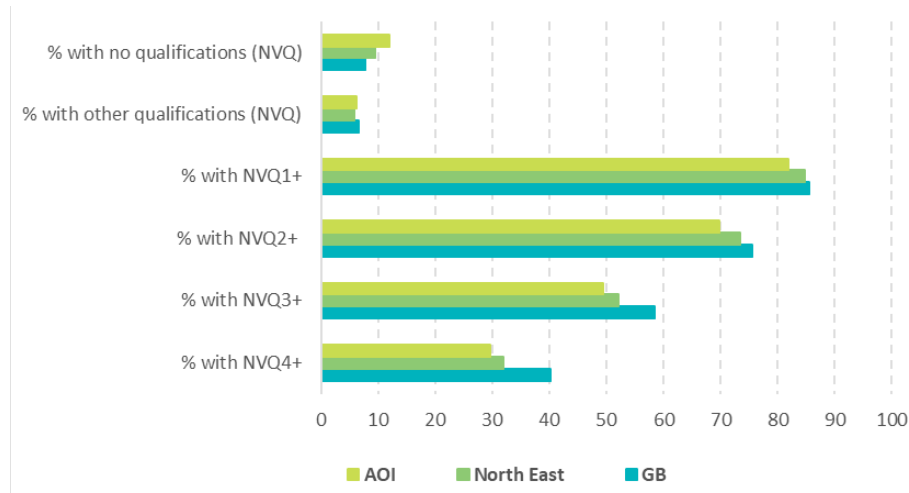
I4.13 In 2019, the model-based unemployment rate (share of working-age residents out of employment) in the AOI was 6.3% - higher than both the regional (5.9%) and national (4.0%) averages. This is also reflected in unemployment data for April 2020 which shows that there were 21,600 residents in the AOI claiming out-of-work benefits<sup>iv</sup>. This equates to a claimant rate of 7.4%. This rate is higher than that of the region (6.9%) and nationally (5.1%). Taken together these data suggest that there is greater scope locally to accommodate employment growth.

### Skills and Qualifications

I4.14 The ONS Annual Population Survey (2019) indicates that the skills base of the AOI's resident workforce (age 16-64) is characterised by:

- a A lower proportion of working-age residents with graduate level (NVQ level 4+) qualifications (29.6%) than that of the North East region (31.9%) and nationally (40.3%);
- b A lower proportion of working-age residents at all other NVQ levels (NVQ1 – 3) in comparison to the regional and national averages; and
- c A higher proportion of working-age residents with no qualifications (12.0%) than that of the wider region (9.4%) and nationally (7.7%).

Figure I4.2 AOI resident skills base (% 16-64 population)



Source: ONS Annual Population Survey, 2019 / Lichfields analysis

I4.15

An analysis of the existing occupational profile of the resident workforce (Figure I4.3) also shows that:

- a The proportion of AOI residents working in Standard Occupational Codes (SOC) 1-3 (managers, directors and senior officials; professional occupations; and associate professional & technical occupations) is low - at 34.4% - in comparison to the North East region (40.8%) and nationally (47.4%); and
- b The proportion of AOI residents working in Standard Occupational Codes (SOC) 7-9 (sales and customer service occupations; process, plant and machine operatives; and elementary occupations) is high - at 28.9% - in comparison to the North East region (27.8%) and nationally (23.7%).

Figure 14.3 Occupational profiles by Standard Occupational Code (SOC)



Source: ONS Annual Population Survey, 2019 / Lichfields analysis

### Earnings

I4.16 Latest (2019) data from ONS Annual Survey of Hours and Earnings (ASHE) indicate that median weekly resident wages (gross) across the AOI (£536) were higher than the regional average (£531) but lower than the national average (£587).

I4.17 Similarly, the median weekly workplace-based earnings (gross) were higher for the AOI (£542) in comparison with the North East (£533) but lower than the national average (£587).

### Deprivation

I4.18 Deprivation at the local level is measured by the Index of Multiple Deprivation (IMD), which uses a series of datasets to rank areas across seven domains that range from income to health. These categories in combination produce a multiple deprivation score for each local area.

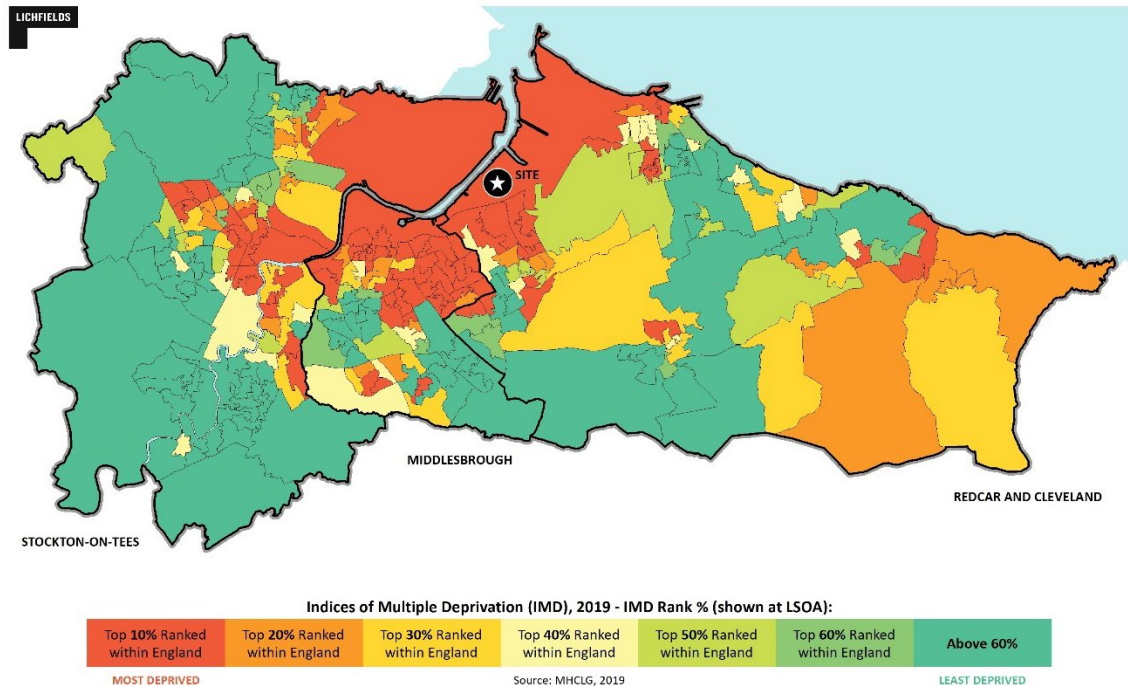
I4.19 The latest English Indices of Deprivation (2019) provides a composite measure of deprivation at a local level. Figure I4.4 indicates that there are significant pockets of deprivation across the AOI, with the most significant pockets located in Middlesbrough but also along the banks of the River Tees in both Stockton-on-Tees and Redcar and Cleveland, including the application site.

I4.20 Within the local authorities that constitute the AOI there are:

- i 23.9% of LSOAs (lower super output areas) in Redcar and Cleveland that score in the 10% most deprived nationally;
- ii 48.8% of LSOAs in Middlesbrough that score in the 10% most deprived nationally; and
- iii 20.8% of LSOAs in Stockton-on-Tees that score in the 10% most deprived nationally.

I4.21 By this metric, Middlesbrough is ranked as the most deprived local authority in England. The LSOA within which the site is located (Redcar and Cleveland oOD) is categorised as being within the 10% most deprived nationally.

Figure I4.4 Deprivation map of the AOI



Source: English Indices of Multiple Deprivation, 2019 / Lichfields analysis

### Summary of Existing Conditions

I4.22 As demonstrated within the preceding paragraphs, the AOI has:

- a lower jobs growth performance relative to the regional and national levels;
- b A lower jobs density ratio compared to both regional and national averages;
- c Higher business growth relative to regional and national averages, with particularly strong growth in Micro (0-9 employees) firms;
- d An economic activity rate that is lower than the regional and national averages. Both the model-based unemployment rate for the AOI and the proportion of economically active population claiming out-of-work benefits are higher than the regional and national averages;
- e Worse performance compared to regional and national averages in terms of skills and occupational profile of the resident workforce. The AOI has a lower proportion of residents with higher skills (NVQ Level 4+) and a lower proportion of the workforce in higher skilled occupations (SOCs 1-3). In addition, it has a higher proportion of residents with no qualifications and a greater proportion of the workforce in lower skilled occupations (SOCs 7-9).
- f On average lower resident-based earnings compared to workplace-based earnings but in both cases sitting above the regional average but below the national average; and
- g Significantly higher levels of deprivation within the context of all English local authorities.

## **Future Baseline**

### **Demographic Profile**

- I4.23 According to the 2018-based projections<sup>v</sup>, the population of the AOI is forecast to increase to 480,913 residents by 2032 (an increase of 1.4% from 2018 levels). This is lower than the rate of growth projected at the regional (2.9%) and national (6.5%) level.
- I4.24 The AOI's working age population, however, is projected to decline by 3.7% across the same period. This rate of decline is greater than that expected across the region (-2.2%) and in contrast to a projected increase in the working age population of 2.9% nationally.

### **Local Economic and Labour Market Conditions**

- I4.25 The Employment Land Review that forms part of the evidence base for the adopted Redcar and Cleveland Local Plan sets out a range of future employment forecasts for the Borough. The baseline econometric forecast<sup>vi</sup> modelled a contraction in the workforce over the course of the plan period, albeit some B class uses (either fully or in part) were forecast to grow over the same period including professional services, administrative and support services and land transport, storage and post. Similarly, the labour supply scenario forecasts only a negligible increase in employment during the plan period.
- I4.26 The Employment Land Review also took cognisance of a 'policy on' scenario which noted the Tees Valley SEP ambition to deliver 25,000 new jobs across the sub-region over the period 2015-2025. Based upon analysis undertaken by the Tees Valley Combined Authority, the apportionment of this growth within Redcar and Cleveland was estimated to be in the order of 215 new jobs per annum – equating to 2,150 new jobs over the course of the period 2015-2025.

### **Site Specific Future Baseline**

- I4.27 For the proposed development specifically, the absence of development (i.e. a no development scenario) would result in a future baseline with no additional on-site job creation – i.e. the commercial floorspace would not be developed unless alternative proposals came forward.

## 15.0 Potential Effects

15.1 The assessment of potential effects is based on the Description of Development set out in Chapter B (Site Description and Scheme Proposals).

### Embedded Mitigation

15.2 No design measures have been embedded into the scheme in relation to socio-economic matters.

### During Construction

#### Employment

##### Direct Employment

- 15.3 The methodology for estimating the employment and economic output effects (during construction) of any development proposal takes the anticipated build cost as its starting point.
- 15.4 The proposed development of the South Industrial Zone is expected to comprise of up to 418,000sq.m of gross external floorspace for general industry (B2) and storage and distribution (B8) uses. As such, the total cost of construction is likely to vary depending upon the exact mix and quantum of commercial employment uses to be delivered.
- 15.5 In recognition of the above, the analysis of employment and economic output effects during construction presented in the following paragraphs reflects two possible outcomes, as summarised below:
- **Option 1:** all floorspace (up to 418,000sq.m) will be for storage and distribution (B8) uses. Based upon an analysis of BCIS data (adjusted to reflect regional cost differentials) it is estimated that this would correspond to a total build cost of £367million; and
  - **Option 2:** all floorspace (up to 418,000sq.m) will be for general industrial (B2) uses. Based upon an analysis of BCIS data (adjusted to reflect regional cost differentials) it is estimated that this would correspond to a total build cost of £392million.
- 15.6 The options have been developed to help frame and assess the upper and lower bounds of the proposed development with respect to potential construction costs (and therefore employment and economic output effects). In reality, however, it is likely that any future development on the site will comprise a mixture of both B2 and B8 uses. As such, the observed employment and economic output effects would sit somewhere within the range identified in this section.
- 15.7 It has been assumed that the length of the build period, for both options, would be in the order of 8 years. This is based upon information provided to Lichfields by the applicant.
- 15.8 Using labour coefficients from the HCA Calculating Cost per Job Best Practice Note (2015) it is possible to estimate the number of direct construction jobs supported by the proposed development over the course of the construction phase. Taking account of the composition of the proposed development, a 'private industrial' coefficient is considered the most appropriate for calculating the number of direct construction jobs. This coefficient assumes that £1million of construction value (in 2011 prices) will support 10 direct Full-Time Equivalent (FTE) construction jobs per annum.
- 15.9 To use the coefficient, the Option 1 construction cost of £367million has been deflated to 2011 prices using the latest UK Government GDP Deflator (2019). Applying the private industrial coefficient to the deflated construction cost of £315million and then dividing the result by the

length of the construction phase (8 years), indicates that the proposed development could be expected to support 395 gross direct FTE jobs annually over the construction phase. Applying the same methodology to the Option 2 construction cost of £392 million translates to 420 gross direct jobs per annum over an 8 year construction period.

- I5.10 The extent to which construction opportunities created by the proposed development will be taken up locally cannot be estimated with any certainty until contracts have been let. Based upon experience, however, it would be reasonable to expect that at least a proportion of the construction jobs would be taken up by residents of the AOI. For instance, whilst national and regional construction firms often use their own labour on schemes, it is typical for a share of the workforce to be drawn from the local area. Within this context, it is noted that the construction industry is particularly strong within the local area, with a location quotient of 1.2 (see Figure I4.1).

### **Indirect and Induced Employment**

- I5.11 Construction typically involves purchases from a range of suppliers, who in turn purchase from their own suppliers further down the supply chain. The relationship between the initial direct and total economic effects is referred to as the 'multiplier effect'. It demonstrates that an initial investment can have much greater 'spin-off' effects as it works through the economy. The construction sector is recognised as being a part of the UK economy where there is a particularly large domestic effect in the supply chain.
- I5.12 In this context, it is anticipated that businesses in the AOI would benefit from supply chain linkages and trade connections established during the construction phase. This would create additional indirect jobs in suppliers of construction materials and equipment etc.
- I5.13 In addition, local businesses would be expected to benefit from a temporary increase in demand as a result of expenditure by direct and indirect workers during construction. This could be expected to include wage spending of workers in shops, bars, restaurants and other services and facilities and helps to create additional induced jobs.
- I5.14 ONS Detailed Input-Output Tables (2019) indicate that the construction industry has an indirect employment multiplier of 2.17. Applying this to the 395 direct FTE jobs supported per annum under Option 1 indicates that the proposed development could be expected to support 460 additional indirect FTE jobs per annum over the duration of the build period (in addition to the direct jobs derived above). This rises to 495 indirect FTE jobs per annum under Option 2. In total, therefore, the proposed development could be expected to support between 855 and 915 direct and indirect FTE jobs per annum over an 8 year build period.
- I5.15 It should be noted that the above analysis is based upon the application of a Type I multiplier and therefore makes no allowance for any induced employment effects associated with the proposed development; that is, jobs generated within the local economy as a result of expenditure by those in direct or indirect employment associated with the scheme. On this basis, the total employment effects derived above are considered to represent conservative estimates.
- I5.16 Taking the above into account, the employment effects of the proposed development during the construction phase are considered to be **temporary, medium term and moderate beneficial**. This is considered significant in EIA terms.

### **Economic Output**

- I5.17 The construction phase of the proposed development will also contribute towards increased economic output, as measured by Gross Value Added (GVA). GVA is a commonly used measure of productivity and economic performance. It represents the difference between what is



produced as output (goods and services) and the inputs required to support the production of those outputs (e.g. raw materials, semi-finished products etc.). In measuring economic growth, economists typically assess the quarterly (or annual) change in GVA for a given area.

- I5.18 Based on recent (March 2019) Experian data, the construction sector in the North East region is estimated to generate an average GVA per FTE worker of £62,370 per annum. Applying this to the direct employment effects of the scheme it is estimated that the proposed development could generate £24.5million of direct GVA for each year of the construction phase under Option 1, rising to £26.2million under Option 2. Applying an indirect GVA multiplier for the construction sector of 2.04<sup>vii</sup> to the direct GVA above, it is estimated that Option 1 could generate £50.1million of direct and indirect GVA for each year of the construction phase. This is anticipated to increase to £53.4million under Option 2.
- I5.19 The preceding analysis is based upon the application of a Type I multiplier and therefore makes no allowance for any induced economic output effects associated with the proposed development. On this basis, the total employment effects derived above are considered to represent conservative estimates.
- I5.20 Taking the above into account the economic output effects of the proposed development during construction are considered to be **temporary, medium term and substantial beneficial**. This is considered significant in EIA terms.

## **During Operation**

### **Employment**

#### **Direct Employment**

- I5.21 Lichfields is advised, by the applicant, that the proposed development is expected to create approximately 3,870 gross direct FTE jobs, once completed and operational. It is understood that this figure has been arrived at having regard to:
- The existing masterplan for the wider STDC site, which identifies distinct character areas and the likely employment yield of each (based on the anticipated scale and nature of end users); and
  - Exploratory discussions with businesses interested in establishing a presence on the site, to understand their business model and the relationship between space requirements and employment creation that flows from this.
- I5.22 The approach outlined above is considered to be more appropriate, in this instance, than the application of the standard employment densities (for general industrial and storage and distribution uses) published by the Homes and Communities Agency. The applicant has advised that the proposed development is likely to be particularly attractive to occupiers from the offshore wind energy sector, which is particularly 'land hungry'. As such, it is likely that the employment effects of the proposed development would be significantly overstated by applying standard employment densities to the quantum of development for which permission is sought.
- I5.23 Within the context of the above, the development of Green Port, Hull is a helpful comparator for the purposes of 'sense checking' the number of direct jobs to be created by the proposed development. Green Port Hull is a 56ha (139 acre) development at Alexandra Dock, Hull, for the manufacture, assembly, testing and shipment of wind turbines. It is understood, based upon the Environmental Statement submitted alongside the planning application for Green Port, Hull, that the development was expected to be capable of supporting up to 1,230 direct FTE jobs during the operational stage<sup>viii</sup>. This translates, in crude terms, to 9 jobs per acre.

- I5.24 By way of comparison, the South Industrial Zone site is anticipated to create 3,870 direct FTE jobs on a 174ha (430 acre) site. This also corresponds to an estimated 9 jobs per acre. This would appear to verify, in broad terms, the direct employment estimates generated using the process described at Paragraph I5.20.
- I5.25 In estimating the net additionality of the proposed development, it is important to make allowances for displacement effects. This refers to the extent to which the proposed development could reduce demand for other businesses (factor market displacement) – or create shortages of labour in competitor firms (labour market displacement) – in the AOI. It is possible to apply high level displacement allowances by having regard to the Homes and Communities Agency (HCA) Additionality Guidance<sup>ix</sup> supplemented by an analysis of the local context.
- I5.26 The South Tees Regeneration Masterplan (2019) establishes the guiding principles for the delivery of the South Tees Development Corporation site (which includes the Site). This states that:
- “STDC will not seek to compete with other local sites and will, instead, adopt a collaborative approach to redevelopment with neighbouring landowners and operators so that end users’ needs and preferences and wider Tees Valley economic objectives are the prime drivers in determining the best location for a potential developer. The South Tees regeneration programme will therefore deliver a development proposition built from uses that are not in conflict with neighbouring industrial centres’ traditional market sectors. The focus will therefore be on those development uses that are clearly better suited to the STDC area, taking cognisance of its setting and attributes; uses that can benefit most optimally from the site’s USPS, such as proximity to water and excellent port facilities.”*
- I5.27 The document states that the development opportunities at the STDC site are distinct from the general stock of available land across Tees Valley and that this differentiation will be maintained to minimise any competition with other employment locations in the area. This would suggest that factor market displacement is expected to be low, as the proposed development competes for investment opportunities that the AOI would not otherwise be able to attract:
- “While opportunity areas often share common attributes, there are, equally, often key differentiators that set one opportunity area apart from others; this is certainly the case with the STDC area. The unique attributes of very large vacant land areas and the development flexibility this feature brings, proximity to the North Sea and international standard port facilities, and excellent, existing road and rail connections serve to make the STDC Area significantly more attractive to inward investment.*
- “Of particular note, is the elevated premium attached to waterside land. When considering areas such as that of STDC compared to general industrial land, this is akin to the differences in value between prime high street retail and tertiary “off-pitch” streets that can be close to impossible to let and yet are within just a few hundred metres of the high street.*
- “...The implementation of this Master Plan will build upon the existing attributes and advance the “unique selling point” of the STDC Area, differentiating it from other available industrial land available in Teesside, the region and the UK, thus enabling it to fully compete for businesses and investment on an international stage.”*
- I5.28 Labour market displacement occurs where new development increases demand for labour, making it more difficult for existing businesses in the AOI to retain or recruit staff. It should, however, be recognised that generally labour market displacement is difficult to quantify and is

shaped largely by an assessment of factor market displacement (as above)<sup>x</sup>. The scale of employment growth associated with the proposed development is significant and will potentially impact upon the availability of labour within the AOI. The AOI is, however, characterised by higher levels of unemployment and residents claiming out-of-work benefits in comparison with national and regional averages. In addition, the skills/employment base of the AOI would appear to be well aligned with the types of businesses likely to be attracted to the proposed development, with both the manufacturing and transport and storage sectors over-represented locally. It is arguable, therefore, that labour availability issues would be less acute in the AOI than elsewhere.

I5.29 In the context of the above, it is assumed that – if delivered and promoted in accordance with the guiding principles of the South Tees Regeneration Masterplan – the displacement effects of the proposed development will be low. In accordance with the Homes and Communities Agency Additionality Guide, a 25% displacement allowance has therefore been applied.

I5.30 As a result, it is estimated that the net additional on-site employment generated by the proposed development is likely to be in the order of 2,903 direct FTE jobs.

### **Indirect and Induced Employment**

I5.31 In addition to the direct jobs considered above, some indirect employment would also be created by the spending on goods and services by those business based at the proposed development. The wage expenditure of workers employed directly at the proposed development, as well as those employed in the supply chain, would also support induced jobs in shops, services and other businesses in the local economy.

I5.32 In this context, it is estimated that the 2,903 net additional on-site jobs created by the proposed development could support the creation of a further 842 additional ‘spin-off’ FTE jobs in the supply chain as well as shops, services and other businesses in the local economy (defined as the AOI). At the regional (North East) level, a total of 1,277 ‘spin-off’ FTE jobs is anticipated (including the 842 to be captured locally). The estimates of ‘spin-off’ employment have been derived having regard to Homes and Communities Agency Additionality Guide which advises that industrial/warehousing intervention types typically support type II multiplier effects of:

- 1.29 at the local level; and
- 1.44 at the regional level.

I5.33 In total, therefore, the proposed development is expected to generate 3,745 (direct, indirect and induced) FTE jobs within the local economy (defined as the AOI), rising to 4,180 FTE jobs at the regional level.

I5.34 This is considered to represent a **permanent and substantial beneficial** effect. This is considered significant in EIA terms.

### **Economic Output**

I5.35 The employment opportunities generated by the proposed development could be expected to contribute towards the creation of additional economic output (measured as Gross Value Added (GVA)). The precise level of GVA to be generated by the proposed development will depend upon the exact mix of commercial uses (and the nature of end users) to be accommodated on the site.

I5.36 To reflect the differences in productivity between the B2 and B8 uses that could be accommodated on the site, the analysis of economic output effects presented below considers two possible outcomes:

- **Option 1:** all employment (2,903 net additional on-site jobs) generated by the proposed development falls within the storage and distribution (B8) uses. It is estimated that this would generate in the order of £110 million of additional GVA per annum; and
- **Option 2:** all employment (2,903 net additional on-site jobs) generated by the proposed development falls within the general industrial (B2) use class. It is estimated that this would generate in the order of £180 million of additional GVA per annum.

I5.37 The estimated GVA effects set out above have been calculated having regard to:

- The level of direct FTE (net) employment to be supported by the development (taking into account the likely split between different sectors/activities); and
- The average GVA per FTE worker<sup>xi</sup> (at the regional level) for each of the relevant sectors/activities.

I5.38 The options presented above have been developed to help frame and assess the upper and lower bounds of the proposed development with respect to potential economic output effects during operation. In reality, however, it is likely that any future development on the site will comprise a mixture of both B2 and B8 uses. As such, the observed economic output effects would sit somewhere within the range identified. This is considered to represent a **permanent and substantial beneficial** effect. This is considered significant in EIA terms.

## Summary

I5.39 The significance of the socio-economic effects identified has been considered within the context of the significance criteria matrix. The effects are assessed as being beneficial, negligible or adverse. The magnitude of effects is assessed as being substantial, moderate, minor or negligible. An assessment of the likely effects in relation to each receptor is presented in Table E5.1.

Table E5.1 Socio-Economic Effects (without mitigation)

	Duration	Effect	Magnitude
During Construction			
Employment	Medium-term, temporary	Beneficial	Moderate
Economic Output	Medium-term, temporary	Beneficial	Substantial
During Operation			
Employment	Permanent	Beneficial	Substantial
Economic Output	Permanent	Beneficial	Substantial

Source: Lichfields analysis

## 16.0 **Mitigation and Monitoring**

16.1 This section considers the need for mitigation measures in order to address any adverse effects of the development proposals.

### **During Construction**

16.2 It is anticipated that the development proposals would give rise to a temporary (medium-term), moderate beneficial effect with respect to construction employment and a temporary (medium-term), substantial beneficial effect in relation to construction economic output (GVA). As a result, no mitigation measures are required during construction.

16.3 Notwithstanding the above, STDC is committed to working with Redcar and Cleveland Borough Council, where possible, to deliver training and apprenticeship schemes during the construction phase. It is anticipated that this will help to maximise the extent to which the beneficial effects of the development proposals are captured within the AOI.

### **During Operation**

16.4 The development is expected to generate permanent, substantial beneficial effects in relation to: operational employment and operational economic output. As a result, no mitigation measures are required during operation. As above, STDC is committed to working with Redcar and Cleveland Borough Council to deliver training and apprenticeship schemes, where possible, during the operational phase. It is anticipated that this will help to maximise the extent to which the beneficial effects of the development proposals are captured within the AOI.

## I7.0 Residual Effects

I7.1 As no mitigation measures are assessed as being necessary, the residual effects are the same as the impacts discussed in earlier sections.

### During Construction

I7.2 As set out above, the effects of the development during construction are anticipated to be beneficial. The residual effects are therefore anticipated to be unchanged from section 6.0.

### During Operation

I7.3 As set out above, the effects of the development during operation are anticipated to be beneficial. The residual effects are therefore anticipated to be unchanged from section 6.0.

I7.4 The scale and significance of residual effects therefore are summarised in Table E7.1.

Table E7.1 Summary of residual effects

Receptor	Effects	Mitigation	Residual Effects
During Construction			
Construction Employment	Temporary (medium-term), Moderate Beneficial	n/a	Temporary (medium-term), Moderate Beneficial
Construction Economic Output	Temporary (medium-term), Substantial Beneficial	n/a	Temporary (medium-term), Substantial Beneficial
During Operation			
Operational Employment	Permanent, Substantial Beneficial	n/a	Permanent, Substantial Beneficial
Operational Economic Output	Permanent, Substantial Beneficial	n/a	Permanent, Substantial Beneficial

## 18.0 Summary & Conclusions

### Socio-Economic

- 18.1 The proposed development will have a beneficial effect on the local economy. During the construction stage, the delivery of 418,000sq.m of new employment space for B2/B8 uses will support new construction industry jobs which, in turn, will generate an increase in economic output (Gross Value Added). Once operational, the site is expected to position Redcar to compete for businesses and investment on an international stage, creating a net increase in local employment and the economic output that flows from this.
- 18.2 The proposed development will, therefore, contribute towards improving economic conditions within the AOI, an area currently characterised by: a low jobs density (and low levels of employment growth in recent years); high unemployment; and high levels of deprivation.
- 18.3 Given the beneficial nature of the potential effects assessed, no mitigation measures are required in order to address any adverse effects of the development proposals. A summary of the socio-economic effects is provided in Table E8.1.

Table E8.1 Summary of Effects

Receptor	Effects	Mitigation	Residual Effects
During Construction			
Construction Employment	Temporary (medium-term), Moderate Beneficial	n/a	Temporary (medium-term), Moderate Beneficial
Construction Economic Output	Temporary (medium-term), Substantial Beneficial	n/a	Temporary (medium-term), Substantial Beneficial
During Operation			
Operational Employment	Permanent, Substantial Beneficial	n/a	Permanent, Substantial Beneficial
Operational Economic Output	Permanent, Substantial Beneficial	n/a	Permanent, Substantial Beneficial

19.0

## **Abbreviations & Definitions**

AOI	Area of Impact
ASHE	Annual Survey of Hours and Earnings
BCIS	Building Cost Information Service
BRES	Business Register and Employment Survey
FTE	Full Time Equivalent
GDP	Gross Domestic Product
GVA	Gross Value Added
IED	Institute of Economic Development
IMD	Index of Multiple Deprivation
LIS	Local Industrial Strategy
LQ	Location quotient
LSOA	Lower Super Output Area
MHCLG	Ministry of Housing, Communities and Local Government
MSOA	Middle Super Output Area
NPPF	National Planning Policy Framework
ONS	Office for National Statistics
SEP	Strategic Economic Plan
SIZ	South Industrial Zone
SOC	Standard Occupational Codes
SPD	Supplementary Planning Document
STDC	South Tees Development Corporation



## References

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- <sup>i</sup> ONS, 2016 Travel to work area analysis in Great Britain: 2016
  - <sup>ii</sup> ONS Population estimates - local authority based by five-year age band (2018)
  - <sup>iii</sup> ONS Annual Population Survey, January – December 2019
  - <sup>iv</sup> ONS Claimant count by sex and age April 2020
  - <sup>v</sup> ONS (2020) Subnational population projections for England: 2018-based
  - <sup>vi</sup> Oxford Economics baseline econometric forecast, April 2016
  - <sup>vii</sup> ONS Detailed Input-Output Tables (2019)
  - <sup>viii</sup> Green Port Hull Environmental Statement, Non Technical Summary, URS Scott Wilson (2011)
  - <sup>ix</sup> Homes and Communities Agency (HCA) (2014); Additionality Guide, Fourth Edition
  - <sup>x</sup> Scottish Enterprise Economic Impact Guidance: Displacement
  - <sup>xi</sup> Based upon an analysis of Experian data (March 2019)