



FIVE
ESTUARIES
OFFSHORE WIND FARM

FIVE ESTUARIES
OFFSHORE WIND FARM
PRELIMINARY ENVIRONMENTAL IMPACT
REPORT

VOLUME 3, CHAPTER 3: SOCIO-
ECONOMIC, TOURISM AND RECREATION

Document Reference 004685507-01
Revision A
Date March 2023



Project	Five Estuaries Offshore Wind Farm
Sub-Project or Package	Preliminary Environmental Information Report
Document Title	Volume 3, Chapter 3: Socio-Economic, Tourism and Recreation
Document Reference	004685507-01
Revision	A

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Revision	Date	Status/Reason for Issue	Originator	Checked	Approved
A	Mar-23	Final for PEIR	SLR	GoBe	VE OWFL



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Term	Definition
Cable Works TCC	Temporary Construction Compounds (TCC) associated with onshore cable works.
Compensation	Compensation describes measures taken to offset residual effects resulting in the loss of, or permanent damage to, ecological features despite mitigation. For example, it may take the form of replacement habitat or improvements to existing habitats.
Construction Substation Access Zone	The area which will contain final OnSS access route during construction.
Effect	Term used to express the consequence of an impact.
Expert Topic Group	Key stakeholders and consultees involved in the scoping and design process.
Impact	An impact to the receiving environment is defined as any change to its baseline condition, either adverse or beneficial, resulting from the activities associated with the construction, operation and maintenance, or decommissioning of the project.
Jointing pits	There will be jointing pits which will require separate, smaller cable-testing pits (known as link boxes) to allow for fault testing. These will consist of a manhole set in a concrete plinth at ground level. These link boxes will fit within the standard cable route width.
Local Area of Impact	The Local Area of Impact forms the focus for assessment of both direct and indirect effects on those receptors that are likely to experience effects at a more local level, specifically community, tourism and recreational assets and extends beyond the Order Limits (OL) to include an offset of at least 5km.
Maximum Design Scenario	The maximum design parameters of the combined project assets that result in the greatest potential for change in relation to each impact assessed.



Term	Definition
Mitigation	Mitigation measures are commitments made by the project to reduce and/ or eliminate the potential for significant effects to arise as a result of the project. Mitigation measures can be embedded (part of the project design) or secondarily added to reduce impacts in the case of potentially significant effects.
Onshore Export Cable Corridor (onshore ECC)	At PEIR, the Onshore ECC is the wider cable corridor within which the preferred cable route is located. The Onshore ECC is typically approximately 60m wide, however some areas require a wider corridor (such as where trenchless crossing may take place)
Red Line Boundary (RLB)	The extent of development including all works, access routes, Temporary Construction Compounds (TCCs), visibility splays and discharge points. For the Environmental Statement (ES) the refined RLB will become ‘the proposed Order Limits’.
Substation zone	The area in which the final substation footprint will be located. The footprint will be confirmed between the PEIR and the ES.
Substation search area	The area in which the final substation construction compound footprint and the final OnSS will be located.
Wider Study Area	The Wider Study Area is intended to encompass the area within which significant effects on employment and the local economy could occur. The Wider Study Area is set at the boundary of the counties of Essex and Suffolk, within which the majority of the local supply chain and labour market effects that could occur would be experienced.



DEFINITION OF ACRONYMS

Term	Definition
Onshore AoS	Onshore cable corridor Area of Search
CCG	Clinical Commissioning Group
CoCP	Code of Construction Practice
CTMP	Construction Traffic Management Plan
ECC	Export Cable Corridor
EIA	Environmental Impact Assessment
EofE	East of England
ES	Environmental Statement
ETG	Expert Topic Group
GB	Great Britain
ICB	Integrated Care Board
LAI	Local Area of Influence
LSA	Local Study Area
LVIA	Landscape and Visual Impact Assessment
MSE	Mid and South Essex
NCN	National Cycling Network
NCR	National Cycle Route
NF OWF	North Falls Offshore Wind Farm
NGET	National Grid Electricity Transmission
NHS	National Health Service
NPS	National Policy Statement
OL	Order Limits
ONS	Office of National Statistics
OnSS	Onshore Substation
PAMP	Preliminary Access Management Plan
PEIR	Preliminary Environmental Information Report
PRoW	Public Rights of Way
SCC	Suffolk County Council
SME	Small to Medium-Sized Enterprise



SNEE	Suffolk and North East Essex
Sustrans	The organisation responsible for setting up and managing the NCN
VE	Five Estuaries Offshore Wind Farm
WES	West Essex Sub-ICB
WSA	Wider Study Area
WTG	Wind Turbine Generators
ZTV	Zone of Theoretical Influence



3. SOCIOECONOMIC, TOURISM AND RECREATION

3.1 INTRODUCTION

- 3.1.1 This chapter of the Preliminary Environmental Impact Report (PEIR) presents the preliminary findings for the assessment of the potential impacts that the Five Estuaries Offshore Wind Farm (hereafter referred to as VE) may have on socio-economics, together with tourism and recreation. The chapter has been undertaken by SLR Consulting Ltd on behalf of Five Estuaries Offshore Wind Farm Limited (VE OWFL).
- 3.1.2 The socio-economics impacts are caused by both direct or indirect interaction between the proposed development and socio-economics receptors, where the interactions could be positive or negative.
- 3.1.3 Socio-economic impacts during the construction phase of the proposed development include the temporary creation of employment opportunities, and potential adverse effects on recreational and tourism receptors. There is potential for long-term socio-economic benefits to the community resulting from investment into skills, including green skills, providing a lasting legacy. Tourism and recreational impacts would be assessed at a more localised area, forming the assessment on the findings of baseline tourism and recreational assets.
- 3.1.4 For the operational phase, the nature of the onshore development dictates that impacts would be lesser compared to that of the construction phase and impacts on the local labour market arising from operational and maintenance jobs would be more limited.
- 3.1.5 This chapter is supported by, and to be read in combination with, the following PEIR chapters:
- > Volume 2, Chapter 3: Marine Water and Sediment Quality;
 - > Volume 2, Chapter 9: Commercial Fisheries;
 - > Volume 2, Chapter 10: Shipping and Navigation;
 - > Volume 2, Chapter 11: Seascape, Landscape and Visual;
 - > Volume 2, Chapter 13: Other Marine Users and Activities;
 - > Volume 3, Chapter 2: Onshore Landscape and Visual;
 - > Volume 3, Chapter 8: Traffic and Transport;
 - > Volume 3, Chapter 9: Noise and Vibration; and
 - > Volume 3, Chapter 11: Human Health and Climate Change.

3.2 POLICY CONTEXT

LEGISLATION

- 3.2.1 This section identifies the legislation, policy and other documentation that has informed the assessment of effects with respect to socioeconomics, tourism and recreation.
- 3.2.2 For socio-economics, tourism and recreation, there is very limited guidance on assessing the effects of major infrastructure projects (such as VE) on national and local economies.



- 3.2.3 Table 3.1 sets out the legislation relevant to the assessment of the project on socio-economics, tourism and recreation receptors and identifies the relevant sections where each is addressed within this chapter.
- 3.2.4 The assessment of potential impacts on socio-economic, tourism and recreation receptors are undertaken with specific reference to the relevant National Policy Statements (NPS). These are the principal decision-making documents for Nationally Significant Infrastructure Projects (NSIP), which include:
- > Overarching NPS for Energy (EN-1) (DECC, 2011a); and
 - > NPS for Renewable Energy Infrastructure (EN-3) (DECC, 2011b).
- 3.2.5 In addition to the current NPSs, revised NPSs were consulted upon 6 September 2021 to 29 November 2021 and a House of Commons Committee report has been submitted to the government for response in February 2022 (BEIS, 2022a). The draft NPSs have been reviewed to determine the emerging expectations and changes from previous iterations of the NPSs. This includes the Draft Overarching NPS EN-1 and EN-3. Draft policies are included in the table where they differ from the extant policy.



Table 3.1: Aspects of National Policy Statement Relevant to Offshore Wind Farms for the Assessment of Socio-Economic, Tourism and Recreation

Legislation/Policy	Key Provisions	Section where comment addressed
Overarching National Policy Statement for Energy (EN-1)	Paragraph 5.12.3 - Creation of jobs and training opportunities.	The construction, operation and decommissioning of VE has potential to support employment through project expenditure with supply chain businesses within the local area and further afield. The direct and indirect impact generated by local expenditure associated with the proposed development is considered in Section 3.9 for construction, Section 3.10 for operations and Section 3.11 for the decommissioning phase
Draft Overarching National Policy Statement EN-1	Paragraph 5.13.3 – the contribution to the development of low-carbon industries at the local and regional level as well as nationally.	The construction, operation and decommissioning of VE has potential to support the development of low carbon industries (wind energy in particular, but also other energy types with similar supply chains), including associated supply chains. The potential contribution of the proposed development is considered in Section 3.9 for construction, Section 3.10 for operations and Section 3.11 for the decommissioning phase.
Draft Overarching National Policy Statement for Energy (EN-1)	Paragraph 5.13.3 - any indirect beneficial impacts for the region hosting the infrastructure, in particular in relation to use of local support services and supply chains.	The construction, operation and decommissioning of VE has potential to support supply chain businesses located in Essex and wider England. The indirect impact generated by local expenditure associated with the proposed development is considered in Section 3.9 for construction, Section 3.10 for operations and Section 3.11 for the decommissioning phase.
Overarching National Policy Statement (EN-1)	Paragraph 5.12.3 - The provision of additional local services and improvements to local infrastructure (including educational and/ or visitor facilities).	Potential impacts on local services and infrastructure are assessed in Section 3.9 for construction, Section 3.10 for operations and Section 3.11 for the decommissioning phase



Legislation/Policy	Key Provisions	Section where comment addressed
Overarching National Policy Statement (EN-1)	Paragraph 5.12.3 - The effects on tourism	Impacts on the visitor economy due to potential displacement of tourists during construction, and the potential for visual impacts of the wind turbines to deter visitors is assessed in Section 3.9 for construction, Section 3.10 for operations and Section 3.11 for the decommissioning phase.
Overarching National Policy Statement (EN-1)	Paragraph 5.12.3 - Impact of an influx of workers during construction, operations and maintenance, and decommissioning phases.	PINS concurred with VE in their Scoping Opinion that the construction of VE would not lead workers to relocate to the area with their families, and therefore there is not expected to be an influx of workers seeking housing and schools' services in the wider study area. PINS agreed that this impact is unlikely to result in significant effects and this matter can be scoped out of further assessment in the ES. However, potential impacts on the tourism economy in terms of competition for temporary accommodation is assessed in Section 3.9 for construction, and Section 3.11 for the decommissioning phase, and are also assessed in Section 3.12 Cumulative.
Overarching National Policy Statement (EN-1)	Paragraph 5.12.3 - Cumulative effects.	Alongside other projects, the construction, operation and decommissioning of VE is likely to generate cumulative effects on the various receptors identified in this assessment. Cumulative effects are considered in Section 3.12, for further review and assessment in the final ES.
Overarching National Policy Statement (EN-1)	Paragraph 5.12.4 - The assessment should describe the existing socio-economic conditions in the areas surrounding the proposed development and should also refer to how the proposal's socio-economic impacts correlate with local planning policies.	The current baseline conditions, against which the effects of VE are considered, are presented in Section 3.7. Detail on the methodology for baseline data gathering and datasets used is provided in Section 0.



Legislation/Policy	Key Provisions	Section where comment addressed
Overarching National Policy Statement (EN-1)	Paragraph 5.12.5 - The inter-relationships of socio-economic impacts with other impacts should also be considered.	The inter-relationship of socio-economics with other effects are considered in Section 3.13.
Draft Overarching National Policy Statement (EN-1)	Paragraph 5.13.6 – Accommodation strategies should be developed where appropriate, especially during construction and decommissioning phases, that would include for the need to provide temporary accommodation for construction workers if required.	Potential impacts on accommodation are assessed in Section 3.9 for construction, and Section 3.11 for the decommissioning phase, and are also assessed in Section 3.12 Cumulative.
Overarching National Policy Statement (EN-1)	Paragraph 5.12.8 – The assessment should consider any relevant positive provisions the applicant has made or is proposing to make to mitigate impacts (for example through planning obligations) and any legacy benefits that may arise as well as any options for phasing development in relation to socioeconomic impacts.	The extent to which the proposed development would retain beneficial socio-economic effects within the local area are assessed in Sections 3.9, 3.10 and 3.11.



Legislation/Policy	Key Provisions	Section where comment addressed
Draft Overarching National Policy Statement (EN-1)	Paragraph 5.13.9 - The Secretary of State may wish to include a requirement that specifies the approval by the local authority of an employment and skills plan detailing arrangements to promote local employment and skills development opportunities, including apprenticeships, education, engagement with local schools and colleges and training programmes to be enacted.	The potential for the proposed development to contribute to employment and skills is under consideration in consultation with stakeholders. VE has committed to the creation and implementation of an Employment, Skills and Education Strategy as a means of aiding in the development of skills locally as a result of the VE project.
Overarching National Policy Statement (EN-1)	Paragraph 5.5.7 - Effects of the proposed project on maintaining coastal recreation sites and features.	Assessment of potential disruption to, or along the access routes to, sensitive community and tourism receptors is provided in Section 3.9.
National Policy Statement for Renewable Energy Infrastructure (EN-3)	Paragraph 1.8.189 - waves and tides – the presence of the turbines can cause indirect effects on flood defences, marine ecology and biodiversity, marine archaeology and potentially, coastal recreation activities	The impacts on coastal recreation activities have been considered in Sections 3.7, 3.9 and 3.11 of this PEIR chapter.



- 3.2.6 The Energy White Paper (BEIS, 2020a) announced that the Energy NPSs would be reviewed such that they reflect its policies and broader strategic approach and facilitate the infrastructure required for the transition to Net Zero. The transition to Net Zero refers to the UK Government's commitment to achieve net zero emissions by 2050 and the transition required to achieve this commitment.

UK POLICY

BUILD BACK BETTER: OUR PLAN FOR GROWTH

- 3.2.7 The Build Back Better: Our Plan for Growth (HM Treasury, 2021a) policy paper sets out the UK Government's plan 'to deliver growth that creates high-quality jobs across the UK' by building on the three core pillars of infrastructure, skills and innovation. The plan also identifies three priorities for the UK Government, among which is supporting the transition to net zero.
- 3.2.8 The Plan for Growth states that the UK Government will focus on delivering The Ten Point Plan for Green Industrial Revolution (BEIS, 2020b), which commits £12 billion of UK Government investment with the ambition of leveraging three-fold that amount of private investment by 2030. Point 1 of the plan is advancing offshore wind, the objective being to quadruple offshore wind capacity to 40 GW by 2030, supporting up to 60,000 jobs along the way.
- 3.2.9 A suite of deliverable plans, including the Energy White Paper (BEIS, 2020a) and the Net Zero Review: Interim report (HM Treasury, 2021b) were published in late 2020. Following the publication of these plans, the Net Zero Review: Final Report (HM Treasury, 2021c) was published in 2021. These build on the Ten Point Plan and seek to examine how the economic benefits of the transition to net zero can be maximised.
- 3.2.10 The final report of HM Treasury's Net Zero Review states, "*The costs of global inaction significantly outweigh the costs of action*", highlighting that current economic analysis could understate the economic costs of climate change to the UK. It recognises that climate action could boost the economy, but also yield co-benefits such as improved air quality.

ENERGY WHITE PAPER

- 3.2.11 The Energy White Paper puts net zero and the UK's effort to fight climate change at its core following the Prime Minister's Ten Point Plan. The White Paper presents a vision of how the UK makes the transition to clean energy by 2050, and what this will mean to consumers of energy at home and places of work, or for how businesses use energy to produce goods and services.
- 3.2.12 The Energy White Paper sets out the changes required to achieve net zero, and argues that taking action now will help ensure not just that the UK ends its contribution to climate change, but also help position UK companies to seize the business opportunities which flow from it, creating jobs and wealth.
- 3.2.13 The Energy White Paper follows on from the Prime Minister's Ten Point Plan, providing further clarity on the measures required, and puts in place a strategy for the wider energy system that:
- > Transforms energy, building a cleaner, greener future for the UK, people and the planet;
 - > Supports a green recovery, growing the UK's economy and supporting thousands of green jobs across the country in new green industry and leveraging new green export opportunities; and



- > Creates a fair deal for consumers, protecting the fuel poor, providing opportunities to save money on bills, giving people warmer, more comfortable homes and balancing investment against bill impacts.

3.2.14 Local, national and UK supply chain expenditure generated as a result of VE will support the UK Government's ambition for a green recovery and help create employment in a nascent green industry.

CLEAN GROWTH STRATEGY

3.2.15 Connected to the UK Industrial Strategy, the UK Government has also developed a Clean Growth Strategy (UK Government, 2017) to ensure economic growth goes hand in hand with greater protection for the natural environment. Within this is a commitment to help businesses and entrepreneurs seize opportunities of a low carbon economy, and specifically offshore wind. This is driven by policies and processes to improve the route to market for renewable technologies such as offshore wind. Examples include up to £557 million for further Pot 2 Contracts for Difference (CfD) auctions and working with industry to develop an ambitious sector deal for offshore wind.

3.2.16 Under its ambition to deliver clean, smart and flexible power the Clean Growth Strategy seeks to deliver a diverse electricity system that supplies homes and businesses with secure, affordable and clean power. The Strategy seeks to deliver this through the development of low carbon sources of electricity (including renewables) and acknowledges that the UK is well-placed to benefit and become one of the most advanced economies for smart energy and technologies.

TOURISM SECTOR DEAL

3.2.17 The Tourism Sector Deal (BEIS, 2019) outlines how the UK Government and industry will collaborate to enhance productivity and workforce skills as well as support destinations to improve the UK's visitor offer. The Deal reinforces the five foundations of the UK Industrial Strategy, and maximises opportunities from the Grand Challenges, as follows:

- > **Ideas** - it places small businesses at the centre of innovation through the creation of a Tourism Data Hub that will enable data sharing to improve understanding of consumer habits.
- > **People** – it seeks to attract, train and retain a more skilled workforce. This ambition is to be overseen by the newly formed Hospitality and Tourism Skills Board, which will oversee an increase in approved apprenticeship starts to 30,000 a year by 2025 and a mentoring programme supporting 10,000 employees. A £1 million retention and recruitment campaign is to be led by industry.
- > **Infrastructure** – it seeks to encourage investment to accommodate the additional 23% visitors expected annually by 2025, ensuring that UK's visitor offer remains world-leading. This entails investment in 130,000 additional hotel rooms UK-wide by 2025, 75% of which are outside the capital.
- > **Business Environment** – it seeks to maintain UK's position as a leading destination for hosting international business events in Europe, through the UK government's International Business Events Action Plan. Additional support for tourism small to medium-sized enterprises (SMEs) is to be made available through the Great Britain Tourism Exchange platform.
- > **Places** – it adopts a place building approach to tourism and proposes the development of five Tourism Zones to provide industry and government support to grow the visitor economy of ambitious areas.



BRITISH ENERGY SECURITY STRATEGY

- 3.2.18 The British Energy Security Strategy (BEIS, 2022b) aims to increase the speed of the UK's transition from fossil fuels to nuclear and renewables, with a goal of low-carbon sources producing 95% of the UK's electricity by 2030 and a fully decarbonised electricity system by 2035. This is taken with the view that it will reduce the consumer costs for energy and the reliance on external nations as a source for energy.
- 3.2.19 Regarding offshore wind, the Strategy aims up to 50 GW of offshore wind by 2030, including up to 5 GW of floating turbines. To accelerate the process, the Strategy aims to reduce the time for consenting from four years to one and implementing fast-tracks for priority cases, as well as amendments to the HRA and Marine Licensing schemes.

LOCAL PLANNING POLICY AND GUIDANCE

TENDRING ECONOMIC DEVELOPMENT STRATEGY, TENDRING DISTRICT COUNCIL

- 3.2.20 Tendring District Council developed a 10-year economic strategy in 2013, the approach was then refreshed and updated to cover 2019-2024. The approach was refreshed to reflect updated evidence in economic context, respond to economic uncertainty and ensure future investment is informed on the most updated evidence.
- 3.2.21 The basis of the original and updated strategy focus is on sustainable growth. The mechanisms to drive the sustainable economic growth have been listed by Tendring District Council as the following:
- > Promoting diversification within the local business base;
 - > Recognising that it is Tendring's businesses that will be delivering economic growth;
 - > Recognising and promoting Tendring's role in regional and national economies;
 - > Valuing places within Tendring;
 - > Recognising the importance of the district's residents to the area's economic future;
 - > Promoting improved partnership working;
 - > Ensuring that the Council continue to prioritise investment into those areas which need it most.
- 3.2.22 The strategy sets out a Two-Year and a Five-Year vision which supports activity until 2024. The Two-Year vision mentions improved relationships with the business and resident communities, using the district's Marine expertise to take a more agile approach to Clean Energy and improving infrastructure and public transport in and out of the district.
- 3.2.23 The Five-Year vision states that by 2024, the impacts of this Economic Strategy will be clear.
- "Indicators relating to employment, business creation, population and job creation will all be demonstrating strong improvement with the rate of employment and business growth converging with that of Essex. Perceptions of Tendring will have changed, with the district being recognised as a location where people seek to live, work and visit." (Tendring District Council, 2020).*
- 3.2.24 North Essex is mentioned in becoming a focus for new developments and innovation in the region's Marine and Clean Energy offer.



- 3.2.25 To achieve the strategy and visions, five objectives were set established in the 2013 Economic Strategy which have been followed in the updates strategy which are:
- > Objective 1 - Targeting growth locations;
 - > Objective 2 - Targeting growth sectors;
 - > Objective 3 - Ensure residents have the skills and information to participate;
 - > Objective 4 - Support Growth & Innovation in Tendring's Businesses;
 - > Objective 5 - Delivering Housing to Support our Economic Objectives.
- 3.2.26 The Strategy notices the importance of delivery and tracking success and states that ensuring any partners must be able to see the long-term vision for Tendring and will be crucial in maintaining and building economic momentum.
- 3.2.27 As noted, the Strategy runs up to the year 2024. Prior to the submission of the final ES, any updates and potential draft replacements will be sought from Tendring District Council, as well as the status of this Strategy.

TENDRING DISTRICT LOCAL PLAN 2013-2033 AND BEYOND SECTION 1 (NORTH ESSEX AUTHORITIES' SHARED STRATEGIC SECTION 1 PLAN).

- 3.2.28 To plan positively for the Tendring area, a collaboration between Braintree District Council, Colchester Borough Council and Tendring District Council was deemed beneficial to get the best outcomes for current and future communities.
- 3.2.29 The main purposes of the strategic chapter of the Local Plan are to:
- > *“Articulate a spatial portrait of the area, including its main settlements and strategic infrastructure, as a framework for accommodating future planned growth;*
 - > *Provide a strategic vision for how planned growth in North Essex will be realised; set strategic objectives and policies for key growth topics;*
 - > *Set out the numbers of additional homes and jobs across the area that will be needed covering the period to 2033. The choices made, particularly in relation to the location of garden communities, will also set the framework for development well beyond the plan period; and*
 - > *Highlight the key strategic growth locations across the area and the necessary new or upgraded infrastructure to support this growth.”*
- 3.2.30 The policy sets out objectives designed to support the vision and provide a basis for development, these are:
- > Providing Sufficient New Homes – to meet the needs of a growing and ageing population
 - > Fostering Economic Development – strengthen and diversify local economies and promote sustainable growth.
 - > Providing New and Improved Transport & Communication Infrastructure – focus on sustainable transport and making use of existing transport, infrastructure and sustainability. To ensure that enabled communication is provided as part of new developments.
 - > Addressing Education and Healthcare Needs – To provide high quality health care, working with healthcare partners such as NHS and supporting sustainable growth.
 - > Ensuring High Quality Outcomes - to promote greater ambition in planning and delivering high-quality sustainable new communities, with focus on green infrastructure.



3.2.31 The policy outlines the importance of favouring sustainable development in accordance with guidance in the National Planning Policy Framework. Policy SP1 - Presumption in Favour of Sustainable Development states:

“When considering development proposals the Local Planning Authorities will take a positive approach that reflects the presumption in favour of sustainable development contained in the National Planning Policy Framework. They will always work proactively with applicants to find solutions which mean that proposals can be approved wherever possible, and to secure development that improves the economic, social and environmental conditions in the area. Development that complies with the Plan will be approved without delay, unless material considerations indicate otherwise.”
(Tendring District Council, 2021).

TENDRING DISTRICT LOCAL PLAN 2013-2033 AND BEYOND SECTION 2

3.2.32 Tendring District Local plan sets out the blueprint for future growth of high quality, energy efficient and properly planned ‘sustainable’ development’.

3.2.33 An overview of the vision states:

“In 2033, Tendring District will be a vibrant, healthy and attractive place to live, work and visit. It will have a thriving, resilient and prosperous economy that promotes sustainable economic growth, making sustainable use of its natural and historic environments, maritime connections and popularity as a visitor destination.”
(Tendring District Council, 2022a).

3.2.34 Objectives for the plan provides the aims and development management policies for the plan as a whole which are as follows:

- > Housing Delivery
- > Employment/Commercial
- > Retail Development
- > Infrastructure Provision
- > Education and Health
- > Sustainability
- > The Historic Environment
- > Biodiversity
- > Water and Climate Change
- > Tourism Promotion

3.2.35 Regarding Tourism Promotion, Local Plan’s strategic objective for tourism is:

“To work with partners to provide an enhanced environment for tourism and the maritime sector and its associated services.”

3.2.36 Currently the tourism sector in Tendring is worth more than £353 million per annum to the local economy and supports approximately 7,900 jobs across the District, with tourism employment growing by approximately 35% over the five years prior to the Plan’s adoption (2014 - 2019). The Plan notices how Green Infrastructure and tourism interlink and suggests a good green infrastructure network provides opportunities to enhance tourism in the Tendring District, while ensuring that its most sensitive assets are protected.



SKILLS FOR ESSEX AND STRATEGY ACTION PLAN

3.2.37 The Essex Skills for Growth Strategy (Essex County Council, 2019) is a paper that sets out a vision to drive inclusive economic growth and focus on the skills needed for the future economy. The strategy recognises the importance of addressing issues such as low productivity, business development and economic inclusion.

3.2.38 The aim set out in the strategy is that by 2035 the skill system of Essex's workforce will be innovative, all-age, and technology focused, achieved by numerous strategy objectives such as:

- > *“Our approach is to work in partnership with employers of all sizes and with education and training providers to develop the skilled workforce of the future. We will use our position as leaders to bring all stakeholders within the skills system together, enabling improved alignment of resources, putting employer skills needs at the fore. This will send a strong signal to Government that Essex is leading the way with a resilient skills culture which will drive a growing economy.”*
- > *“Our interventions are steered by robust evidence which we regularly refresh recognising the fluid, changeable nature of our labour markets whilst ensuring that our responses are agile and future-proofed.”*

THE NORTH ESSEX ECONOMIC STRATEGY

3.2.39 The North Essex Economic Strategy published in October 2019 sets out ambitions for long-term sustainable and inclusive prosperity whilst looking out to 2040. The strategy has been prepared in the context of:

- > **Rapid population growth:** From 1998-2018 population increased by almost 20%, therefore 50,000 new homes planned across North Essex by 2036.
- > **Rapid economic change:** Data-driven economies, artificial intelligence and demographic change will lead to a new type of goods and services (along with skills, infrastructure, and technologies to provide them).

3.2.40 The strategy is based on the vision that:

“North Essex is a high-value, productive and sustainable economy. People choose to live and work locally, in a new and established communities that are well connected and inspire innovation and creativity” (Essex County Council, 2019).

3.2.41 The vision is supported by four missions that will be worked towards in the shorter term. The missions are:

- > **Mission 1:** Driving innovation and technology adoption: In the next 40 years the aim is to support an economy which is 'high value and productive' by increasing technology adaption, driving forward productivity and allowing innovative businesses to grow. The short term aims to achieve this are by supporting innovative business, the supply chain and knowledge base. Increasing communications between knowledge hubs such as Essex University and SME's to strengthen supply chains. Driving inward investment will allow the delivery of sustainable employment and encourage innovation.
- > **Mission 2:** Developing a skilled and resilient workforce: In the next 40 years the aim is to develop a fully inclusive workforce of all ages and across all communities to support and contribute towards the North Essex Economic Strategy. This will be achieved in the short term by working with institutions and partnerships to increase supply of industry-relevant qualifications. Awareness of opportunities that are available in North Essex will be increased along with supporting those in the labour market by accessing new skills and adapting to changing working practices and technologies.



- > **Mission 3:** Creating a network of distinctive, cohesive communities: In the next 40 years the aim is to preserve and enhance the North Essex's identity and diversity and to ensure all areas of North Essex contribute and benefit from any economic growth. In the short term this will be achieved by a transport strategy which is sustainable and is well connected. Investment will be needed to support distinctive, adaptable and creative places. Coastal towns will have a focus to better embed 'anchor-institutes'
- > **Mission 4:** Growing a greener, more sustainable economy: In the next 40 years the aim is ensure North Essex is a leading example of a sustainable economy through development such as New Garden communities, lower carbon innovative business. This will be achieved by, in the short term focusing on supporting businesses in becoming more energy efficient and seeking to provide incentives for businesses to use sustainable materials in construction and development processes.

3.2.42 The Strategy highlights the need for close partnerships with institutions, universities, local authorities, and local businesses, and also notes the need for it to be flexible to adapt to change.

THE CONSTRUCTION GROWTH IN ESSEX REPORT 2020-2040

- 3.2.43 Essex County Council have produced a report to identify what implications a predicted boost in construction activity would have on the labour market and skills in Essex in the years up to 2040.
- 3.2.44 Essex has a mature construction industry which has sustained and supported economic growth generating £4.7 billion per annum in Gross Value Added (GVA) with baseline data suggesting resident construction workforce has consistently tracked above the number of jobs available locally by between approximately 5,000 and 19,000.
- 3.2.45 Despite this, the current pipeline of construction work has been considered as unprecedented and comprises of several multi-billion pound projects. This includes six new Garden Communities, significant programme of highway and transport improvements, a new public health facility in Harlow and expansion of Stansted airport. In addition, Lower Thames Crossing and Bradwell B nuclear new are two more megaprojects, all projects combined would deliver around 35,000 new homes by 2040 alongside infrastructure with a value of around £26 billion (Essex County Council, 2020a). Other megaprojects outside of the Essex boundary are predicted to draw on the Essex workforce such as High Speed 2, Silvertown Tunnel and potential Heathrow Airport Expansion in London, consented Sizewell C nuclear power station and East Anglia Array offshore wind farms off the coast of Suffolk, and the proposed London Resort in Kent.
- 3.2.46 The report explores potential impacts the major projects may have on the construction workforce by understanding the pipeline of work, identifying changing political and economic circumstances and how to secure a positive and sustainable legacy from the construction activity.
- 3.2.47 A supply and demand assessment identifies that when combining a baseline demand in growth with the identified major projects, a labour demand will peak in 2031 creating an overall level of demand in this year of c.101,000. Without intervention, it is predicted there will be a shortage of labour in peak demand year, 2031, by around 12,900.



- 3.2.48 The report identifies key issues and disruptors in the construction industry with the main themes being accelerated change and emerging methods which are likely to affect supply and demand within the industry. Other challenges predicted are product quality, understanding skills requirements, investment risk associated with growing manufacturing capacity and insufficient security relating to future developments.
- 3.2.49 Opportunities, challenges and recommendations of the report highlights the benefits of a potential construction innovation network led by the local authority, the network would provide leadership; communication; collaboration and coordination; and capability in the industry. Early adoption of innovation in education and training has been recognised as a method to encourage lifelong learning.

ESSEX GREEN SKILLS INFRASTRUCTURE REVIEW REPORT AND ACTION PLAN

- 3.2.50 Essex County Council have produced a Green Skills Infrastructure review for Essex, published in March 2022. The report was used to review green skills and related infrastructure in the county. Green skills are defined as:
- 3.2.51 “Green skills are knowledge, experience, values, attitudes and abilities that support carbon reduction and resource efficiency to increase climate resilience and enhance natural assets. Green skills do not form their own sector, they are relevant to all sectors in the economy.” (Essex County Council, 2022).
- 3.2.52 It is estimated that there are currently around 3,000 - 4,000 green skilled jobs in Essex and rising to 5,750 by 2030 based on historic growth. Future growth based on the UK Government’s on the Ten Point Plan (BEIS, 2020b) is estimated to deliver around 14,000 jobs within Essex by 2030, whilst the Government’s further ambition of creating 2 million UK green jobs by 2030 would increase the estimated number of green jobs in Essex to 45,000 by 2030.
- 3.2.53 It is recognised that for every green job there will be a ripple effect of supporting jobs created such as recruitment. It is currently unclear which industries will grow at faster rates in comparison to others due to political and geographical drivers in Essex.
- 3.2.54 The report also reviews the provision of green upskilling, further education, higher education and adult community learning. Following the review of provisions within Essex, it shows that is over 100,000 learning places available in Essex each year, with the opportunity for further upskilling. This highlights there is a good capacity of opportunities to provide for the predicted growth in green skills. It is essential to understand the emerging skills and demands in order to direct courses and education curriculum towards these areas.
- 3.2.55 The review identified six gaps and challenges in the green skills infrastructure which are:
- > **Policy Implementation** –The importance of implementing national policy in a local context
 - > **Awareness** – Creating a balance between supply and demand and ensuring stakeholders understand the opportunity for green skills. Education and trainers are aware of pipeline projects and legislation training.
 - > **Education** – Addressing issues such as staff shortages, lack of carbon literacy and disconnection between industry and business needs.
 - > **Data Availability** – There is currently a lack of available data which restricts detailed assessment in relation green skills and their demand.



- > **Communication** – Communication restraints can limit the pace of upskilling, at present there are a lack of communication channels for stakeholders to remain informed about green jobs, improved communication can supply confidence around the demand of green jobs.
- > **Resources** – COVID-19 was a key disruptor in the green skills agenda, therefore SME's are focusing on stability rather than enhancing green skills for the medium-term.

3.2.56 The recommendations in the review have formed Joint Stakeholder Action Plan, this is broken down under four headings.

- > The Essex Net Zero Centre of Excellence – Online hub of experts for individuals and businesses to utilise
- > Raising Awareness – A package of five communication tools to improve the speed of information between stakeholders to improve the supply and demand of green skills
- > Strategic Leadership – Providing the certainty of demand for green skills using four targeted leadership actions.
- > Collaboration and Partnership – Encouraging more collaborations and partnerships to promote green skills in Essex.

3.3 CONSULTATION

3.3.1 To date, the consultation taken place with regards to the Socio-Economic, Tourism and Recreation assessment has comprised:

- > Submission of a Scoping Report (Five Estuaries OWF, 2021);
- > Non-Statutory Public Consultation response - Essex County Council, 2022
- > Non-Statutory Public Consultation response - NHS Suffolk and North East Essex, 2022;
- > Non-Statutory Public Consultation response – East Suffolk Council, 2022
- > Consultation meeting regarding jobs and skills with NHS Suffolk and North East Essex Integrated Care Board and Essex County Council; and
- > VE Evidence Plan (Socio-Economic, Tourism and Recreation Expert Topic Group (ETG)) process, comprising discussions with Essex County Council (inclusive of Tendring District Council) and NHS Suffolk and North East Essex Integrated Care Board.

3.3.2 After the submission of the Scoping Report, a Scoping Opinion was received from the Planning Inspectorate (PINS) which comprised further relevant statutory consultees, where the methodology was agreed and inputs for further consideration were given.

3.3.3 A further two meetings with the Essex County Council and Suffolk and North East Essex Integrated Care Board were held. The first was in reference to a potential Employment and Skills Strategy and the impacts on employment, whilst the second was part of the ETG.

3.3.4 The individual consultations, the issues raised and how they have been addressed in this assessment are tabulated in Table 3.2.



Table 3.2: Summary of Consultation Relating to Socio-Economics, Tourism and Recreation

Date And Consultation Phase/ Type	Consultation And Key Issues Raised	Section Where Comment Addressed
PINS, Scoping Opinion, November 2021	<p>The Scoping Report argues that socio-economic and tourism effects arising from decommissioning works are likely to be of a similar nature, but of smaller scale and geographical extent, to effects experienced during the construction phase. No justification has been provided to demonstrate that the effects of decommissioning would not be significant. In light of this the Inspectorate is unable to agree to scope this matter out. Accordingly, the ES should include an assessment of this matter or information demonstrating agreement with the relevant consultation bodies and the absence of an LSE.</p>	<p>Decommissioning effects have been addressed in Section 3.11.</p>
	<p>The proposed assessment has not factored in the impact on the development on the local workforce skills base, particularly with respect to the potential cumulative impact with other major infrastructure. The ES should include an assessment of the likely skills shortages at the construction and operation stage to allow early-stage intervention plans to mitigate against this likelihood. The assessment of the impact on the labour market should set out clearly the expected number and nature of employment opportunities during each phase of the development.</p>	<p>Current levels of employment in skilled industries and the level of education and qualifications attained by residents of the WSA have been outlined in Section 3.7 - Population and Labour Market.</p> <p>The impacts on the labour market have been addressed in Section 3.9 - Impact of Construction Activity on Employment.</p> <p>Further information will be dependent on the level of employment, and the level of local employment, for the construction and operation of VE. This information will be obtained prior to the final ES assessment.</p>
	<p>The impacts scoped into the assessment do not include any consideration of potential socio-economic impacts on the fishing</p>	<p>Impacts on recreational angling are assessed in Section 3.9 - Impact of Construction Activity on Offshore Recreation and Section 3.10 -</p>



Date And Consultation Phase/ Type	Consultation And Key Issues Raised	Section Where Comment Addressed
	<p>industry in the region. The ES should include information on this and an assessment if LSE are likely to arise from the Proposed Development alone or cumulatively with other projects.</p>	<p>Impact of Operational Activity on Offshore Recreation.</p> <p>Further information on impacts to the fishing industry is available in Volume 2, Chapter 9: Commercial Fisheries and Volume 2, Chapter 13: Other Marine Users and Activities.</p>
	<p>The Scoping Report proposes to assess the disruption caused to tourism assets and community facilities within the local impact area arising from concurrent construction of the Proposed Development and any other major infrastructure projects. The Inspectorate considers that this should include any project with potential to affect the same receptors as the Proposed Development and should not be confined to other OWF. In addition to this, the assessment of cumulative impacts to tourism should consider perception and propensity for visiting and subsequent impact upon tourism. This should draw on the cumulative impact set out in chapters:</p> <ul style="list-style-type: none"> > Volume 2, Chapter 11: Seascape, Landscape and Visual Impact Assessment; > Volume 2, Chapter 12: Offshore Archaeology and Cultural Heritage; > Volume 2, Chapter 13: Other Marine Users and Activities > Volume 3, Chapter 2: Onshore Landscape and Visual. > Volume 3, Chapter 7: Onshore Archaeology and Cultural Heritage; 	<p>The cumulative effects will be considered in full at the ES stage. Reference to major projects is outlined in Section 3.12.</p>



Date And Consultation Phase/ Type	Consultation And Key Issues Raised	Section Where Comment Addressed
	<ul style="list-style-type: none"> > Volume 3, Chapter 9: Airborne Noise and Vibration; > Volume 3, Chapter 8: Traffic and Transport; and > Volume 3, Chapter 10: Air Quality. 	
<p>Essex County Council, Scoping Opinion, November 2021</p>	<p>The document makes reference to job numbers in other developments. However, there is no mention of numbers expected at this development specifically.</p> <p>One of the outcomes of the scoping exercise should be generation of a timetable which clearly sets out the assumptions about the number of workers required and the skills profile. This will inform engagement with local skills providers, educators and Essex County Council.</p> <p>Therefore, a construction and operational workforce profile would also need to be scoped, with information on the numbers of specific skilled workers required at each stage.</p>	<p>Specific levels of employment are unknown and are expected to be obtained prior to the final ES, where they will be fully assessed.</p> <p>The estimated numbers of construction workers have been outlined and assessed in Section 3.9 - Impact of Construction Activity on the Displacement of Visitors within the WSA, however, it is expected that the number of operational workers will be obtained and assessed prior to the submission of the final ES.</p>
	<p>As well as the Essex Open data source, we would expect the developer to review other key data that does not seem to appear on this list - Table 27.1. This includes Skills for Essex Strategy and Action Plan (2021), the Essex Prosperity and Productivity Plan - Success Essex Board (2020), the North Essex Economic Strategy (2019), the Construction Growth in Essex Report 2020-2040 (2020), the Essex County Council Skills and Employment Principles for Major Projects and Developments, and the Essex Green Skills Infrastructure Review Report and</p>	<p>Relevant policies and plans reviewed prior to the assessment have been outlined in Section 3.2.</p>



Date And Consultation Phase/ Type	Consultation And Key Issues Raised	Section Where Comment Addressed
	<p>Action Plan (due to be published in Dec 2021).</p> <p>It is our opinion that these documents will provide useful additional data and information about the locality and county, thereby enabling the developers to further align the project with the local, regional and national ambition</p>	
	<p>The proposed assessment method is sound and the reference to the National Policy Statement for Energy (NPS) EN-1 is welcome. However, we would also welcome a specific skills and jobs theme for the impacts proposed to be scoped into the assessment for Socio-Economic, Tourism and Recreation. For example, an assessment of the likely skills shortages at the construction and operation stage would allow early-stage intervention plans to mitigate against this likelihood. This would be welcome, especially if the interventions are increasing the local skills base in preparation for this and other projects.</p> <p>Though 27.5.12 does make reference to the cumulative effects from other projects, we think that the assessment method needs to also look at this project's specific expected impact on the local labour market, in addition to other developments.</p>	<p>VE has agreed to prepare and implement an Employment, Skills and Education Strategy.</p> <p>Impacts on the local labour market are assessed in Section 3.9 - Impact of Construction Activity on Employment and Section 3.10 - Impact of Operational Activity on Employment.</p> <p>Further details on specific job numbers and skills needed for the VE project and will be obtained and assessed prior to the submission of the final ES.</p>
	<p>As an additional next step, we would propose that the scoping process starts to sketch out data and/ or assumptions to populate an Employment, Skills and Education Strategy as part of the socio-economic modelling. This</p>	<p>VE has agreed to prepare and implement an Employment, Skills and Education Strategy.</p>



Date And Consultation Phase/ Type	Consultation And Key Issues Raised	Section Where Comment Addressed
	would support the developer's intend to work closely with us in order to maximise local recruitment across all skills levels, during the construction and post-construction phase.	
NHS North East Essex CCG, Scoping Opinion, November 2021	We are particularly interested in understanding more around the opportunities to work with the developer on turning the potential impacts on Socio Economics, Tourism and Recreation into opportunities to improve the offer of local skills, education, training and jobs for local people.	VE has agreed to prepare and implement an Employment, Skills and Education Strategy.
SCC, Scoping Opinion, November 2021	It should also set out clearly the expected number and nature of employment opportunities during each phase of the development. It should relate this to the availability of labour in the area, its cumulative impact alongside other infrastructure projects, not just similar offshore wind farm projects and identify how any mismatch between supply and demand can be addressed.	Impacts on the local labour market are assessed in Section 3.9 - Impact of Construction Activity on Employment and Section 3.10 - Impact of Operational Activity on Employment. Cumulative effects are to be considered at ES stage. VE has agreed to consider the preparation of an Employment, Skills and Education Strategy.
	SCC does not agree with the scoping out of impacts to socio-economic and tourism impacts during decommissioning. If, as the applicant explains in table 27.3, impact 27.14, these are likely to be of a similar nature as the effects occurring and experienced during construction there is no justification to scope out.	Decommissioning effects have been addressed in Section 3.11.
Essex County Council / NHS NEEICB, Jobs and	A) Social value job creation 1. We would like to see guarantees and evidence that employment is created locally to deliver true social value. As opposed to teams	VE has agreed to prepare and implement an Employment, Skills and Education Strategy. Impacts on the local labour market are assessed in Section 3.9 - Impact of Construction Activity on



Date And Consultation Phase/ Type	Consultation And Key Issues Raised	Section Where Comment Addressed
Skills Meeting, September 2022	<p>of contractors being bussed in to deliver and go.</p> <ol style="list-style-type: none"> 2. This is an opportunity to address skills and employment gap. Will the project be providing local apprenticeships, linking into relevant collages/training establishments? 3. Along the lines of point 2, this is an opportunity to partner with Essex CC to further develop skills that may be relevant to the Retrofit Academy. Please examine this potential of this. 4. Green skills creation is fundamental to wider climate change delivery targets for the Essex Climate Commission strategy. They are also intrinsic to tackling health inequalities as part of the SNEE Green Plan. We would wish to see a concerted effort to embed social value, green infrastructure into delivering improved health outcomes 	<p>Employment and Section 3.10 - Impact of Operational Activity on Employment.</p> <p>Further details on specific job numbers and skills needed for the VE project have been requested and are expected to be obtained and assessed prior to the submission of the final ES.</p>
NHS Suffolk and North East Essex ICB, Five Estuaries Non Statutory Public Consultation Response, August 2022	<ul style="list-style-type: none"> > Impact of tourism on the healthcare services > Impact on accommodation from construction workers > Helpful for the VE project to fit into those existing plans/actions plans rather than create separate ones > Development in the area may impact on skills and create skills gaps 	<p>Impacts on healthcare services has been assessed in Section 3.9 - Impact of Construction Activity on Healthcare Services within the WSA).</p> <p>Impacts on accommodation have been based upon the estimated numbers of construction workers, however, it is expected that the number of operational workers will be obtained and assessed prior to the submission of the final ES. Preliminary results regarding</p>



Date And Consultation Phase/ Type	Consultation And Key Issues Raised	Section Where Comment Addressed
		<p>accommodation competition is assessed in Section 3.9 - Impact of Construction Activity on the Displacement of Visitors within the WSA.</p> <p>VE has agreed to prepare and implement an Employment, Skills and Education Strategy.</p>
<p>ETG Presentation, November 2022</p>	<p>No further comments raised.</p>	<p>N/A</p>
<p>Essex County Council, non-statutory consultation, August 2022</p>	<p>Essex County Council would welcome further discussions to explore opportunities to explore partnerships for the host communities arising from the development.</p> <p>Essex County Council considers that, notwithstanding embedded mitigation and potential modifications to the scheme as proposed above, it is unavoidable for the development to result in serious and lasting negative residual impacts on the community and locality, including on amenity, loss/reduced quality of recreational opportunity for the community, tourism, culture and heritage, and health and wellbeing. Essex County Council expects appropriate and robust mitigation for such residual impacts, which could be, for example, include but not be limited to, funding for alternative outdoor recreational offers, access and amenity improvements, green space, cultural and heritage enhancements.</p>	<p>Further consultation has been ongoing with the host authority, NHS, Suffolk County Council, throughout various expert topic groups and non-statutory public consultations throughout 2022.</p>
<p>East Suffolk Council, non-</p>	<p>Whilst there is a possibility that tourism effects may be felt in East</p>	<p>The baseline for tourism in East Suffolk has been outlined in Section</p>



Date And Consultation Phase/ Type	Consultation And Key Issues Raised	Section Where Comment Addressed
statutory consultation, August 2022	Suffolk due to seascape visual impacts introduced by the proposed wind farm extension, either alone or in-combination with other NSIP projects, we await further assessments being completed before providing detailed comments regarding whether economic impacts are anticipated.	3.7, specifically from Paragraph. The impacts of which were considered in Section 3.10, specifically Paragraph 3.10.4. Further consideration of the impact of VE on the Suffolk coastline is given in Volume 2, Chapter 10: Seascape and Landscape Visual Assessment.

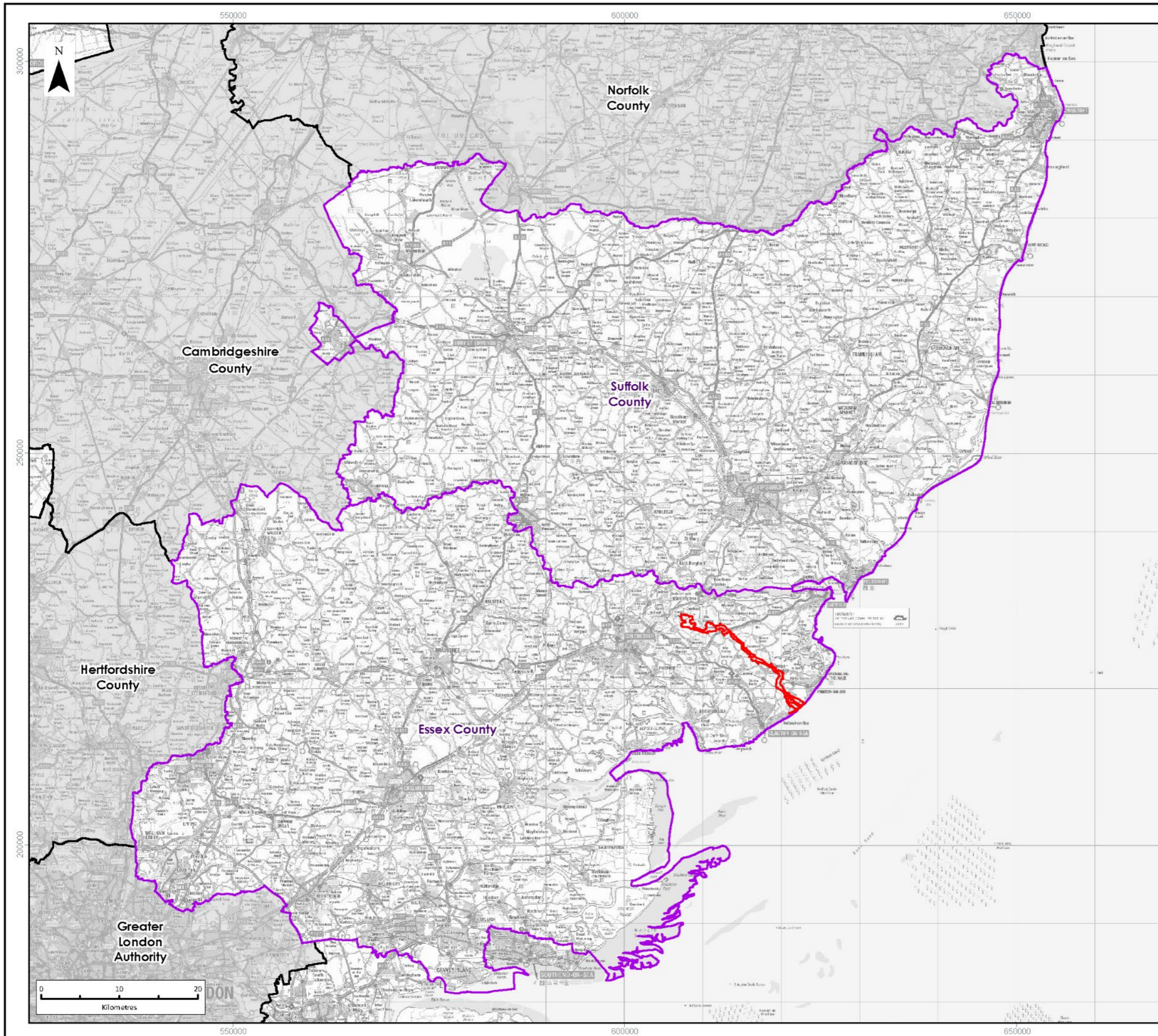
3.4 SCOPE AND METHODOLOGY

SPATIAL SCOPE

3.4.1 The nature of the effects to be considered by the socio-economic and tourism assessment apply at a range of spatial levels. It is therefore proposed to adopt a two-tier approach to baseline characterisation, identification of potential receptors and the assessment of effects. The two spatial levels and associated relevant receptors are defined as follows:

WIDER STUDY AREA (WSA)

3.4.2 The WSA is intended to encompass the area within which significant effects on employment and the local economy could occur. The WSA is set at the boundary of the counties of Essex and Suffolk, within which the majority of the local supply chain and labour market effects that could occur would be experienced, shown on. The relevant receptor for the WSA is the economy as a whole, with special reference to the tourism sector.



LEGEND

- Onshore Red Line Boundary
- Wider Study Area

Data Source:
 © Crown copyright [and database rights] [2022] 0100031673 OS OpenData,
 Office for National Statistics licensed under the Open Government Licence v.3.0.

PROJECT TITLE:
FIVE ESTUARIES OFFSHORE WINDFARM

DRAWING TITLE:
Wider Study Area

VER	DATE	REMARKS	Drawn	Checked
1	15/02/2023	PEIR Submission	DB	JS

DRAWING NUMBER:
FIGURE 3.1

SCALE: 1:500,000 PLOT SIZE: A3 DATUM: OSGB 1936 CO-ORDINATE SYSTEM: British National Grid

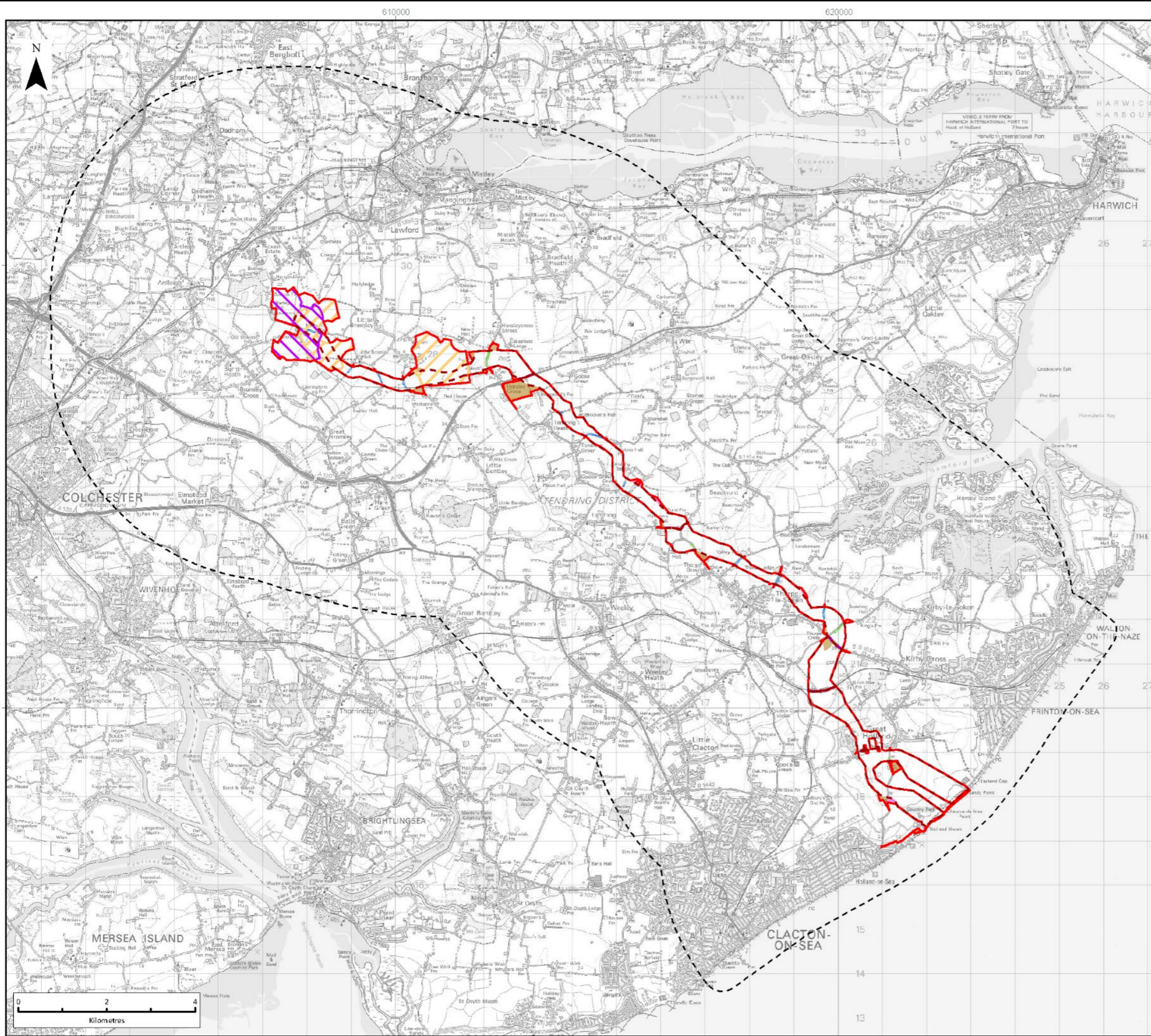




- 3.4.4 The project will produce a temporary increase in the resident population due to the demand for a workforce, particularly during the construction phase, which could lead to an increased demand for healthcare services. This demand is likely to be experienced across the WSA reflecting the location of the temporary workforce.
- 3.4.5 It is not known whether the port location for offshore construction and operational maintenance activities would be located within the WSA. The assessment of effects will therefore consider two alternative scenarios: one in which the port activities will be located within the WSA, and one in which they will be located elsewhere. Assessing these two scenarios would allow for an understanding of the best / worst-case, in a socio-economic context, as well as allowing for an understanding of the impacts should the construction port be located outside of the WSA whilst the operations port is located within it, or vice versa.

LOCAL AREA OF IMPACT (LAI)

- 3.4.6 The LAI forms the focus for assessment of both direct and indirect effects on those receptors that are likely to experience effects at a more local level, specifically community, tourism and recreational assets and extends beyond the Order Limits (OL) to include an offset of at least 5 km, shown on Figure 3.2. Receptors include businesses and attractions associated with the local visitor economy, as well as community facilities and services. Where a receptor is located close to the boundary (for example, where a village straddles the boundary of the 5 km offset) this will be accounted for and the offset distance extended accordingly. It is anticipated that the LAI will be refined significantly at the point where the preferred route corridor and sub-station are identified (refer to Volume 1, Chapter 4: Site Selection and Consideration of Alternatives).



- LEGEND**
- Onshore Red Line Boundary
 - Onshore Red Line Boundary 5 km Buffer
 - Onshore Export Cable Corridor
 - Onshore Cable Route Section Division
 - National Grid Area of Search
 - Onshore Substation Areas of Search
 - Temporary Construction Compounds
 - Works Access Required
 - Haul Road Crossings
 - Haul Road Access

Data Source:
 © Crown copyright (and database rights) (2022) 0100031673 OS OpenData.

PROJECT TITLE:
 FIVE ESTUARIES OFFSHORE WINDFARM

DRAWING TITLE:
 Local Area of Impact

VER	DATE	REMARKS	Drawn	Checked
1	21/02/2023	PEIR Submission	DB	JS

DRAWING NUMBER:
 FIGURE 3.2

SCALE: 1:90,000 PLOT SIZE: A3 DATUM: OSGB 1936 COORDINATE SYSTEM: British National Grid





- 3.4.7 Similar to the potential impacts on healthcare facilities, the impacts on accommodation stock will also have an amended scope. Accommodation stock is a highly important asset for Essex, especially in regard to the coastal areas, it is not only used for housing their own residents but also acts as an important revenue stream and business for the tourism industry. The construction of the proposed development would naturally bring in an increased workforce to the local area, which could lead to a competition in accommodation between those involved in the Five Estuaries project and potential tourists to the area. The scope for impacts in accommodation demand within the Tendring District Council administrative boundaries, where the greatest volume of the workforce is likely to be housed.

PROJECT TIMELINE

- 3.4.8 The assessment will cover the entire timescale of the Five Estuaries' project lifetime when assessing its impacts on socio-economics, tourism and recreation. The period which the assessment would cover comprises the construction phase, operational and maintenance phase and the decommissioning phase.
- 3.4.9 The construction phase of the proposed development is assumed to last approximately 24+ months. The operational period is typical for a large offshore wind farm project, which is assumed to be lasting up to 40 years.
- 3.4.10 The final stage of the project would be its decommissioning phase; this stage is more difficult to define in terms of a timeline, due to the uncertainty regarding the infrastructure and technology involved, and changes to the baseline conditions identified in this chapter. As such, the assessment of decommissioning effects will be undertaken using a qualitative approach, with the understanding that the impacts during the decommissioning phase will be broadly similar to those during the construction phase but are likely to be to a lesser extent.

SOCIO-ECONOMIC RECEPTORS

- 3.4.11 A range of potential socio-economic impacts have been identified which may occur during the construction, operation and maintenance, and decommissioning phases of VE. The impacts that have been scoped into the PEIR are a result of the Scoping Opinion and ongoing stakeholder consultation. These potential impacts have been outlined in Table 3.3, together with the particular impact on the receptor and a description of the impacts.



Table 3.3: Potential Socio-Economic Receptors and Impacts

Receptor	Impact	Description of Impact
Construction		
Economy	Impacts on the local GVA and supply chain as a result of the construction of VE	Impacts on the local GVA and supply chain within the WSA are likely to be experienced during the construction phase; the impacts may be beneficial due to increased direct investment in the local area or indirect investment through local supply chains.
Labour Market	Impacts on local employment and the labour market as a result of the construction of VE	Impacts on the local labour market within the WSA are likely to be experienced during the construction phase; the impacts may be beneficial due to the creation of direct, indirect and induced jobs for the local population and potential investments into skills locally.
Healthcare Services	Increased demand for healthcare facilities	There is potential for an influx of workers during the construction phase to create a demand for local health care services that may lead to undue pressure on the system.
Operation		
Economy	Impacts on the local GVA and supply chain as a result of the operation and maintenance of VE	Impacts on the local economy within the WSA are likely to be experienced during the operational phase; the impacts may be beneficial due to further investment for the continual operation and maintenance of VE. These impacts would be to a lesser degree than that of the construction phase.



Receptor	Impact	Description of Impact
Labour Market	Impacts on local employment and the labour market as a result of the operation and maintenance of VE	Impacts on the local labour market within the WSA are likely to be experienced during the operational phase; the impacts may be beneficial due to further investment, employment and usage of local supply chains for the continual operation and maintenance of VE. These impacts would be to a lesser degree than that of the construction phase.
Decommissioning		
Economy	Impacts on the local GVA and supply chain as a result of the construction of VE	Socio-economic effects arising from decommissioning works are likely to be of a similar nature, but of smaller scale and geographical extent, to the effects experienced during the construction phase.
Labour Market	Impacts on local employment and the labour market as a result of the construction of VE	
Healthcare Services	Increased demand for healthcare facilities	

TOURISM AND RECREATION RECEPTORS

3.4.12 The potential tourism and recreational receptors are identified through the scope of the assessment within the identified LAI in combination with the timeframe of the VE project; split into the construction, operation and maintenance, and decommissioning phases. The potential receptors in relation to the tourism and recreation of the LAI, the impacts that VE may pose upon them, and a description of the impacts are provided in Table 3.4.



Table 3.4: Potential Tourism and Recreation Receptors and Effects

Receptor	Impact	Description of Effect
Construction		
Tourism Receptors	Disruption to community and tourism receptors within the LAI	Impacts due to construction of the onshore infrastructure on community and tourism receptors may occur due to severance of access routes, noise and vibration, and visual impact.
Accommodation	Displacement of tourism visitors within the WSA	There is potential for an influx of workers during the construction period to create a demand for local accommodation that may lead to competition for accommodation with tourist visitors. This is most likely to occur during the peak summer season.
Offshore Recreation	Impact of offshore construction activities on offshore recreational activities	Landfall construction activities could negatively impact offshore recreational activities such as water sports or angling through disturbance or temporary cessation of activities.
Public Rights of Way (PRoW) and other routes	Users of PRoW and other walking and cycling routes	Construction activities may cause disruption to users through the temporary diversion or closure of the routes as a result of the construction activities.
Offshore Businesses	Impact of offshore construction activities on businesses, ports and maritime users	Impact on ports and related businesses both beneficial (the concentration of jobs and services supplying the offshore construction activities) and potentially adverse (disruption to existing businesses and maritime users as a result of construction activities).



Receptor	Impact	Description of Effect
Operation		
Tourism	Long term impact on tourism receptors and tourism economy within the WSA	There may be an impact on the visitor economy if the visual impact of further WTG were to deter potential visitors.
Offshore Businesses	Impact of offshore O&M activities on businesses and maritime users	Impact on ports and related businesses both beneficial and potentially adverse (disturbance and delays).
Decommissioning		
Tourism Receptors	Disruption to community and tourism receptors within the LAI	Tourism and recreational effects arising from decommissioning works are likely to be of a similar nature, but of smaller scale and geographical extent, to the effects experienced during the construction phase.
Accommodation	Displacement of tourism visitors within the WSA	
Offshore Recreation	Impact of offshore construction activities on offshore recreational activities	
Public Rights of Way (PRoW) and other routes	Users of PRoW and other walking and cycling routes	
Offshore Businesses	Impact of offshore construction activities on businesses, ports and maritime users	

3.4.13 As with the socio-economic effects, the tourism and recreational receptors identified and assessed during the PEIR are considered at this stage, however, there may be more receptors added, or some identified receptors scoped out within the final submitted ES.

IMPACTS SCOPED OUT

3.4.14 Following agreement within the Scoping Opinion response and consultation with key stakeholders, various potential effects on socio-economics, tourism and recreation have been scoped out from further consideration within the assessment. These potential impacts were identified in the Scoping Report, along with a justification as to why they would not merit further assessment based on experience of similar developments.

3.4.15 Table 3.5 details the impacts which have been agreed to be scoped out of the assessment and justification for their scoping out provided.



Table 3.5: Scoped Out Impacts

Scoped Out Impact	Justification
Impact of construction on demand for housing and schools	The construction and decommissioning phases of the VE are expected to be relatively short-term activities that will not lead workers to relocate to the area with their families. There is therefore not expected to be an influx of workers seeking housing and schools' services in the WSA.
Impact of construction, operation or decommissioning on indoor recreational facilities such as gyms	It is not expected that the construction, operation or decommissioning of the VE project will have an impact on indoor recreational facilities over and above any potential indirect construction traffic-related impacts, which have been addressed in Volume 3, Chapter 8: Traffic and Transport.
Impact on LAI due to presence of onshore infrastructure during operational phase.	The above-ground presence of the onshore infrastructure during the Operational phase will be restricted to the OnSS, which will have a limited sphere of visual influence that will be further reduced by proposed mitigation measures that will be addressed fully in the Volume 3, Onshore Chapter 2: Landscape and Visual.
Transboundary impacts	Volume 1, Annex 3.2: Transboundary Screening provides details of the approach that will be taken for assessing the transboundary impacts, which is not expected to be relevant for the onshore elements of VE as socio-economics, tourism and recreation effects arising as a result of VE will be localised and will not be experienced across international boundaries.

BASELINE METHODOLOGY

3.4.16 An initial desk-based study has been undertaken to identify sources of pre-existing data of relevance, that could inform the Environmental Impact Assessment (EIA). The following existing sources have been identified:

- > Office of National Statistics and other governmental published sources including Census data - demographic and labour market characteristics (covering the occupational profile and the availability of skills within the labour force); employment, economic activity and unemployment trends; commuting and travel to work relationships; business demography: the number, size profile and sectoral representation of the business base;
- > OS postcode data - businesses, tourism attractions and community services;
- > OS mapping / MAGIC map / Definitive Map (Public Rights of Way);
- > England Coast Path / Sustrans / Long Distance Walkers Association - long distance routes;
- > Local Plan policies and land allocations for Tendring District Council and Essex County Council, including minerals and waste safeguarding areas; and
- > Visit Essex – Economic Impact of Tourism (2019) annual report; A Recovery Plan for the Essex Tourism and Hospitality Industry.



ECONOMIC MODELLING

- 3.4.17 This part of the assessment comprises a quantitative analysis of the likely direct, indirect and induced effects of the proposed development on the WSA (as defined in Paragraph 3.4.2) in terms of investment, employment, additional GVA and contribution to the labour market.
- 3.4.18 The employment effects that are attributable to the proposed development are divisible into three components. These are:
- > **Direct:** the employment and other economic outputs that are directly attributable to the delivery of the proposed development. These include any new jobs that are created to manage and supervise the construction and operational phases of the proposed development and that are filled by the employees or the appointed Contractor (or sub-contracted employees);
 - > **Indirect:** employment and other outputs created in other companies and organisations that provide services to the proposed development (i.e. procurement and other supply chain effects); and
 - > **Induced:** additional jobs and other economic outputs that are created in the wider economy as a result of the spending of employee incomes and other ripple effects that occur as a result of direct and indirect effects of the proposed development.
- 3.4.19 Construction phase job creation and investment have been assessed through the use of employment estimates provided by VE and the estimated construction elements categories within which these jobs would fall. The assessment addresses the potential effects of the proposed development to the labour market and the local supply chain and economic output in terms of GVA. The estimate for construction phase GVA is calculated using the latest regional estimates for the average yield of GVA per worker for the construction and civil engineering sector in the WSA, obtained from the Office of National Statistics (ONS).
- 3.4.20 Information gathered from the baseline data review has been used to develop a quantitative economic model which includes direct, indirect and induced effects of the development.
- 3.4.21 In the case of operational phase effects, quantitative economic modelling has been undertaken based on information regarding likely creation of permanent jobs based on experience of similar projects and expenditure projections provided by VE. As well as direct job creation (e.g. facility management and maintenance), the assessment models indirect and induced job effects (i.e. supply chain jobs and multiplier effects; and jobs arising from apprenticeships and skills schemes).

METHODOLOGY FOR THE TOURISM AND RECREATION ASSESSMENT

- 3.4.22 The proposed development may have direct and indirect effects on tourism and recreation receptors within the LAI. This part of the socio-economic assessment comprises a qualitative assessment of the effects of the proposed development on receptors within the LAI including recreational paths and long-distance routes, and tourist attractions, including beaches.
- 3.4.23 The Chapter assesses the significance of the likely socio-economic, tourism and recreational effects of the proposed development based on the magnitude of the impacts and the sensitivity of the receptor groups. The following sections set out the criteria for establishing magnitude of impact and sensitivity of the receptors.



3.5 ASSESSMENT CRITERIA AND SIGNIFICANCE

- 3.5.1 Volume 1, Chapter 3: Environmental Impact Assessment Methodology provides an overview of the approach to assessment and explains the parameters being assessed in the EIA. Volume 1, Annex 3.1: Cumulative Effects sets out the information on cumulative sites, and the approach to assessing cumulative effects.
- 3.5.2 There are no published standards or technical guidelines that set out a preferred methodology for assessing the likely socio-economic effects (including effects on tourism and recreation) of an offshore wind farm project. However, there are commonly used methodologies for such an assessment, including recognised approaches to quantifying economic effects both during the construction of a development and following its completion, that have been widely used in other major projects. These have been adopted here and are described below.
- 3.5.3 The approach to the socio-economic assessment is presented in two parts, addressing both the construction phase aspects of the proposed development and the longer-term economic effects once the proposed development is built and operational.

SENSITIVITY OF RECEPTOR

- 3.5.4 There are no published standards that define receptor sensitivity in relation to a socio-economic assessment. As a general rule, the sensitivity of each receptor or receptor group is based on its importance or scale and the ability of the baseline to absorb or be influenced by the identified effects. For example, a receptor (such as a public footpath or an accommodation business) is considered less sensitive if there are alternatives with capacity within the study area. In assigning receptor sensitivity, consideration has been given to the following:
- > the importance of the receptor e.g. local, regional, national, international;
 - > the availability of comparable alternatives;
 - > the ease at which the resource could be replaced;
 - > the capacity of the resource to accommodate the identified impacts over a period of time; and
 - > the level of usage and nature of users (e.g. sensitive groups such as people with disabilities).
- 3.5.5 Based upon professional judgement and experience on other large-scale projects, four levels of sensitivity have been used: high; medium; low; and negligible. These are defined in Table 3.6.



Table 3.6: Sensitivity Criteria

Sensitivity	Description
High	<p>The receptor:</p> <ul style="list-style-type: none"> > has little or no capacity to absorb change without fundamentally altering its present character; or > is of high socio-economic, recreational, or tourism value ; or > is of national or international importance; or > is accorded priority in national policy; or > has no alternatives with available capacity within its catchment area; or > is a destination in its own right (as regards tourism and visitor attractions).
Medium	<p>The receptor:</p> <ul style="list-style-type: none"> > has moderate capacity to absorb change without fundamentally altering its present character; or > has a moderate socio-economic, recreational or tourism value; or > is of regional importance; or > is accorded priority in local policy; or > has some alternatives with available capacity within its catchment area; or > is a destination for people already visiting the area (as regards tourism and visitor attractions); or > forms a cluster of low sensitivity receptors.
Low	<p>The receptor:</p> <ul style="list-style-type: none"> > is tolerant of change without detriment to its character; or > is of low socio-economic, recreational or tourism value; or > is of local importance; or > is accorded low priority in policy; or > has a choice of alternatives with available capacity within its catchment area; or > is an incidental destination for people already visiting the area (as regards tourism and visitor attractions).
Negligible	<p>The receptor:</p> <ul style="list-style-type: none"> > is tolerant of change; > is of low socio-economic, recreational or tourism value; or > there is a wide choice of alternatives with available capacity within its catchment area.



3.5.6 In considering the sensitivity of a receptor it is important to remember that, in the case of socio-economic assessment, the sensitivity is often subjective and different receptors will have differing sensitivities depending on matters such as the economic profile of the local area, perception of the type of development and attitude to the potential benefits of a development. This assessment is based on the assumption of a worst-case which assumes that there is a negative perception of the proposed development, although this may not be the case for all receptors.

MAGNITUDE OF IMPACT

3.5.7 There are no published standards that define thresholds of magnitude for socio-economic, tourism or recreation impacts. In order to aid clear and robust identification of significant effects, specific and targeted criteria for defining the magnitude of impacts have been developed for this assessment based on experience on other similar projects. The following four levels of magnitude have been adopted using professional judgement: high; medium; low and negligible. These impacts can be beneficial, adverse or neutral. Criteria for each of these levels of magnitude for each receptor group are set out in Table 3.7.

Table 3.7: Magnitude of Impact

Receptor Group	High	Medium	Low	Negligible
WSA economy	An impact that would dominate over baseline economic conditions by >2%.	An impact that would be expected to result in a moderate change to baseline economic conditions by 1% - 2%.	An impact that would be expected to result in a perceptible difference from baseline economic conditions by 0.5% - 1%.	An impact that would not be expected to result in a measurable variation from baseline economic conditions.
WSA labour market	An impact that would dominate over baseline labour market conditions and/or would affect a large proportion (2%) of the existing resident workforce.	An impact that would be expected to result in a moderate change to baseline labour market conditions and/or would affect a moderate proportion (1% - 2%) of the existing resident workforce.	An impact that would be expected to result in a perceptible difference from baseline labour market conditions and/or would affect a small proportion (0.5% - 1%) of the existing resident workforce.	An impact that would not be expected to result in a measurable variation from baseline labour market conditions.



Receptor Group	High	Medium	Low	Negligible
WSA tourism and visitor economy	An impact that would dominate over baseline tourism and visitor economy conditions.	An impact that would be expected to result in a moderate change to baseline tourism and visitor economy conditions.	An impact that would be expected to result in a perceptible difference to baseline tourism and visitor economy conditions	An impact that would not be expected to result in a measurable variation from baseline tourism and visitor economy conditions
Tourism and recreation assets	An impact that would be expected to cause a major restriction of access to or availability of tourism and visitor assets in the LAI or would result in a major change to existing patterns of use.	An impact that would be expected to have a moderate restriction of access to or availability of tourism and visitor assets in the LAI or would result in a moderate change to existing patterns of use.	An impact that would be expected to have a small restriction of access to or availability of tourism and visitor assets in the LAI or would result in a small change to existing patterns of use.	An impact that would be unlikely to result in a noticeable difference to tourism and visitor assets in the LAI.

POTENTIAL EFFECTS

3.5.8 The level of effect of an impact on socio-economic, recreation and tourism receptors is initially assessed by combining the magnitude of the impact and the sensitivity of the receptor. The level of effects matrix presented in Table 3.8 provides a guide to the decision-making process.

Table 3.8: Matrix to determine effect significance

Sensitivity or Value of Resource or Receptor	Magnitude of Impact			
	High	Medium	Low	Negligible
High	Major	Major	Moderate	Minor
Medium	Major	Moderate	Minor	Negligible
Low	Moderate	Minor	Negligible	Negligible
Negligible	Minor	Negligible	Negligible	Negligible



- 3.5.9 Effects may be positive (beneficial) or negative (adverse). Where an effect is classified as major, this is considered to represent a 'significant effect' in terms of the EIA Regulations. Where an effect is classified as moderate, this may be considered to represent a 'significant effect' but should always be subject to professional judgement and interpretation, particularly where the sensitivity or impact magnitude levels are not clear or are borderline between categories or the impact is intermittent.
- 3.5.10 The level of effects matrix shown in Table 3.8 therefore provides a guide to decision making but is not a substitute for professional judgement. Impacts and effects can be beneficial, neutral or adverse and these would be specified where applicable. It should be noted that significant effects need not be unacceptable or irreversible.

POTENTIAL CUMULATIVE EFFECTS

- 3.5.11 In relation to economic effects, cumulative effects depend on the extent to which the supply chain and labour market within the WSA have the capacity to meet demand for construction services from a number of similar projects. An assessment will be made as to whether it is considered likely that the cumulative effect indicates a loss of benefit as a result of cumulative projects, or an enhancement of opportunity which would help to develop expertise and capacity in the market.
- 3.5.12 Other cumulative effects may arise if the construction and/or operation of a number of wind farms were to affect receptors in the LAI.

MITIGATION

- 3.5.13 The assessment takes account of any environmental principles that are incorporated into the design of the proposed development. These include good practice measures with regard to traffic management set out in Volume 5, Annex 8.3: Outline Construction Traffic Management Plan, the control of noise and dust, which are set out in Volume 7, Report 3: Draft Code of Construction Practice (CoCP), and signage and provisions for maintaining access for walkers, details of which are set out in Volume 5, Annex 8.4: Outline Public Access Management Plan (PAMP). Any additional mitigation measures that would reduce the level of any significant effects are set out and considered prior to assessing residual effects.

RESIDUAL EFFECTS

- 3.5.14 A statement of residual effects, following consideration of any specific mitigation measures, is provided.

STATEMENT OF SIGNIFICANCE

- 3.5.15 The assessment approach is to describe the baseline conditions, to identify likely effects from construction and operation of the proposed development, consider the sensitivity of receptors, and then to assess the likely significance of any effects. Any adverse effects considered to be 'significant' are further considered with regard to bespoke mitigation measures and residual effects following mitigation are then identified.
- 3.5.16 Any significant effects that would be direct, indirect, secondary, cumulative, short, medium and long term, permanent or temporary are examined and their significance assessed. These effects are identified as being positive or negative.



3.6 ASSUMPTIONS, LIMITATIONS AND CONFIDENCE

- 3.6.1 Assumptions used in the assessment are stated where relevant and are set out in such a way as to be as transparent, evidence-based and as accurate as possible.
- 3.6.2 Data limitations regarding data collected during the period affected by the Covid-19 pandemic; this was particularly evident for the tourism economy and consequently data from a pre-Covid-19 pandemic year has been used in place of the most recent baseline data.
- 3.6.3 There is limited public information on accommodation, to remedy this, data has been sought from the Economic Impact reports for tourism of the relevant local authorities to gauge the current accommodation levels as well as further sources to gauge an average occupancy rate for serviced accommodation venues.
- 3.6.4 At PEIR stage, there is limited information regarding the potential investment figures and number of construction and operational workers; it expected that there will be further information available, which can be utilised, for the final ES. For the assessment relating to the displacement of visitors as a result of increased competition construction workers, the number of construction workers has been sourced from a comparable project by the same developer.

3.7 EXISTING BASELINE

ECONOMY

- 3.7.1 The data supplied to support the following sections is considered to be the most relevant and up-to-date, namely relying upon the datasets provided by the Office of National Statistics (ONS). Throughout the DCO process, particularly when drafting the ES, this data will be subject to a thorough review and updated and/or amended accordingly with the most recent sources.

EMPLOYMENT

- 3.7.2 In 2021, there were 607,300 jobs¹ in Essex and 339,300 in Suffolk (total employment) (ONS, 2022a) which accounted for 21.02% and 11.75% of the total employment in the East of England (EofE) region, respectively (2,888,400 jobs). Further details are provided in Table 3.9.

Table 3.9: Total Employment

Sector	Essex			Suffolk				
	Full-Time	Part-Time	Total Employees	Total Employment	Full-Time	Part-Time	Total Employees	Total Employment
Public	57,000	36,200	93,200	93,500	28,600	23,500	52,000	52,000
Private	328,700	170,300	499,000	513,800	188,900	88,800	277,700	287,300
All	385,700	206,500	592,200	607,300	217,400	112,300	329,700	339,300

¹ Does not include farm agriculture data due to their unavailability



- 3.7.3 Job density is from 2020 (ONS, 2021a) ONS data, which used the total number of jobs for Essex from that year and includes employees, self-employed, government-supported trainees and HM Forces. The job densities were 0.77 jobs per working aged member of population (persons aged 16 – 64) for Essex and 0.88 for Suffolk. The figure for Essex was lower than that of the wider East of England region, 0.85, and also lower than the figure given for Great Britain (GB), 0.84, conversely, Suffolk was higher than each of the comparatives.
- 3.7.4 In the 10 years from 2011 to 2021, the total employment in Essex grew by 12.15% and Suffolk grew by 11.14% (ONS, 2022a). Compared with the regional and national levels, these were lower than the East of England, 16.62%, and GB, 12.93%.
- 3.7.5 The annual rates of changes in the number of jobs in Essex, broadly, follows the same pattern of job growths and declines of the East of England, other than in 2013 and 2015, where Essex and Suffolk, respectively, lost jobs whilst GB and the East of England grew. The changes in job numbers, shown on Figure 3.3, all showed similar fluctuations with GB maintaining a more levelled change other than in 2020, the first year of the Covid-19 pandemic.

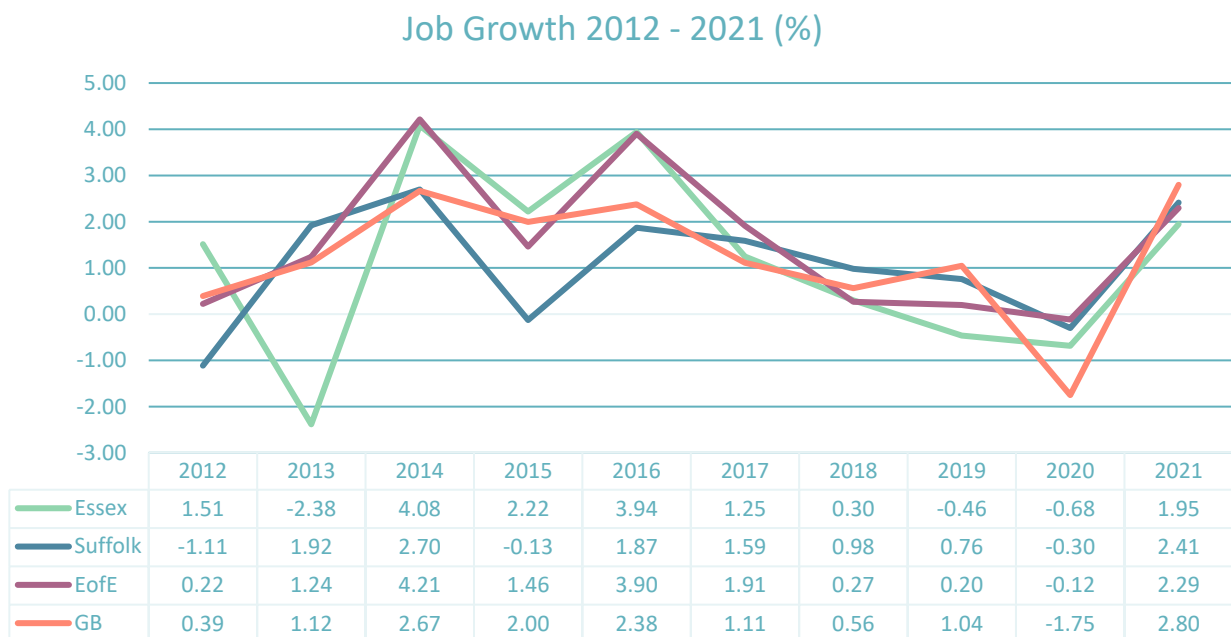


Figure 3.3: 10-Year Job Growth

SECTORAL DISTRIBUTION OF JOBS

- 3.7.6 Employment in the WSA (ONS, 2022a) is characterised by being generally reflective of the average for GB; however, one difference to note which would be of relevance to the VE project is the higher than average proportion of those working in the construction sector in Essex, with Suffolk being broadly in line with comparatives
- 3.7.7 The proportion of residents within the ‘accommodation and food services’ sector is also of relevance to the VE project and the WSA is broadly in line with comparatives, as were ‘arts, entertainment, recreation & other services’. The full data for job sectors in the four spatial areas is provided in Table 3.10.



Table 3.10: Job Sectors

Sector	Essex	Suffolk	EofE	GB
Agriculture, forestry & fishing	0.8%	1.5%	0.7%	0.9%
Mining, quarrying & utilities	1.0%	1.2%	1.3%	1.0%
Manufacturing	6.5%	9.0%	7.6%	7.3%
Construction	7.7%	5.7%	4.9%	5.9%
Motor trades	2.0%	2.1%	1.7%	1.9%
Wholesale	4.0%	3.3%	3.5%	4.0%
Retail	9.6%	9.6%	9.2%	9.2%
Transport & storage (inc. postal)	5.4%	6.3%	5.0%	5.5%
Accommodation & food services	7.2%	7.5%	7.5%	6.9%
Information & communication	3.7%	3.0%	4.4%	4.1%
Financial & insurance	2.5%	2.7%	3.6%	2.1%
Property	1.7%	1.2%	1.8%	1.7%
Professional, scientific & technical	8.4%	5.7%	8.9%	9.1%
Business administration & support services	9.2%	11.7%	8.9%	11.7%
Public administration & defence	2.9%	4.2%	4.6%	3.4%
Education	9.6%	9.0%	8.7%	9.5%
Health	13.6%	12.0%	13.6%	12.1%
Arts, entertainment, recreation & other services	4.0%	4.2%	4.2%	4.0%



SUPPLY CHAIN CAPACITY

- 3.7.8 The East of England has had notable offshore wind development over the past two decades. Several offshore windfarms are located off the East of England coast, including Hornsea, London Array and Greater Gabbard, as well as the Galloper Offshore Wind Farm. As well as the constructed offshore wind farms, there are several sites which are under construction, including the East Anglia offshore windfarms.
- 3.7.9 It is therefore relevant to consider the extent to which businesses are relevant to the offshore wind industry, namely, the extent to which key employment sectors are represented in the WSA. The data (ONS, 2022a) provided in Table 3.11 demonstrates that, whilst construction and engineering sectors are well represented in Essex, energy businesses form a higher proportion within Suffolk.

Table 3.11: Key Sector Capacity

Key Sector	Essex		Suffolk		EofE		GB	
	Total	%	Total	%	Total	%	Total	%
Civil Engineering	6,000	1.0	4,500	1.3	25,000	0.6	189,000	0.9
Construction	41,000	6.9	15,000	4.5	142,000	5.0	1,289,000	4.2
Energy	500	0.1	2,000	0.6	5,000	0.2	135,000	0.4
Land-based Transport	11,000	1.8	8,000	2.4	52,000	1.8	568,000	1.9
Manufacturing	34,835	6.0	27,020	7.9	185,350	6.6	2,095,250	7.0
Marine Transport	150	0.0	350	0.1	700	0.0	15,000	0.0

GROSS VALUE ADDED

- 3.7.10 Gross Value Added (GVA) is the value generated by any unit engaged in the production of goods and services and is often used as a measure of prosperity. In 2020 (ONS, 2022b) Essex and Suffolk represented approximately 25.98% and 11.63%, respectively, of the total GVA for the East of England and approximately 2.18% and 1.00% of the total United Kingdom (UK) GVA.
- 3.7.11 The GVA per head of population in the same year was estimated to be £22,897/person in Essex and higher in Suffolk at £25,002/person, which are 12.26% and 4.2% less than the East of England, and approximately 21.22% and 14.0% lower than the UK, respectively, indicating a lower level of productivity than the national average. The full data is available in Table 3.12.



Table 3.12: Gross Value Added

Region	Total GVA (£ Million)	GVA per Head
Essex	£42,499	£22,897
Suffolk	£19,033	£25,002
East of England	£163,602	£26,096
United Kingdom	£1,949,605	£29,063

POPULATION AND LABOUR MARKET

POPULATION

3.7.12 In 2020, the resident population of the WSA (ONS, 2021b) was 2,259,000, of which 1,497,800 (51.1% female and 48.9% male) were in Essex and 761,200 (50.6% female and 49.4% male) were in Suffolk. Out of the total population, 1,347,300 are of working age (16 - 64), 60.3% of Essex and 58.3% of Suffolk, which are below the averages for the East of England (60.6%) and Great Britain (GB) (62.4%). 79.0% of Essex's and 78.2% of Suffolk's working age population are in employment, which is higher than both averages for the East of England with 77.9% and GB with 75.4%.

3.7.13 From 2010 to 2020, the population of Essex increased by 7.84% and Suffolk increased by 5.14%, both lower than the East of England (7.95%) and Essex higher than GB (6.94%). The average year on year increase in Essex was approximately 0.76% and Suffolk was 0.50%, also slightly lower than the 0.77% average for East of England with Essex higher than the 0.67% average for GB. The individual increases for each year are given in Figure 3.4.

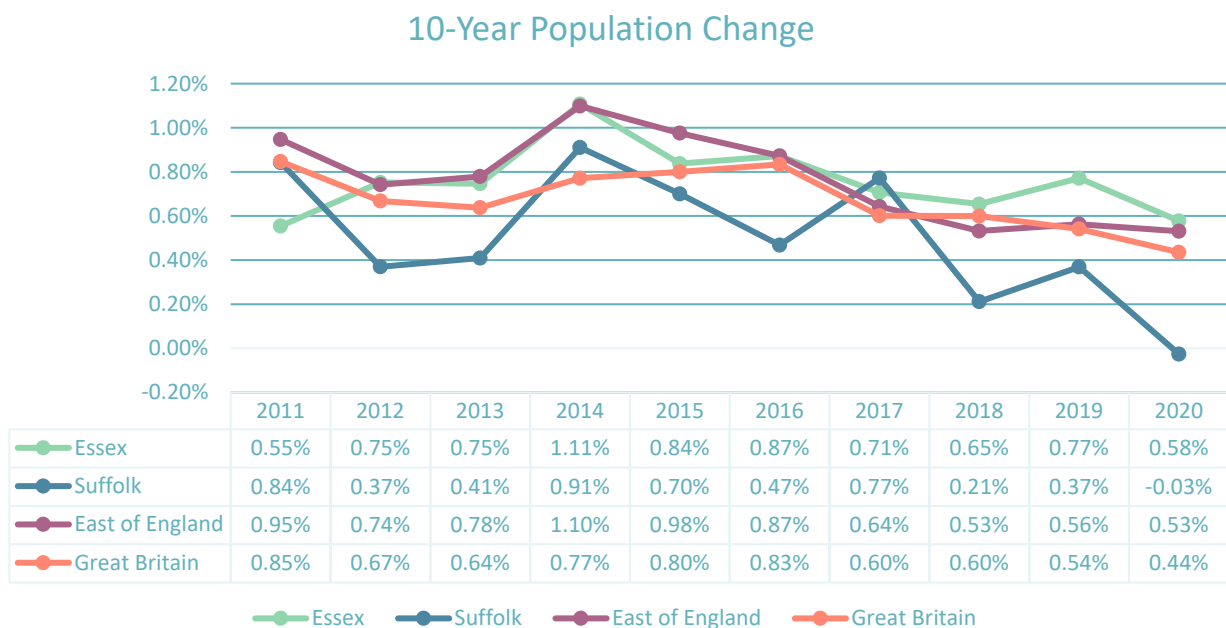


Figure 3.4: Population Change



- 3.7.14 Of note is the highest population increase in the WSA was in 2014, which was also the highest average for the East of England, but not Great Britain (2016).
- 3.7.15 The lowest increase for Essex was 2011, 0.55%, and the only decrease was in 2020, for Suffolk, which was -0.03%, which was also the lowest yearly increase on average for the East of England and Great Britain.

FUTURE POPULATION

- 3.7.16 The latest available data from the Office of National Statistics (ONS) (ONS, 2020) shows that Essex is estimated to have the highest increase in population over a 25-year period from the 2018 dataset baseline, 12.86%, whilst Suffolk was lower at 8.95%. Comparatively, the East of England was expected to grow by 10.29%, and Great Britain by 9.1%. The data shows that the expected proportional increases for Essex are highest for children and working ages, whilst Suffolk is lowest, detailed on Table 3.13.

Table 3.13: Population Increase

	Essex	Suffolk	EofE	GB
0 – 15	4.83%	-3.35%	-1.29%	-2.02%
16 – 64	6.58%	-1.12%	3.29%	2.66%
65+	38.77%	44.03%	43.43%	42.57%

LABOUR MARKET INDICATIONS

- 3.7.17 The employment for the WSA (ONS, 2022c) averages at 79.1%, between Essex at 79.0% and Suffolk at 79.2%, which are higher than the East of England region (77.9%) and GB (75.5%), this is also reflected in the low unemployment rate of 1.9% (Essex at 2.6% and Suffolk at 1.3%), compared with the averages for the East of England (3.0%) and GB (3.8%), with a comparative of this information shown on Figure 3.5.

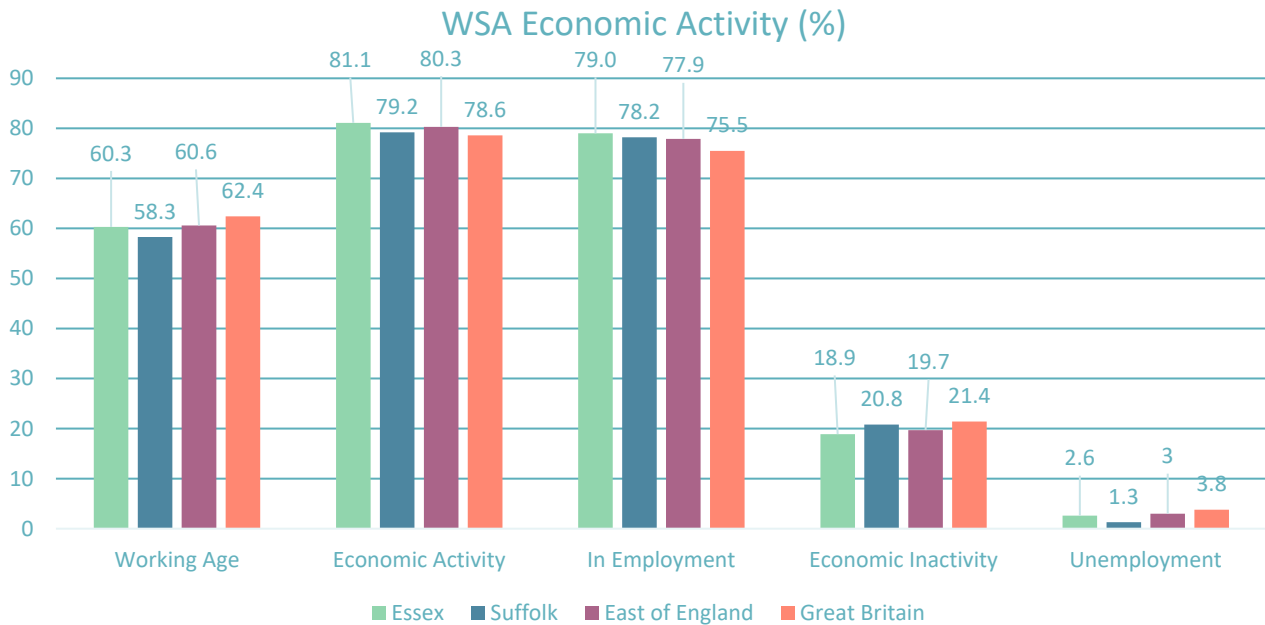


Figure 3.5: WSA Economic Activity

3.7.18 Essex has relatively low economic inactivity (ONS, 2022c) at 18.9%, compared 20.8% to Suffolk, 19.7% for the East of England and 21.4% for GB. The economic inactivity in Essex differs from the comparative areas in its relatively high proportion of retired people (22.4%) followed by Suffolk (17.6%), the East of England (17.0%) and GB average (13.7%). Of note is that the sample sizes of 'Temporary Sick' and 'Discouraged' were too low for reliable estimates. Figure 3.6 further illustrates the economic inactivity data.

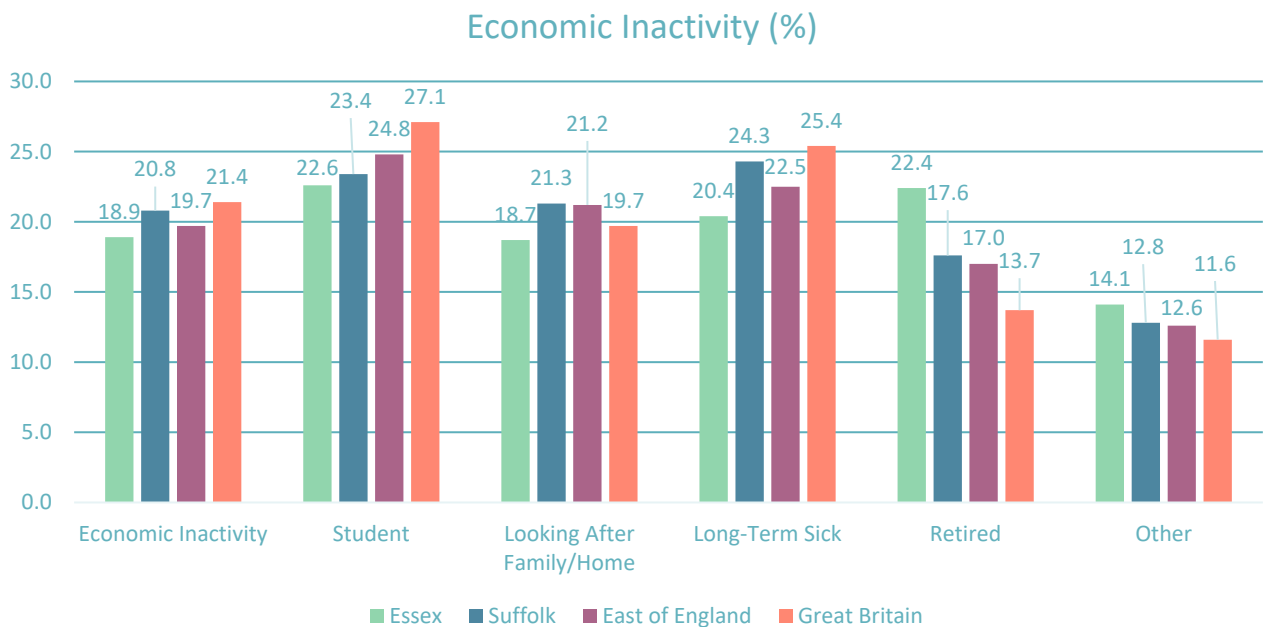


Figure 3.6: Economic Inactivity

3.7.19 Gross workplace earnings reflect the median pay for workplaces within the respective areas, irrespective of the area they reside in. The gross weekly average earnings for workplaces (ONS, 2022d) in Tendring (the LAI) were lower than in the WSA (Essex and Suffolk) and each were progressively lower than the larger comparatives of the East of England and Great Britain. This is reflected in the gross annual pay, with Tendring being lower.

3.7.20 Similarly, the gross hourly pay for Tendring was also lower, with the full results tabulated in Table 3.14.

Table 3.14: Gross Workplace Earnings (ONS, 2022d)

Area	Annual Pay	Weekly Pay	Hourly Pay
Tendring	£28,019	£569.30	£12.86
Essex	£30,409	£583.90	£14.80
Suffolk	£28,311	£554.70	£13.94
East of England	£30,867	£601.90	£15.18
Great Britain	£31,364	£612.80	£15.70

3.7.21 The gross resident earnings reflect the median pay for which the residents of the respective areas are paid, irrespective of the location of their workplace. Suffolk has the lowest annual and hourly pay, whilst Essex has the highest annual, weekly and hourly pay, with the complete data for gross resident earnings is given in Table 3.15.

Table 3.15: Gross Resident Earnings (ONS, 2022d)

Area	Annual Pay	Weekly Pay	Hourly Pay
Tendring	£29,994	£573.00	£14.26
Essex	£33,172	£634.80	£16.16
Suffolk	£29,309	£573.60	£14.04
East of England	£32,240	£628.60	£15.95
Great Britain	£31,368	£613.10	£15.71

3.7.22 The resident earnings for Essex were significantly higher than the workplace earnings, however, the earnings for Suffolk were broadly the same, this is potentially due to Essex’s closer proximity to London, leading to higher earnings for those who work outside of the County.

3.7.23 Indices of multiple deprivation are published by government and are derived from a combination of income, employment, education, health, skills and training, barriers to housing and services, and crime to create an overall score of deprivation, as well as assessing each of these ‘domains’ individually. They therefore provide a useful summary of many of the issues noted above. When assessing at a County Council level, the overall average and the individual domains are scaled against the number of upper-tier local authorities, where ‘1’ would signify the ‘most deprived’ and ‘151’ would be the ‘least deprived’, therefore the higher the number is representative of lesser deprivation. The data given for Essex is compiled on Figure 3. (Ministry of Housing, Communities & Local Government, 2020a).

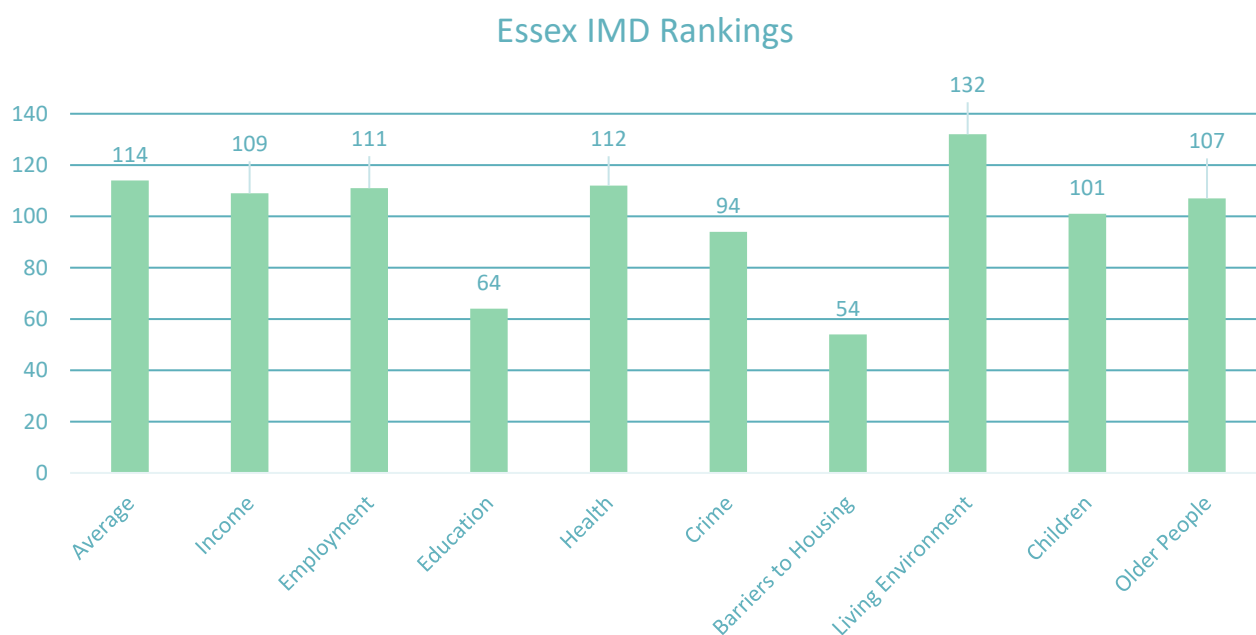


Figure 3.7: Essex IMD Rankings (Ministry of Housing, Communities & Local Government, 2020a)

3.7.24 Essex ranks relatively highly (less deprived) across a number of the domains, with an average score of 114 and 7/10 domains ranked higher than 100 (Ministry of Housing, Communities & Local Government, 2020a). The least deprived domain in Essex is for the ‘Living Environment’ domain which measures the quality of both the ‘indoor’ and ‘outdoor’ local environment, ranked at 132nd least deprived of all upper-tier local authorities and within the 8th decile. The ‘Average’, ‘Income’, ‘Employment’, ‘Health’ and ‘Older People’ domains each rank within the 7th decile and ‘Crime’ and ‘Children’ were in the 6th decile, above average for upper-tier local authorities.

3.7.25 ‘Education’ was the second lowest domain for Essex and shows that Essex as a whole was the 64th most deprived upper-tied local authority and the 4th decile; ‘Education’ measures the lack of attainment and skills in the local population.



- 3.7.26 'Barriers to Housing' was the lowest domain for Essex and 54th most deprived of all upper-tier local authorities. This is within the 3rd decile and is the domain which measures the physical and financial accessibility of housing and local services. The two lowest scoring domains represent a County in which the residents have lower than average skills and education attainment and may struggle to have the resources to access housing and services.
- 3.7.27 Figure 3.8 shows the individual rankings for Tendring, where a score of '1' is the most deprived and a score of '317' is the least deprived.



Tendring IMD Rankings

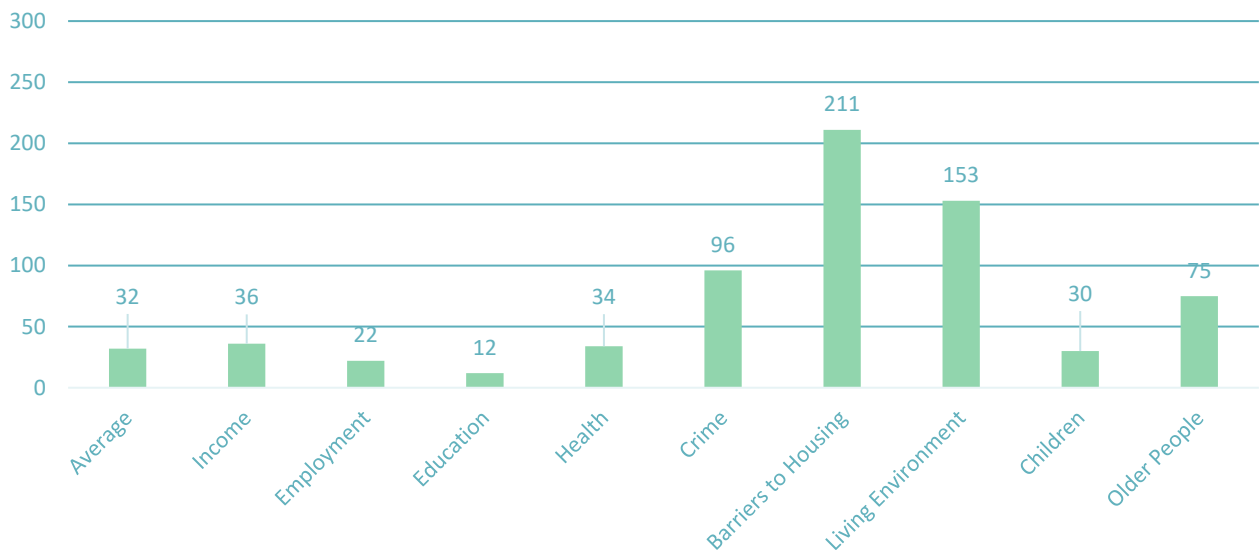
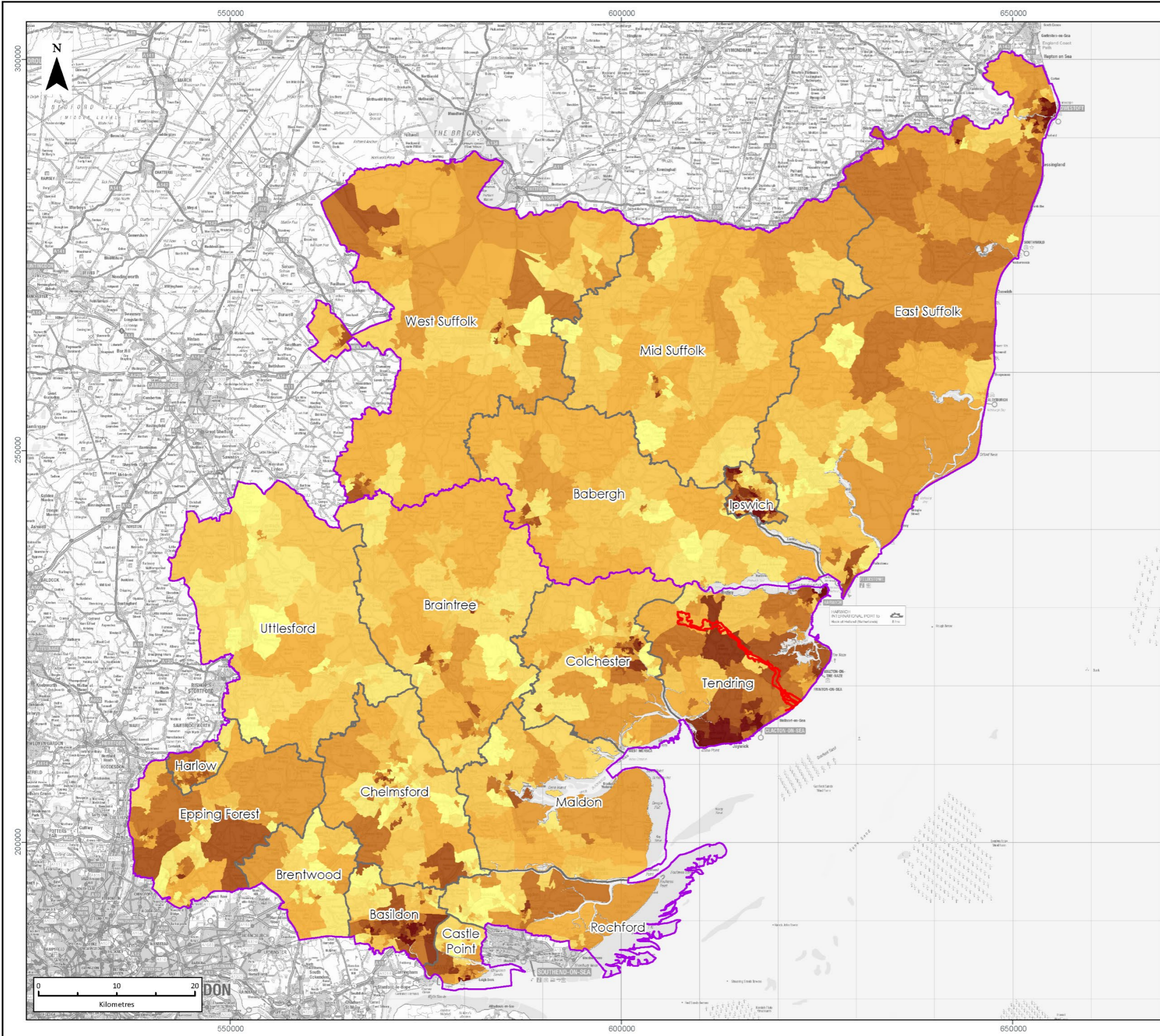


Figure 3.8: Tendring IMD Rankings (Ministry of Housing, Communities & Local Government, 2020b)

Tendring has a low score when compared to Essex as a whole, ranked as the 32nd most deprived District in England (Ministry of Housing, Communities & Local Government, 2020b), within the 2nd decile. The only higher-than-average domain in Tendring was 'Barriers to Housing'. This may represent a poorer quality and therefore affordable housing stock.

3.7.28 Education was the lowest ranked, as the 12th most deprived domain for districts and, along with 'Employment' and 'Children', was in the 1st decile, with 'Income' and 'Health' in the 2nd decile. 'Crime', 'Older People' and 'Living Environment' were ranked in the 3rd, 4th and 5th deciles respectively. A summary of the average IMD ranking for districts within Essex and Suffolk is illustrated in Figure 3.9.



LEGEND

- Onshore Red Line Boundary
- County Council Boundary
- District Authority Boundary

Indices of Multiple Deprivation Decile (2019)

- 1 (Most Deprived)
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10 (Least Deprived)

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PROJECT TITLE:
FIVE ESTUARIES OFFSHORE WINDFARM

DRAWING TITLE:
Deprivation in the Wider Study Area

VER	DATE	REMARKS	Drawn	Checked
1	24/02/2023	PEIR Submission	DB	JS

DRAWING NUMBER:
FIGURE 3.9

SCALE: 1:500,000 PLOT SIZE: A3 DATUM: OSGB 1936 COORDINATE SYSTEM: British National Grid

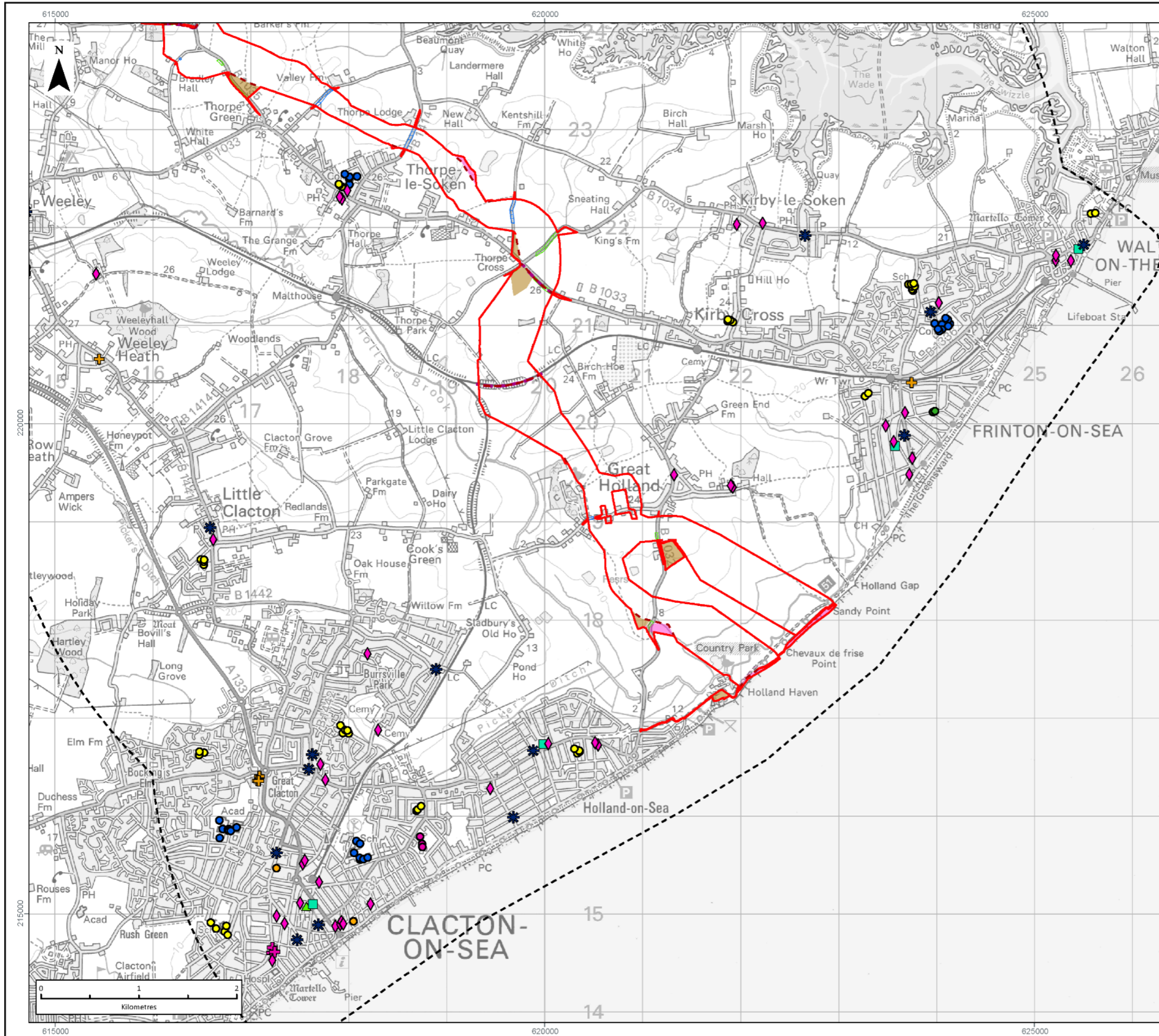




COMMUNITY FACILITIES

3.7.29 The community facilities identified within the LAI are primarily concentrated along the coastal areas of Clacton-on-Sea and Frinton-on-Sea close to the proposed landfill location, as well as another sizeable grouping in Manningtree, north west of the proposed onshore substation (OnSS) site, as shown on Figure 3.10 details the 12 different categories of community facilities within the LAI, which comprise:

- > Tourist Information Centre;
- > Library;
- > Museum;
- > Further Education;
- > Non-State Primary Education;
- > Special Needs Education;
- > Secondary Education;
- > Primary Education;
- > Police Station;
- > Fire Station;
- > Place of Worship; and
- > Post Office.



LEGEND

- Onshore Red Line Boundary
- Onshore Red Line Boundary 5 km Buffer
- Onshore Export Cable Corridor
- Onshore Cable Route Section Division
- Temporary Construction Compounds
- Works Access Required
- Haul Road Crossings
- Haul Road Access

Attraction & Leisure

- ▲ Tourist Information

Cultural

- Library

Education

- Further Education
- Non State Primary Education
- Special Needs Education
- Secondary Education
- Primary Education

Emergency Service

- + Police Station
- + Fire Station

Religious Building

- ◆ Place Of Worship

Retail

- ✱ Post Office

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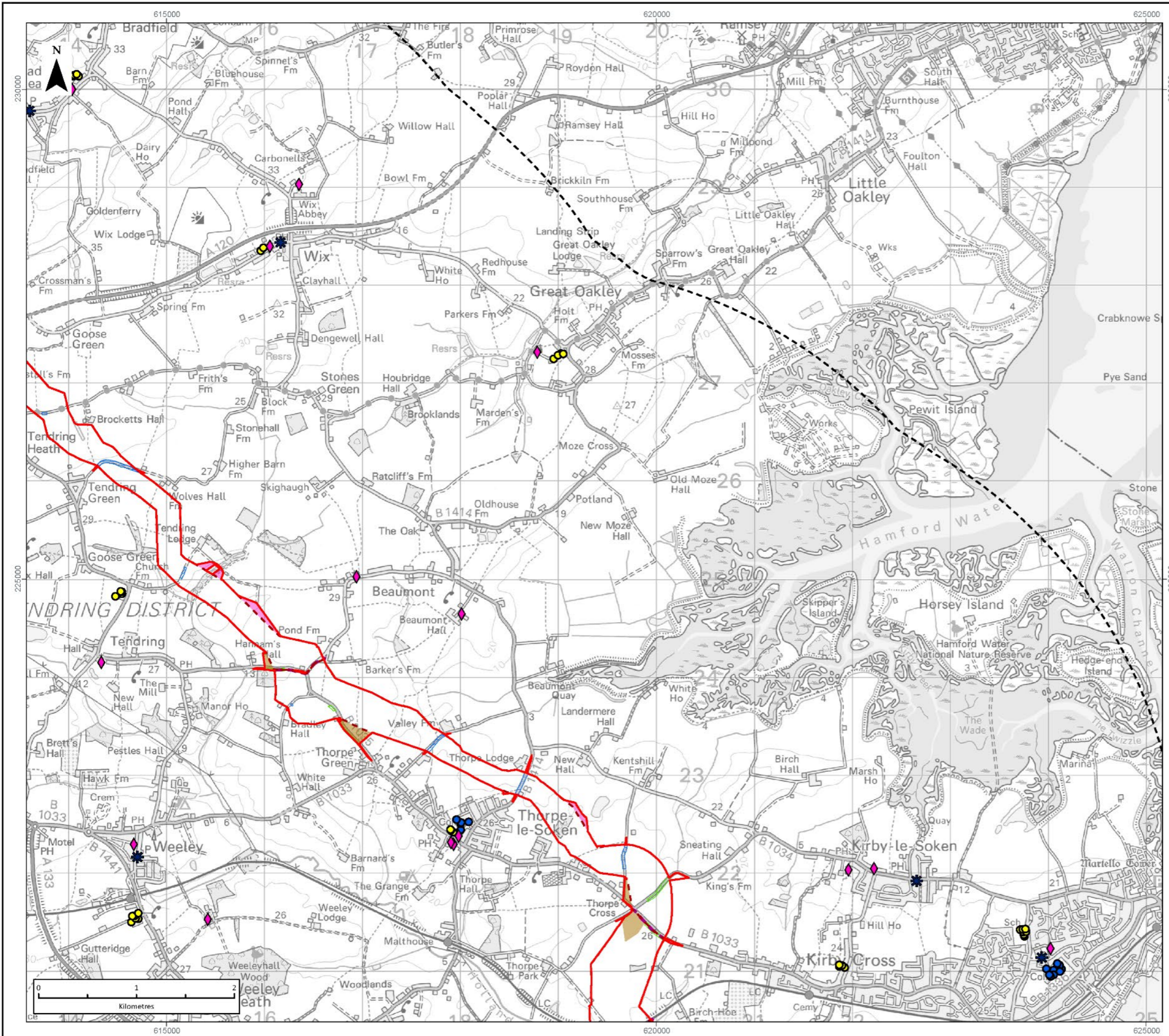
PROJECT TITLE:
 FIVE ESTUARIES OFFSHORE WINDFARM

DRAWING TITLE:
 Community Facilities

VER	DATE	REMARKS	Drawn	Checked
1	24/02/2023	PEIR Submission	DB	JS

DRAWING NUMBER:
 FIGURE 3.10
 Page 1 of 5

SCALE: 1:40,000 | PLOT SIZE: A3 | DATUM: OSGB 1936 | COORDINATE SYSTEM: British National Grid



LEGEND

- Onshore Red Line Boundary
- Onshore Red Line Boundary 5 km Buffer
- Onshore Export Cable Corridor
- Onshore Cable Route Section Division
- Temporary Construction Compounds
- Works Access Required
- Haul Road Crossings
- Haul Road Access

Education

- Secondary Education
- Primary Education

Emergency Service

- + Fire Station

Religious Building

- ◆ Place Of Worship

Retail

- ✱ Post Office

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 FIVE ESTUARIES OFFSHORE WINDFARM

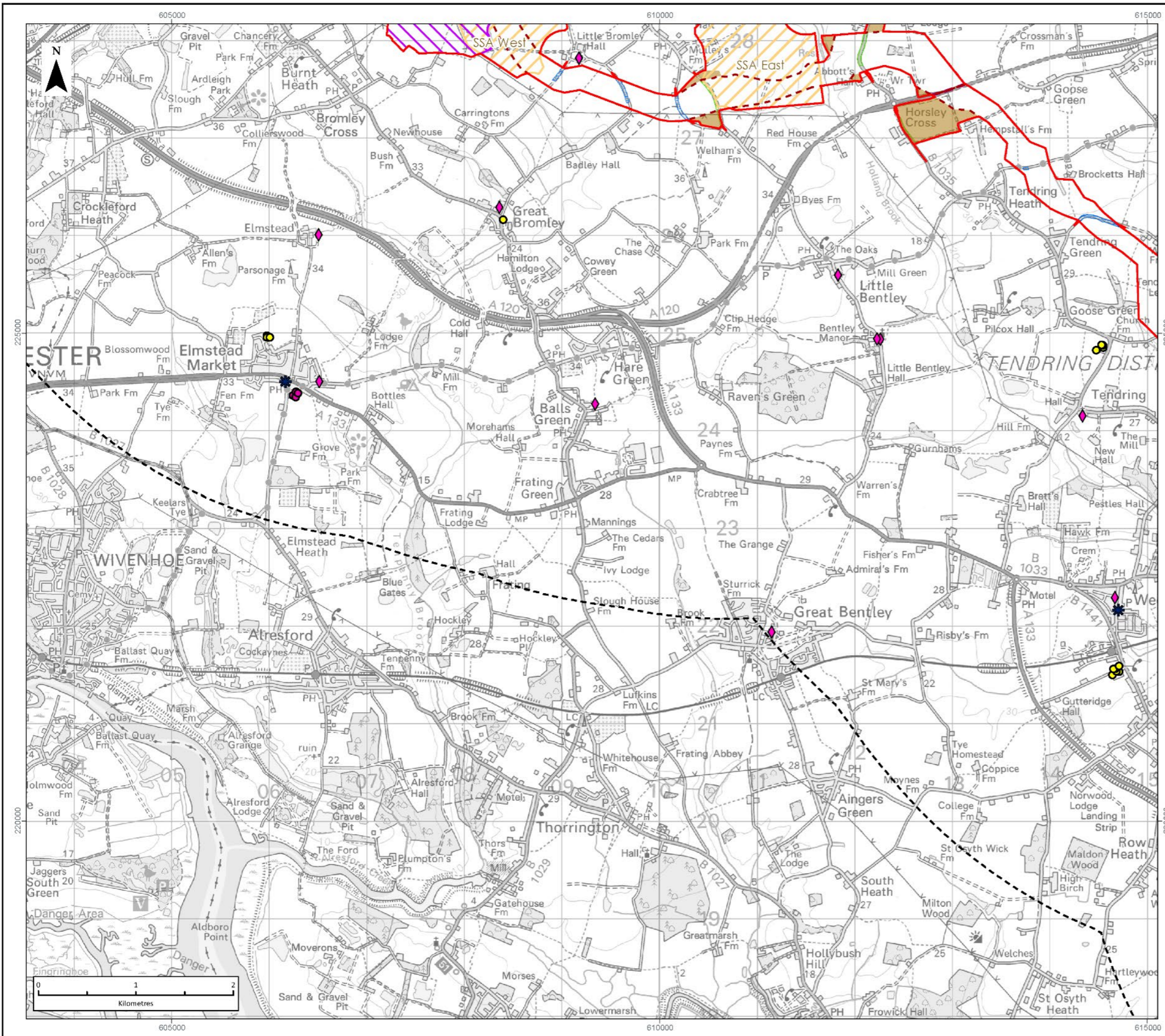
DRAWING TITLE:
 Community Facilities

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1	24/02/2023	PEIR Submission	DB	JS

DRAWING NUMBER:
 FIGURE 3.10

Page 2 of 5
 SCALE: 1:40,000 | PLOT SIZE: A3 | DATUM: OSGB 1936 | COORDINATE SYSTEM: British National Grid





LEGEND

- Onshore Red Line Boundary
- Onshore Red Line Boundary 5 km Buffer
- Onshore Export Cable Corridor
- Onshore Cable Route Section Division
- National Grid Area of Search
- Onshore Substation Areas of Search
- Temporary Construction Compounds
- Haul Road Crossings
- Haul Road Access

Education

- Special Needs Education
- Primary Education

Religious Building

- ◆ Place Of Worship

Retail

- ✱ Post Office

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 FIVE ESTUARIES OFFSHORE WINDFARM

DRAWING TITLE:
 Community Facilities

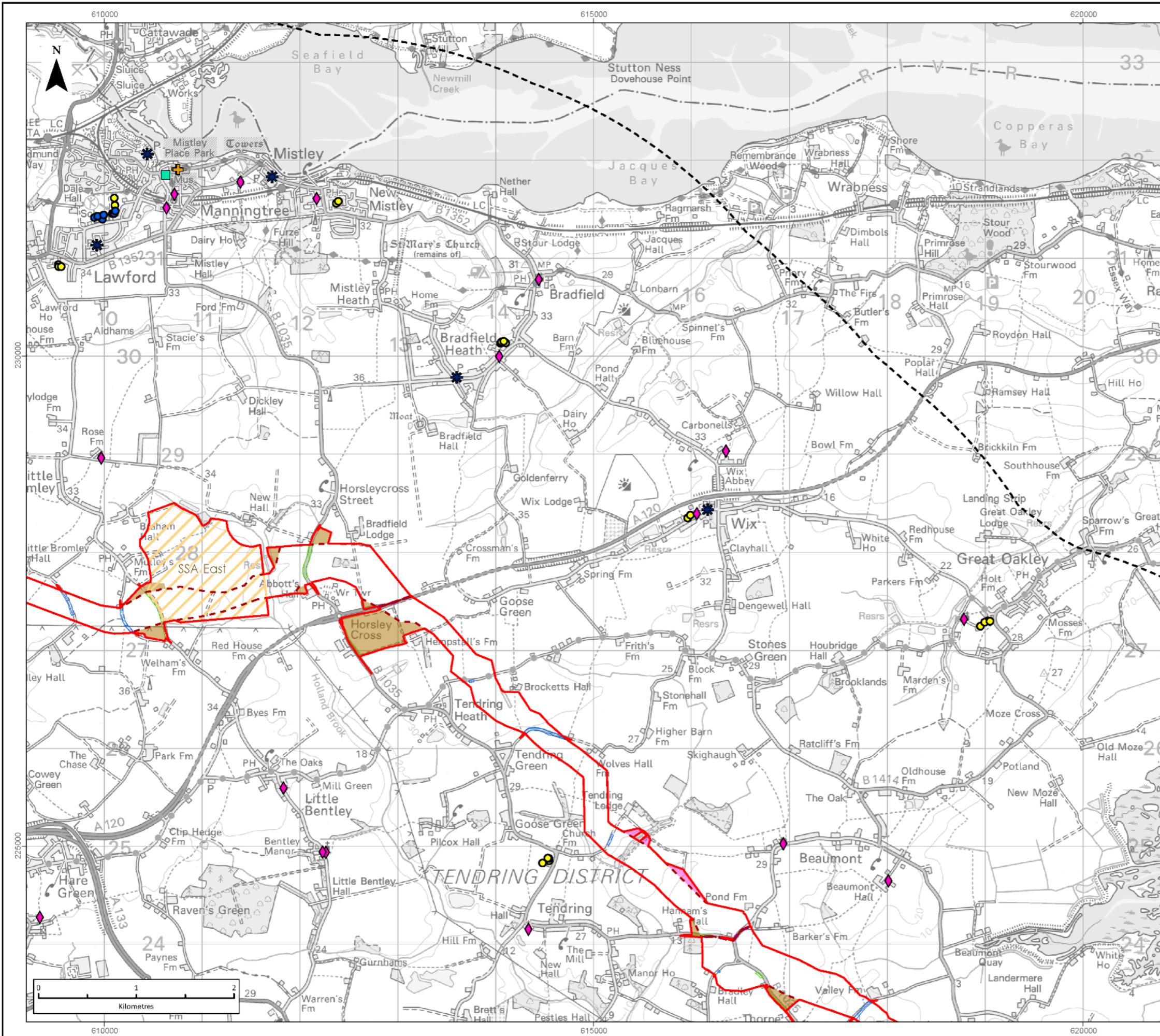
VER	DATE	REMARKS	Drawn	Checked
1	24/02/2023	PEIR Submission	DB	JS

DRAWING NUMBER:

FIGURE 3.10
 Page 3 of 5

SCALE: 1:40,000 | PLOT SIZE: A3 | DATUM: OSGB 1936 | COORDINATE SYSTEM: British National Grid





LEGEND

- Onshore Red Line Boundary
- Onshore Red Line Boundary 5 km Buffer
- Onshore Export Cable Corridor
- Onshore Cable Route Section Division
- Onshore Substation Areas of Search
- Temporary Construction Compounds
- Works Access Required
- Haul Road Crossings
- Haul Road Access

Cultural

- Library

Education

- Secondary Education
- Primary Education

Emergency Service

- + Fire Station

Religious Building

- ◆ Place Of Worship

Retail

- ★ Post Office

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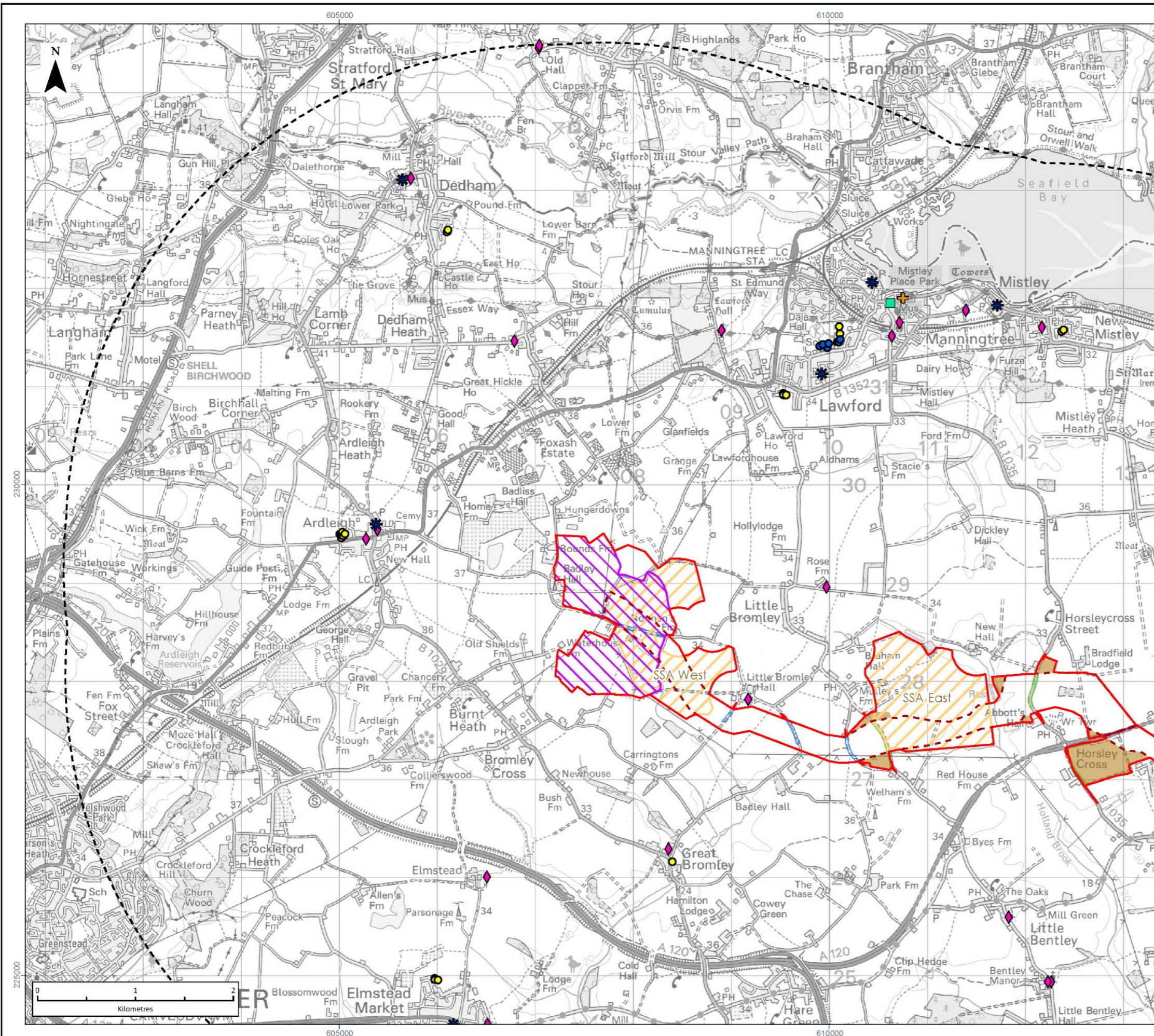
DRAWING TITLE:
Community Facilities

VER	DATE	REMARKS	Drawn	Checked
1	24/02/2023	PEIR Submission	DB	JS

DRAWING NUMBER:
FIGURE 3.10
Page 4 of 5

SCALE: 1:40,000 PLOT SIZE: A3 DATUM: OSGB 1936 COORDINATE SYSTEM: British National Grid





LEGEND

- Onshore Red Line Boundary
- Onshore Red Line Boundary 5 km Buffer
- Onshore Export Cable Corridor
- Onshore Cable Route Section Division
- National Grid Area of Search
- Onshore Substation Areas of Search
- Temporary Construction Compounds
- Haul Road Crossings
- Haul Road Access

Cultural

- Library

Education

- Secondary Education
- Primary Education

Emergency Service

- + Fire Station

Religious Building

- ◆ Place Of Worship

Retail

- ✱ Post Office

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PROJECT TITLE:
 FIVE ESTUARIES OFFSHORE WINDFARM

DRAWING TITLE:
 Community Facilities

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1	24/02/2023	PEIR Submission	DB	JS

DRAWING NUMBER:

FIGURE 3.10
 Page 3 of 5

SCALE: 1:40,000 | PLOT SIZE: A3 | DATUM: OSGB 1936 | COORDINATE SYSTEM: British National Grid.





3.7.30 Due to the nature of the impact that the VE project would have, only community facilities identified within 500 m of the onshore Red Line Boundary will be assessed further, these have been detailed in Table 3.16.

Table 3.16: Community Facilities

Name	Type of Facility
Little Bromley Hall	Place of Worship
Tendring Primary School	Primary School
Tendring Technology College	Secondary Education
Rolph Church of England Primary School and Nursery	Primary School
Thorpe-Le-Soken Police Station	Police Station
Great Holland Church	Place of Worship
Holland Haven Primary School	Primary School

HEALTH

- 3.7.31 The WSA, comes under three health jurisdictions; the NHS (National Health Service) Suffolk and North East Essex (SNEE) Integrated Care Board (ICB), Mid and South Essex (MSE) ICB and the 07H West Essex Sub-ICB (WES) (part of Hertfordshire and West Essex ICB), which are responsible for the commissioning of the majority of health services across Essex and Suffolk counties, including community health, mental health, disability services and emergency care.
- 3.7.32 There are 93 General Practitioner (GP) Practices (NHS Digital, 2022a) in the Suffolk and North East ICB and 151 in the Mid and South Essex ICB, equating to 244 GP Practices throughout the WSA. Of note is that there is no data available at the Sub-ICB level.
- 3.7.33 The WSA comprises 695 (MSE 342, SNEE 274, WES 79) GP Partners, 346 (MSE 136, SNEE 166, WES 44) Salaried GPs, 309 (MSE 130, SNEE 117, WES 62) GPs in a Training Grade, 5 (MSE 1, SNEE 3, WES 1) GP Retainers and 43 (MSE 33, SNEE 3, WES 7) GP Regular Locum (a GP fulfilling the duties of an otherwise absent GP), with a total of 1,398 GPs (NHS Digital, 2022b).
- 3.7.34 The data regarding the number of patients and GPs for any given ICB or sub-ICB are updated monthly, with the latest data available at the time of writing published for November 2022 (NHS Digital, 2022c). The data showed that there are 2,639,021 registered patients across WSA (1,053,348 in Suffolk and North East Essex, 1,259,344 in Mid and South Essex and 326,329 in West Essex ICB). This implies that each GP serves 1,888 patients, which is above the maximum threshold (of 1,800 patients per GP) recommended by the Healthy Urban Development Unit (London HUDU, 2019). Table 3.17 displays the comparative data.



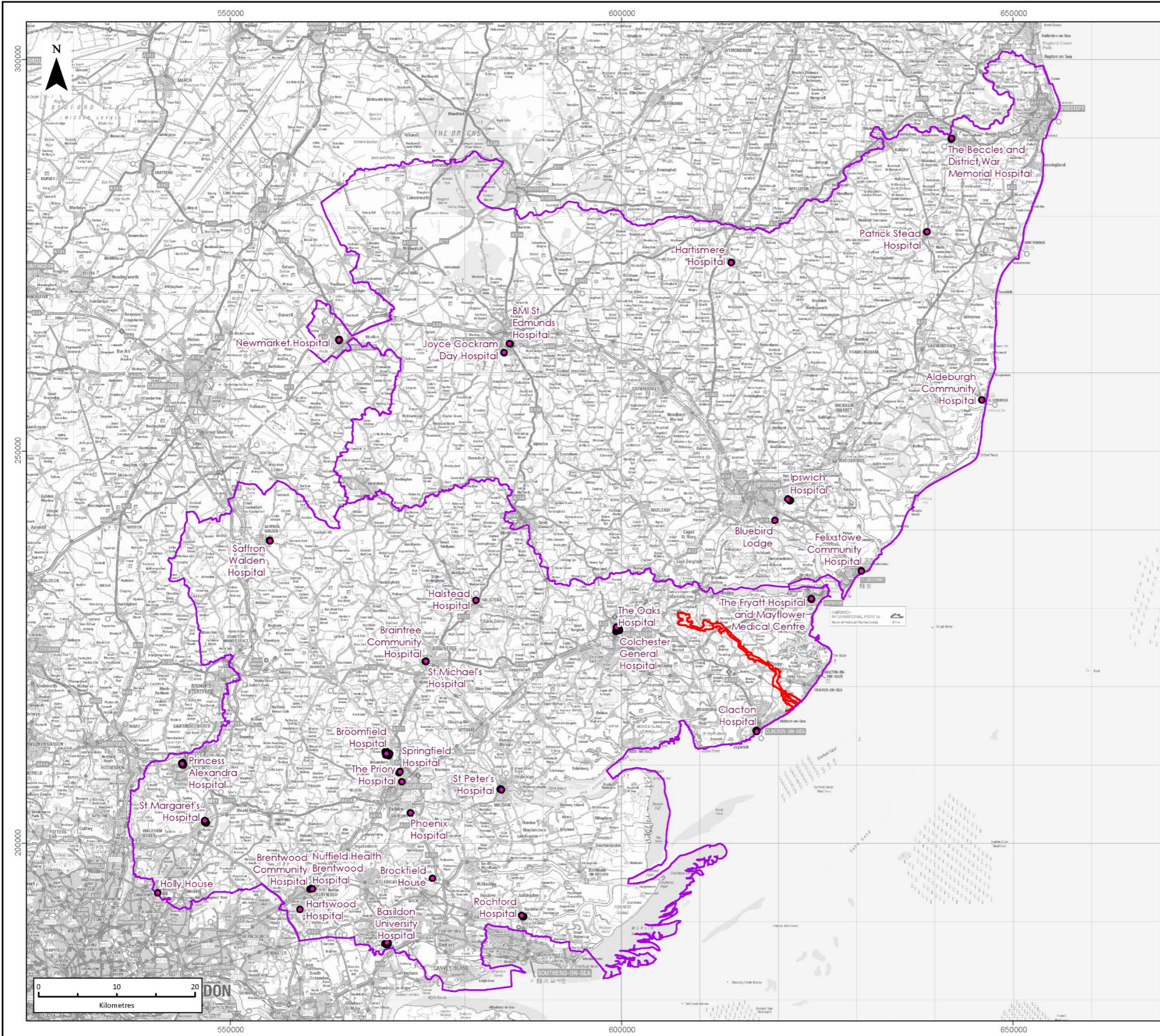
Table 3.17: GPs in the Local Area of Impact

Administrative Area	Registered Patients	No of FTE GP	Patients per GP
West Essex Sub-ICB	366,927	187	1,962
Suffolk and North East Essex	1,053,348	563	1,871
Mid and South Essex	1,259,344	642	1,962
WSA	2,639,021	1,398	1,888
East of England	6,156,505	3,823	1,610
England	57,827,308	36,338	1,591

3.7.35 Table 3.18 details the hospitals in the LAI; of the nine hospitals listed, two hospitals, Colchester Hospital and Ipswich Hospital, contain an accident and emergency (A&E) department. Figure 3.11 shows the hospitals within the WSA.

Table 3.18: Hospitals in the LAI

Hospital	Address
Colchester Hospital	Turner Road, Colchester, CO4 5JL
Ipswich Hospital	Heath Road, Ipswich, IP4 5PD
Aldeburgh Community Hospital	Park Road, Aldeburgh, Suffolk, IP15 5ES
Bluebird Lodge	100 Mansbrook Boulevard, Ipswich, Suffolk, IP3 9GJ
Clacton and District Hospital	Tower Road, Clacton, CO15 1LH
Felixstowe Hospital	Constable Road, Felixstowe, Suffolk, IP11 7HJ
Halstead Hospital	Hedingham Road, Halstead, Essex, CO9 2DL
Fryatt Hospital	419 Main Road, Dovercourt, Harwich, CO12 4EX
Colchester Primary Care Centre	Turner Road, Colchester, CO4 5JR



LEGEND

- Onshore Red Line Boundary
- County Council Boundary
- Hospital

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PROJECT TITLE:
FIVE ESTUARIES OFFSHORE WINDFARM

DRAWING TITLE:
Health Facilities

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DRAWING NUMBER:
FIGURE 3.11

SCALE: 1:500,000 | PLOT SIZE: A3 | DATUM: OSGB 1936 | COORDINATE SYSTEM: British National Grid.





3.7.36 The NHS Constitution for England (Department of Health and Social Care, 2021) pledges to set an overall target of 95% of all attendees at A&E facilities to be seen, discharged, admitted and/ or transferred within four hours of arrival. This standard recognises that for 5% of all patients it may not be clinically appropriate to manage them within four hours of arrival at A&E. Table 3.19 shows the current waiting times for the relevant trusts in the WSA and LAI.

Table 3.19: A&E Wait Times

Region / Coverage	Total A&E Attendances	A&E Attendances Dealt With in <4 Hours (%)
Suffolk and North East Essex	33,706	67.4%
Mid and South Essex	32,799	62.2%
WSA	66,505	64.8%
England	217,1615	69.31%

3.7.37 Data for October 2022 (NHS Digital, 2022d) shows that of all the patients accessing Accident and Emergency (A&E) departments in England, 69.31% were attended within 4 hours or less. Comparatively, the two ICBs in the WSA had, on average, attended 64.8% of their patients within 4 hours or less, which is below the average for England and significantly below the standards pledged in the NHS Constitution for England.

TOURISM

THE TOURISM ECONOMY

ESSEX

3.7.38 The 2020 report Economic Impact of Tourism (Essex County Council, 2021) for Essex identified that tourism in Essex generated £1,598.16 million for the economy of the WSA; however, it is noted that 2020 was the first year of the Covid-19 pandemic and tourism is likely to have been significantly reduced. For the 2019 report (Essex County Council, 2020b) (prior to the impacts of the Covid-19 pandemic), the total generation was £3,535.52 million for the economy of the WSA. For the purposes of establishing a representative baseline. Both the 2019 and 2020 data have been used to establish the current tourism economy; the 2020 data is the latest available and offers a 'worst-case', whilst the 2019 data is prior to the lockdowns of 2020 and is considered 'best-case'. It is considered that the current tourism economy will lie between these two datasets.

3.7.39 For 2019, there was a total of 53,694,367 trips to Essex made up of 95.65% day trips (51,359,367) and 4.35% overnight trips (2,335,000).



- 3.7.40 The total 2020 figure was split into the total visitor spend (£1.17billion) and the indirect / induced spend (£426.37 million), meaning that the total visitor spend represented 73.3% of the total value, compared with 74.05%, showing that the ratios of visitor spending and whether the visitors are staying overnight in Essex or not, remains largely the same before and after the impacts of Covid-19 pandemic, just to a significantly more reduced scale.
- 3.7.41 The 2020 results showed that tourism provided 32,351 Full Time Equivalent (FTE) jobs (44,596 jobs in total) and tourism related employment was found to equate to 6.5% of all employment in the WSA. This was a 37.09% reduction from the 2019 number of 51,424 FTE roles, and a 35.42% reduction in the total jobs (69,054). The types of employment as a result of tourism were 80% direct, 14% indirect and 6% induced, in 2020, with, proportionately, the results being similar for 2019.
- 3.7.42 The majority of the trips in 2020 were for the purpose of 'Holidays' (51%), followed by 'Friends and Relatives' with 38% of visitors identifying as this as their purpose for visiting Essex. 'Business' saw the largest reduction from 2019, from 14% to 9% in 2020, showing that 5% of the visitors previously coming for business were no longer.
- 3.7.43 The 2020 breakdown of expenditure shows that the sector experiencing the largest proportion of expenditure was 'Food and Drink', at 39% of the total expenditure, followed by 'Shopping' with 30% of expenditure, 'Travel' with 15%, 'Entertainment' with 11% and 'Accommodation' with the lowest level of expenditure at '5%'. In 2019, the make-up of visitor expenditure was, proportionately, broadly the same as 2020.
- 3.7.44 The report found that in 2020, the highest proportion of expenditure by accommodation type from UK-based visitors was 'Serviced Accommodation' at 54%, a 2% decrease from 2019. This was followed by those who were 'Staying with Friends and Relatives' at 24%, a 4% decrease from 2019, and static caravans at 10%, a 4% increase from 2019.
- 3.7.45 Spend on self-catering accommodation and camping both increased from 2019 to 2020 from 1% to 4% and 2% to 3%, respectively. The data for the overseas visitors are given on Figure 3.12.



Overseas Accommodation Expenditure (%)

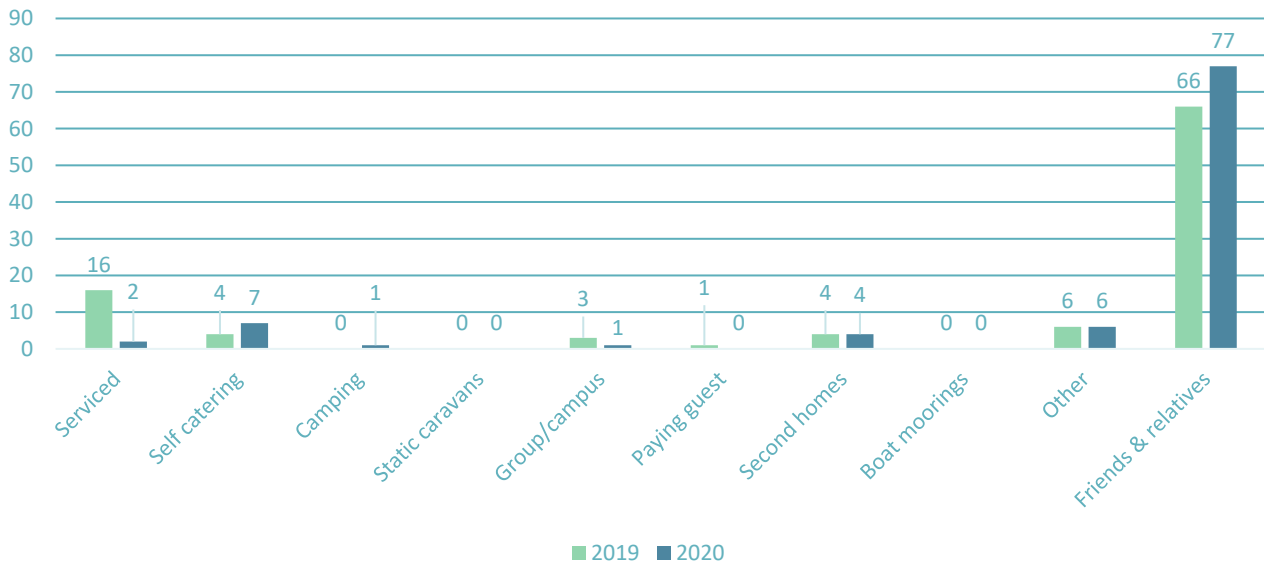


Figure 3.12: Overseas Accommodation Expenditure in Essex

3.7.46 The greatest difference between overseas visitor’s accommodation expenditure was in with ‘Serviced’ accommodation (hotels), which reduced from 16% to 2% and staying with ‘Friends and Relatives’ which increased 11% in 2020. The data for the total numbers are given in Figure 3.13.

3.7.47

Total Accommodation Expenditure (%)

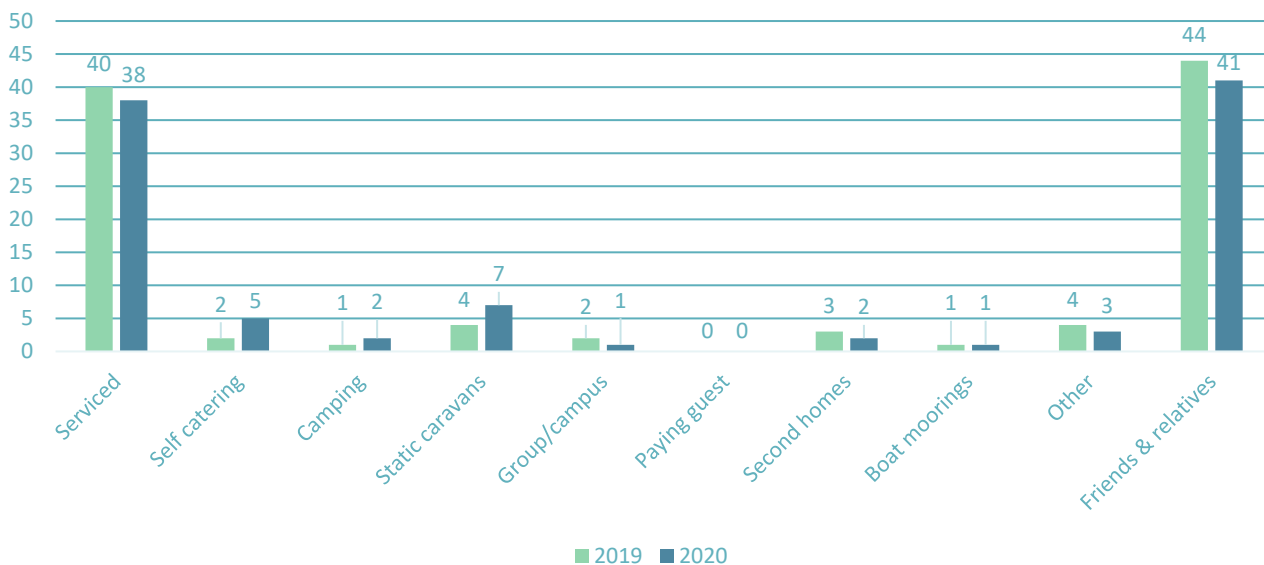


Figure 3.13: Total Accommodation Expenditure in Essex



- 3.7.48 The data show that in total, the proportional expenditure on 'Serviced' and 'Friends and Relatives' decreased after the onset of the Covid-19 pandemic, whilst 'Self Catering', 'Camping' and 'Static Caravans' increased, possibly showing an uptake in independent (self-isolating) forms of accommodation.
- 3.7.49 Regarding employment provided as a result of this expenditure, there were a total of 24,599 FTE roles directly supported by the tourism industry, a 29% decrease on the previous year, with 46% of these involved in the 'Catering' industry. 21% of the direct FTE Employment was in 'Retailing' and 14% was in 'Entertainment'. 'Accommodation' was 7% of the total FTE employment and 'Transport' accounted for 4%.

SUFFOLK

- 3.7.50 The VE project may have potential to impact the Suffolk tourism economy through the visibility of the turbines from the Suffolk coast, and the potential for accommodation demand for construction workers. As such, the tourism baseline extends to the Suffolk Coast, within the East Suffolk Council administrative area
- 3.7.51 The 2020 report Economic Impact of Tourism (East Suffolk Council, 2021) for East Suffolk identified that tourism in East Suffolk generated £297,292,000 for the economy of the WSA; it is noted that 2020 was the first year of the Covid-19 pandemic and tourism is likely to have been significantly reduced. For the 2019 report (East Suffolk Council, 2020) (prior to the impacts of the Covid-19 pandemic), the total generation was £695,187,000 for the East Suffolk economy, representing a 57% drop in the value of tourism over the 12-months to 2020, 2% higher than that of Essex.
- 3.7.52 The total number of trips in 2020 was 5,449,000, approximately 5,133,000 day trips (94.2%) and 316,000 staying trips (5.8%). For 2019, there were 12,478,000 total number of trips to East Suffolk and the cost, marking a 56.33% reduction to the year 2020, and is made up of 94.38% day trips (11,777,000) and 5.62% overnight trips (701,000).
- 3.7.53 The total 2020 figure was split into the total visitor spend (£221.4 million) and the indirect / induced spend (£75.88 million), meaning that the total visitor spend represented 74.47% of the total value, compared with 75.51% in 2019, showing that the ratios of visitor spending and whether the visitors are staying overnight in East Suffolk, as well as Essex, or not, remains largely the same before and after the impacts of the Covid-19 pandemic.
- 3.7.54 The 2020 results showed that tourism provided 6,537 Full Time Equivalent (FTE) jobs (9,026 actual jobs in total) and tourism related employment was found to equate to 9.3% of all employment in East Suffolk. This was a 39.60% reduction from the 2019 number of 10,824 FTE roles, and a 38.43% reduction in the total actual jobs (14,660). The types of employment as a result of tourism were 82% direct, 14% indirect and 4% induced, in 2020, which had a higher proportion of direct roles than in 2019, where the results were 75% direct, 20% in-direct and 5% induced.
- 3.7.55 The majority of the trips in 2020 were for the purpose of 'Holidays' (79%), followed by 'Friends and Relatives' with 16% of visitors identifying as this as their purpose for visiting East Suffolk. 'Business' saw the largest reduction from 2019, from 13% to 3% in 2020, showing that 10% of the visitors previously coming for business were no longer.



3.7.56 The 2020 breakdown of expenditure shows that the largest industry that visitors were spending their money towards was 'Food and Drink', where 39% of the total expenditure was spent, followed by 'Shopping' with 21% of expenditure, 'Travel' with 19%, 'Entertainment' with 11% and 'Accommodation' with the lowest level of expenditure at 10%. In 2019, the make-up of visitor expenditure was, proportionately, broadly the same as 2020.

3.7.57 The report found that in 2020, the highest proportion of expenditure by accommodation type from UK-based visitors was 'Serviced Accommodation' at 28%, an 8% decrease proportionately from 2019. This was followed by those who were 'Static Caravans' at 19%, a proportionately 4% increase from 2019, and 'Self-Catering' at 17%, a 7% increase from 2019. The data for the overseas visitors are given on Figure 3.14.

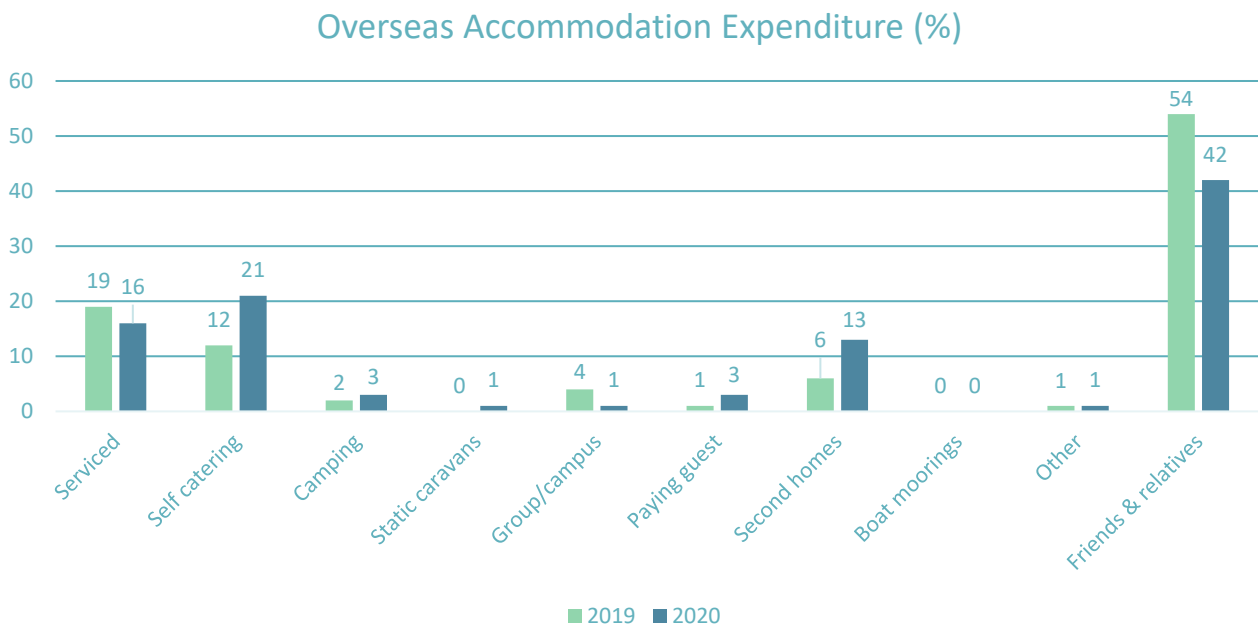


Figure 3.14: Overseas Accommodation Expenditure in East Suffolk

3.7.58 The greatest difference between overseas visitor's accommodation expenditure was with staying with 'Friends and Relatives' which decreased 12%, from 54% to 42%, in 2020. The data for the total numbers is given in Figure 3.15.



Total Accommodation Expenditure (%)

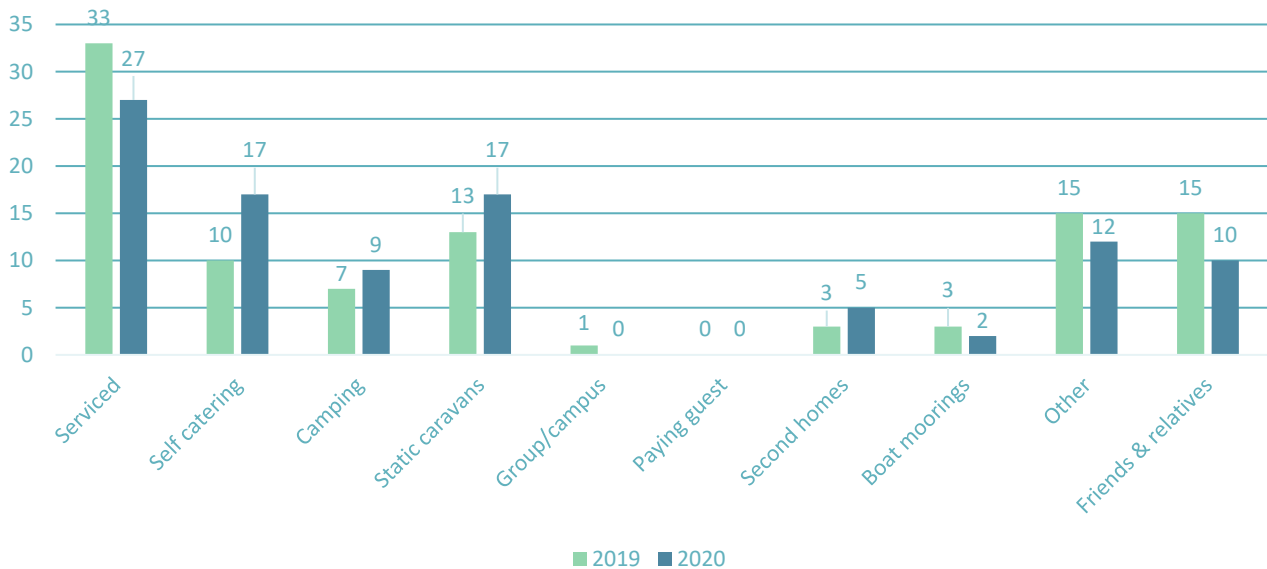


Figure 3.15: Total Accommodation Expenditure in East Suffolk

3.7.59 The data show that in total, the proportional expenditure on ‘Serviced’ and ‘Friends and Relatives’ decreased after the onset of the Covid-19 pandemic, whilst ‘Self Catering’, ‘Camping’ and ‘Static Caravans’ increased, possibly showing an uptake in cheaper and / or activity-related accommodation. These results are broadly similar to those in Essex over the same period of time.

3.7.60 Regarding employment provided as a result of this expenditure, there were a total of 5,132 FTE roles directly supported by the tourism industry, a 33% decrease on the previous year, with 45% of these involved in the ‘Catering’ industry. 15% of the direct FTE Employment was in ‘Entertainment’ and ‘Retail’ and ‘Accommodation’ each had 13% of the total FTE employment.

TOURISM EMPLOYMENT

3.7.61 The data related to the employment in tourism related industries within the geographical contexts have been retrieved from Business Register and Employment Survey (BRES) (ONS, 2021c). It is noted that BRES data captures only the direct employment associated with tourism-related activity, but not the non-tourism supported jobs linked to multiplier spend from tourism (i.e. the indirect and induced employment associated with supply chain and wage expenditure). However, the data from BRES offers comparatives at a local, county, regional and national scale which allows for the contextualisation of the tourism-related employment in the study area with other comparator areas.

3.7.62 The 2007 Standard Industrial Classification (SIC) classes used to understand the scale of employment directly related to the tourism industry were:

- > 55: Accommodation;
- > 56: Food and beverage service activities;
- > 79: Travel agency, tour operator and other reservation service and related activities;



- > 90: Creative, arts and entertainment activities;
- > 91: Libraries, archives, museums and other cultural activities; and
- > 93: Sports activities and amusement and recreation activities.

3.7.63 According to the latest estimates (year of 2021), there were approximately 5,330 jobs supported directly by tourism-related sectors in the host local authority, Tendring, which equates to 13% of total employment. These data can be used in combination with a Location Quotient (LQ), which is a method of using local employment data to determine the level of specialization of an area and gives an understanding of the available resource within the local area comparatively with regional/national averages, indicating the proportion of the workforce available within that industry.

3.7.64 With a LQ of 1.34, this is higher than the proportion seen across Essex (LQ 0.99) and the East of England (LQ 0.93), making it the only area with a higher-than-average tourism-related workforce. The full data are shown on Table 3.20.

Table 3.20: Tourism Employment

Area	Total Employment	Percentage Employment (%)	LQ vs. GB
Tendring	5,330	13.0%	1.34
Essex	56,900	9.6%	0.99
East of England	256,500	9.0%	0.93
Great Britain	2,974,000	9.7%	1.0

ACCOMMODATION STOCK

3.7.65 The data on the number of bedrooms by type of accommodation (i.e. serviced, self-catering, camping, boat moorings, etc.) are currently not publicly available. However, an estimate of the number of serviced accommodation rooms across Essex can be derived from available data.

3.7.66 On the basis that approximately 48% of visitors who stayed in accommodation, did so in paid accommodation (hotels, caravans, bed and breakfast etc.) (Essex County Council, 2021), equating to approximately 484,320 visitors paying for accommodation, with an average number of 2 occupants per room, this equates to 242,160 rooms. The comparative England-level occupancy rate for 2020 was 38% (VisitEngland, 2021), therefore it can be estimated that this equates to 637,253 paid accommodation rooms across Essex.

3.7.67 It is noted that the figures for the average rate of accommodation were in the first year of the Covid-19 pandemic and will therefore be uncharacteristically lower, however, they have been used to gauge an average occupancy rate when combined with the 2020 occupancy figures for Essex.

3.7.68 The following year, 2021, the occupancy rates rose by 15% to 52%, and were still significantly lower than pre-pandemic levels of 2019, 76%.

3.7.69 Tendring, the District which will be the ‘host’ location of the onshore works, is home to several tourism assets, particularly at the coastal, landfall, areas. The Essex Tourist Guide (Essex Tourist Guide, 2022) highlights popular attractions for tourists to visit in Essex, which can be combined with online searches to include ‘paid’ attractions:

- > Clacton Pavillion;
- > Century Cinema Clacton;
- > Clacton Shopping Village;
- > Princes Theatre;
- > West Cliff Theatre;
- > Holland Haven Country Park;
- > Walton & Frinton Yacht Club;
- > Frinton on Sea Lawn Tennis Club;
- > Frinton Golf Club: and
- > Frinton Summer Theatre.

3.7.70 And ‘free’ attractions:

- > Great Holland Pits Nature Reserve:
- > Clacton Pier; and
- > Walton Pier.

3.7.71 Indoor tourist and/or recreational assets are scoped out of the assessment and, as such, Century Cinema Clacton, Clacton Shopping Village, Princes Theatre, West Cliff Theatre and Frinton Summer Theatre are not considered further.

3.7.72 Of note are the Frinton Golf Club, which is within the proposed landfall site (and is expected to be avoided using Horizontal Directional Drilling, or similar trenchless technique), as well as Holland Haven Country Park, which is located close to the proposed landfall locations.

3.7.73 The path of the proposed cable route passes the Great Holland Pits Nature Reserve to its east, which is a 40-acre area of grassland, ancient woodland and wetlands. The site includes walking trails and areas for parking cars of visitors.

3.7.74 As the route travels further inland, the number of tourist sites decreases, the main area of potential impact is therefore concentrated in the coastal areas around the proposed landfall site.

3.7.75 The beaches within the LAI, as previously mentioned, are of particular importance when considering Essex’s tourism assets, Figure 3.1 shows the following beaches within the LAI

- > Walton-on-the-Naze;
- > Skippers Island;
- > Beaumont Quay;
- > Frinton;
- > Clacton; and



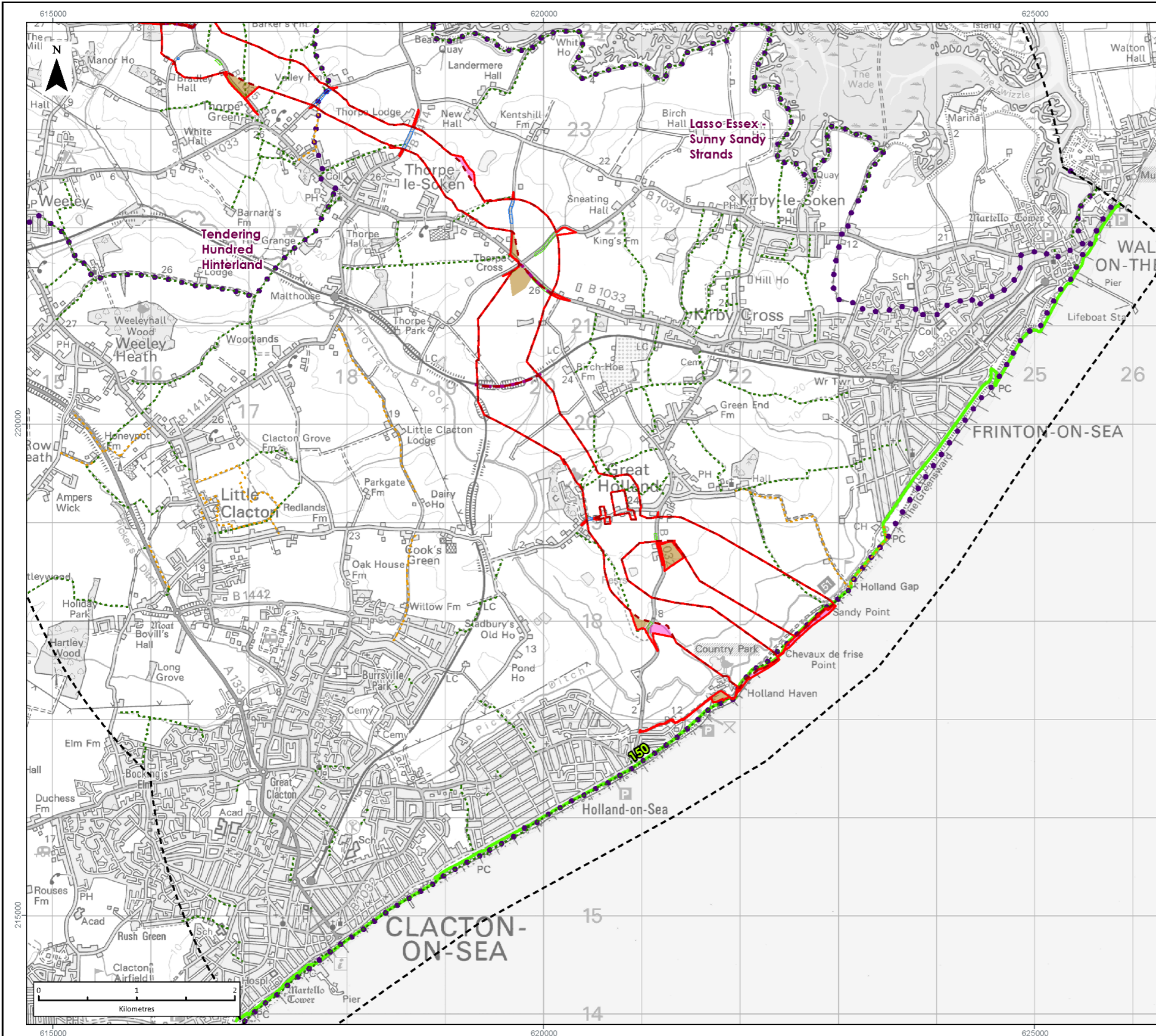
> Jaywick Sands (most northernly section).

3.7.76 The beach assets are further referenced in the Bathing subsection of the Offshore Recreation Section of this baseline review.

ONSHORE RECREATION

PUBLIC RIGHTS OF WAY AND OTHER ROUTES

3.7.77 Public Rights of Way (PRoW) and other walking, cycling and riding routes are shown on Figure 3.16: Onshore Recreation, and tabulated on Table 3.21 along with the name of the location of the route, type of route, the total length of the particular route that is within the LAI and the ID number of the routes of a particular area within the LAI; of note is the repetition of some route number IDs, this is due to the route entering and exiting the LAI and also where some routes split.



LEGEND

- ▭ Onshore Red Line Boundary
- Onshore Red Line Boundary 5 km Buffer
- Onshore Export Cable Corridor
- Onshore Cable Route Section Division
- Temporary Construction Compounds
- Works Access Required
- Haul Road Crossings
- Haul Road Access
- Long Distance Walking Route
- National Cycle Route
- Public Right of Way
- Footpath
- Bridleway

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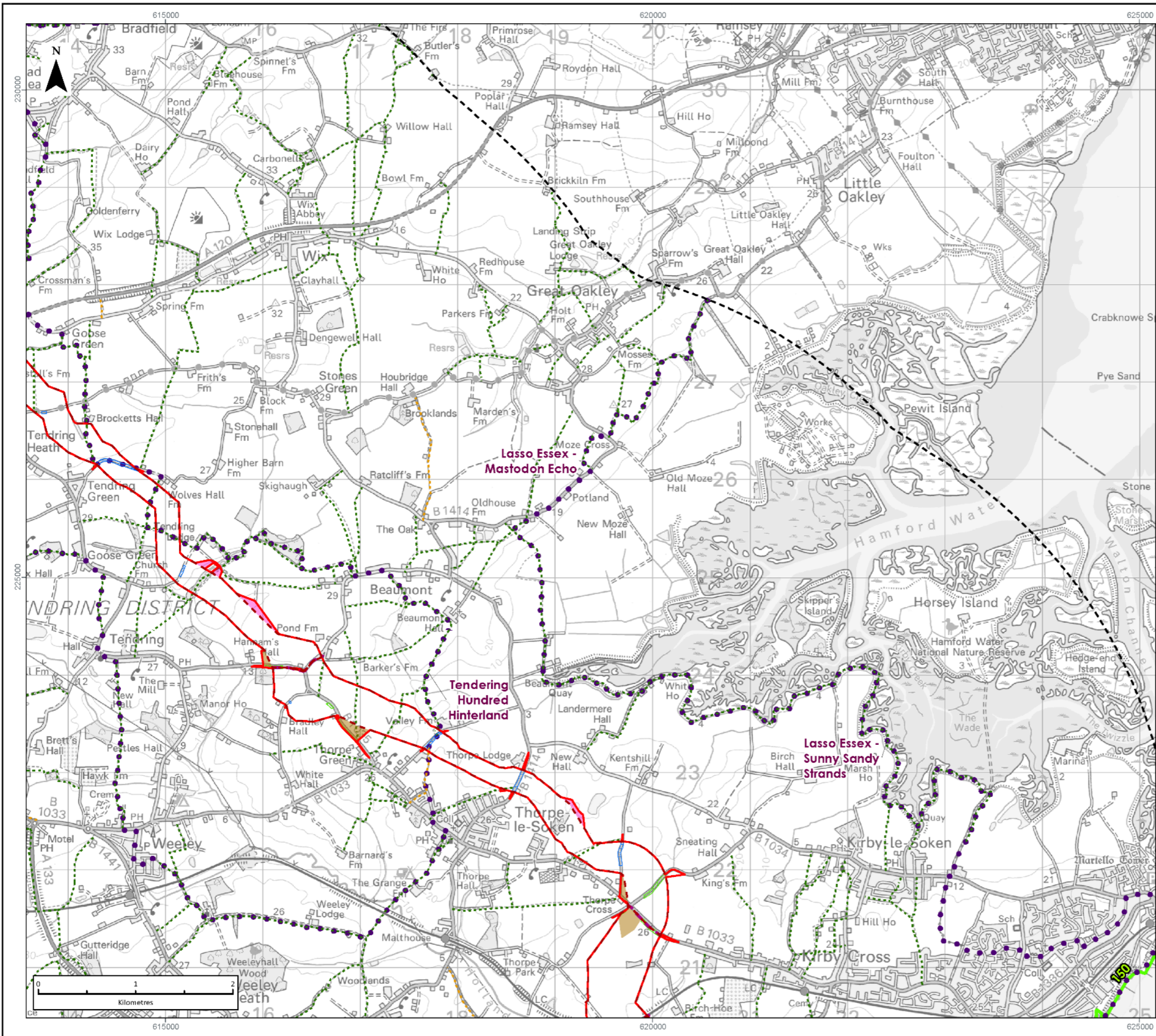
PROJECT TITLE:
 FIVE ESTUARIES OFFSHORE WINDFARM

DRAWING TITLE:
 Onshore Recreation

VER	DATE	REMARKS	Drawn	Checked
1	24/02/2023	PEIR Submission	DB	JS

DRAWING NUMBER:
 FIGURE 3.16
 Page 1 of 5

SCALE: 1:40,000 PLOT SIZE: A3 DATUM: OSGB 1936 COORDINATE SYSTEM: British National Grid



LEGEND

- ▭ Onshore Red Line Boundary
- Onshore Red Line Boundary 5 km Buffer
- Onshore Export Cable Corridor
- Onshore Cable Route Section Division
- Temporary Construction Compounds
- Works Access Required
- Haul Road Crossings
- Haul Road Access
- Long Distance Walking Route
- National Cycle Route
- Public Right of Way
- - - Footpath
- - - Bridleway

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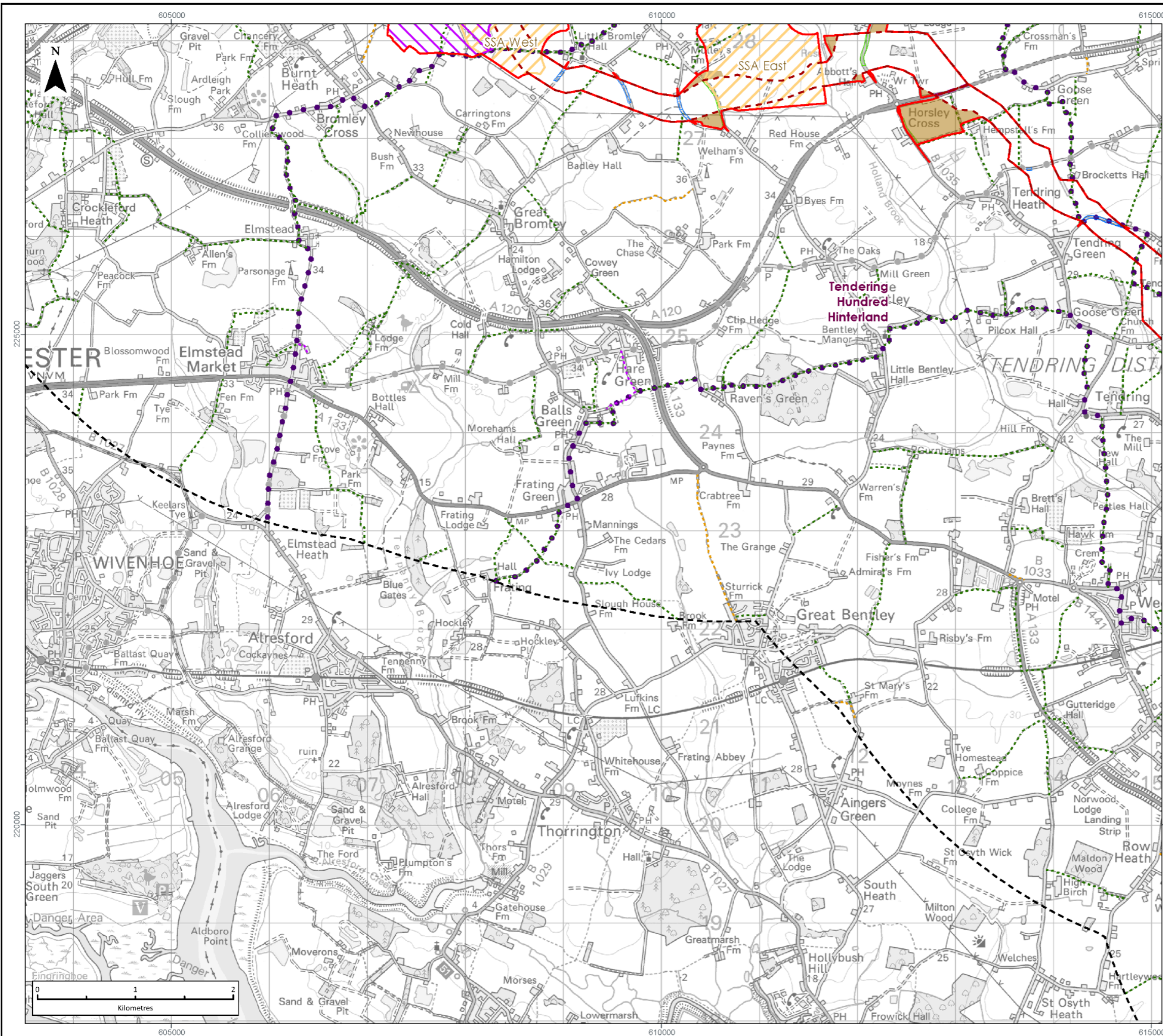
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1	24/02/2023	PEIR Submission	DB	JS

DRAWING NUMBER:
FIGURE 3.16
 Page 2 of 5

SCALE: 1:40,000 PLOT SIZE: A3 DATUM: OSGB 1936 COORDINATE SYSTEM: British National Grid





LEGEND

- Onshore Red Line Boundary
- Onshore Red Line Boundary 5 km Buffer
- Onshore Export Cable Corridor
- Onshore Cable Route Section Division
- National Grid Area of Search
- Onshore Substation Areas of Search
- Temporary Construction Compounds
- Haul Road Crossings
- Haul Road Access
- Long Distance Walking Route
- Public Right of Way
- Footpath
- Bridleway
- Byway

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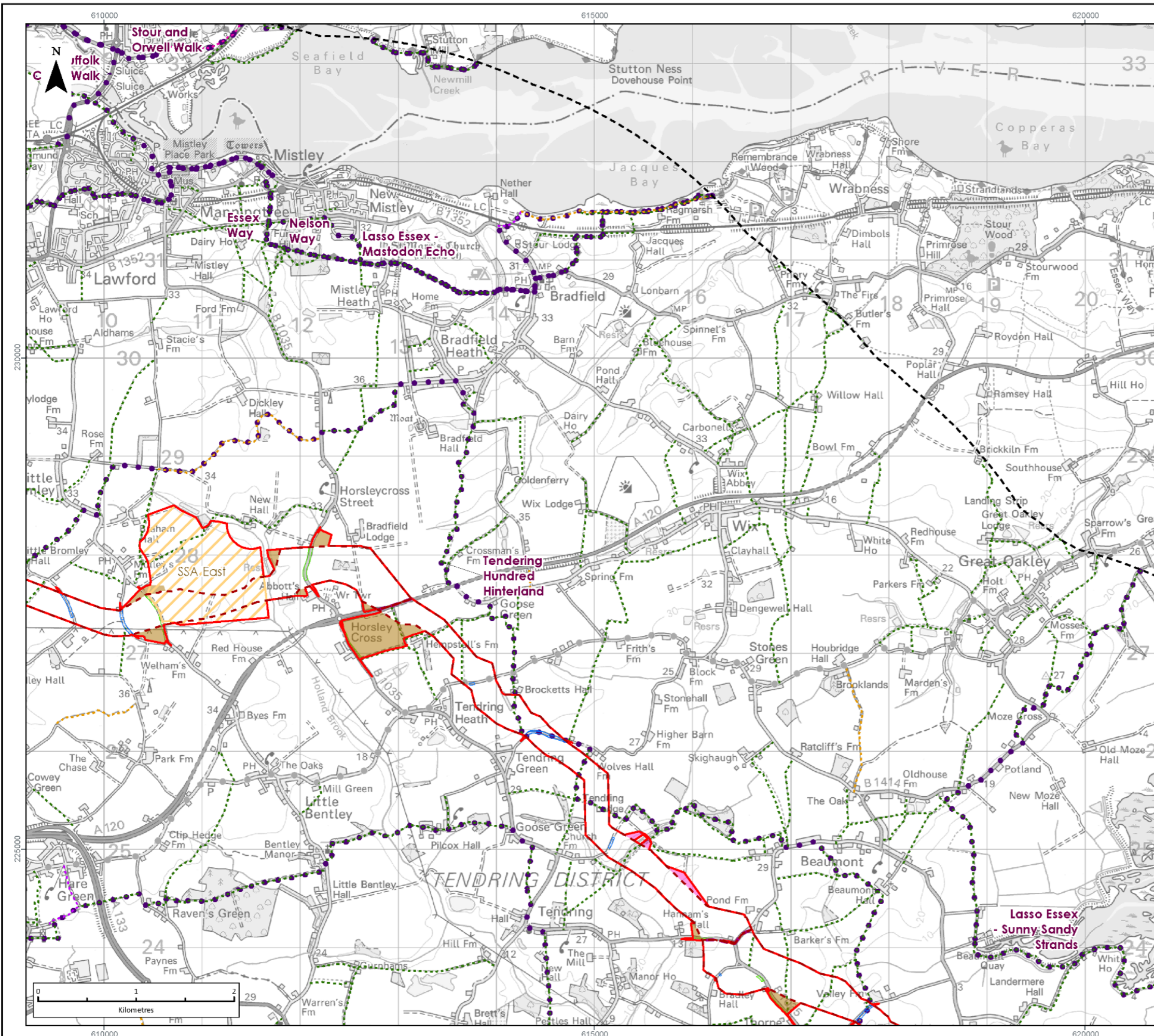
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 Onshore Recreation

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1	24/02/2023	PEIR Submission	DB	JS

DRAWING NUMBER:
 FIGURE 3.16
 Page 3 of 5

SCALE: 1:40,000 PLOT SIZE: A3 DATUM: OSGB 1936 COORDINATE SYSTEM: British National Grid





LEGEND

- Onshore Red Line Boundary
- Onshore Red Line Boundary 5 km Buffer
- Onshore Export Cable Corridor
- Onshore Cable Route Section Division
- Onshore Substation Areas of Search
- Temporary Construction Compounds
- Works Access Required
- Haul Road Crossings
- Haul Road Access
- Long Distance Walking Route
- Public Right of Way
- Footpath
- Bridleway
- Byway
- Restricted Byway

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 FIVE ESTUARIES OFFSHORE WINDFARM

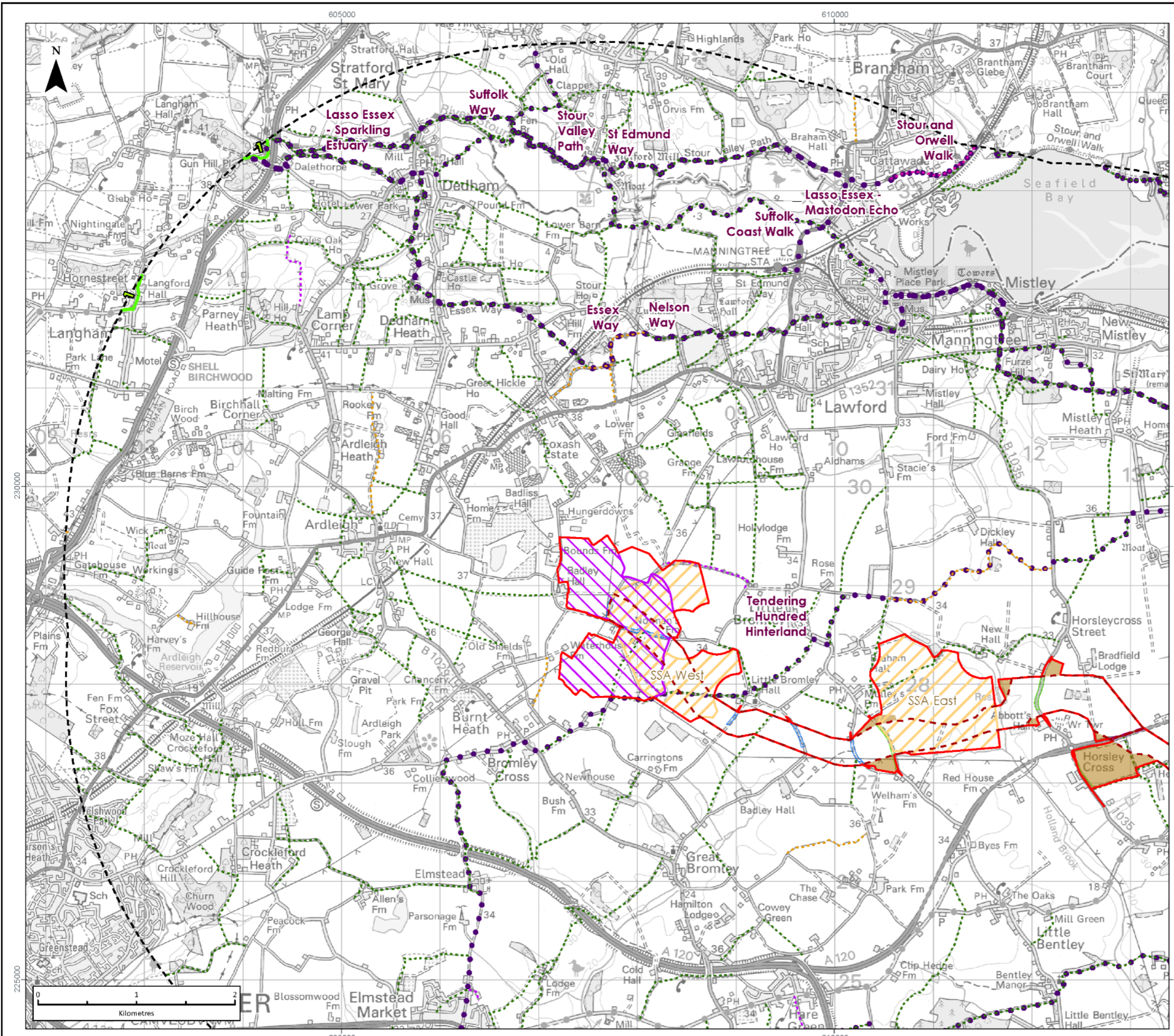
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 Onshore Recreation

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 FIGURE 3.16
 Page 4 of 5

SCALE: 1:40,000	PLOT SIZE: A3	DATUM: OSGB 1936	COORDINATE SYSTEM: British National Grid
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LEGEND

- Onshore Red Line Boundary
- Onshore Red Line Boundary 5 km Buffer
- Onshore Export Cable Corridor
- Onshore Cable Route Section Division
- National Grid Area of Search
- Onshore Substation Areas of Search
- Temporary Construction Compounds
- Haul Road Crossings
- Haul Road Access
- Long Distance Walking Route
- National Cycle Route
- Public Right of Way
- Footpath
- Bridleway
- Byway
- Restricted Byway

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PROJECT TITLE:
 FIVE ESTUARIES OFFSHORE WINDFARM

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VER	DATE	REMARKS	Drawn	Checked
1	24/02/2023	PEIR Submission	DB	JS

DRAWING NUMBER:

FIGURE 3.16
 Page 5 of 5

SCALE: 1:40,000 PLOT SIZE: A3 DATUM: OSGB 1936 COORDINATE SYSTEM: British National Grid





Table 3.21: PRow within the LAI

PRoW	Description	Total Length of the PRow within the LAI	No. of Instances (Route ID)
Ardleigh	PRoW - bridleway	1.89 km	Three routes (30, 13, 2)
Ardleigh	PRoW - footpath	22.89 km	Forty routes (23, 43, 1, 50, 27, 42, 12, 31, 51, 8, 49, 29, 11, 10, 38, 44, 17, 15, 16, 40, 18, 47, 36, 35, 37, 14, 19, 22, 5, 7, 39, 20, 21, 48, 24, 3, 26, 4, 28, 28)
Beaumont Cum Moze	PRoW - bridleway	0.28 km	One route (5)
Beaumont Cum Moze	PRoW - footpath	15.22 km	Twenty-six routes (7, 13, 18, 12, 17, 14, 15, 16, 9, 8, 26, 10, 19, 24, 20, 22, 29, 3, 27, 2, 1, 21, 11, 11, 28, 28)
Bradfield	PRoW - bridleway	1.67 km	One route (19)
Bradfield	PRoW - byway	0.3 km	One route (1)
Bradfield	PRoW - footpath	10.1 km	Seventeen routes (3, 4, 20, 17, 12, 11, 8, 7, 13, 18, 16, 15, 6, 5, 2, 21, 22)
Brantham	PRoW - bridleway	0.48 km	One route (17)
Brantham	PRoW - footpath	2.49 km	Four routes (8, 12, 13, 18)
Brantham	PRoW – restricted byway	1.0 km	One route (14)
Colchester	PRoW - footpath	3.85 km	Thirteen routes (109, 110, 113, 114, 111, 115, 128, 221, 124, 112, 112, 123, 242)
Dedham	PRoW - byway	0.84 km	One route (47)
Dedham	PRoW - footpath	25.25 km	Forty seven routes (26, 27, 1, 2, 5, 8, 4, 42, 36, 41, 12, 14, 43, 10, 13, 39, 19, 48, 18, 17, 45, 20, 22, 46, 21, 23, 24, 25, 28, 35, 32, 34, 31, 30, 16, 16, 15, 3, 37, 37, 38, 38, 50, 49, 51, 29, 29)
East Bergholt	PRoW - footpath	11.48 km	Twenty-four routes (19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 42, 44, 46, 47, 49)
Elmstead	PRoW - byway	0.17 km	One route (10)
Elmstead	PRoW - footpath	13.87 km	Sixteen routes (26, 12, 22, 25, 8, 11, 1, 2, 7, 13, 21, 27, 3, 14, 18, 28)



PRoW	Description	Total Length of the PRoW within the LAI	No. of Instances (Route ID)
Frating	PRoW - footpath	3.81 km	Six routes (2, 10, 1, 8, 5, 12)
Frinton And Walton	PRoW - bridleway	2.58 km	One route (2)
Frinton And Walton	PRoW - footpath	25.56 km	Forty one routes (11, 6, 7, 8, 38, 44, 3, 41, 5, 13, 14, 15, 40, 4, 10, 12, 16, 24, 25, 26, 29, 23, 22, 17, 20, 18, 21, 32, 36, 27, 1, 1, 42, 42, 43, 43, 48, 51, 49, 52, 53)
Great Bentley	PRoW - bridleway	1.88 km	Two routes (2, 20)
Great Bentley	PRoW - footpath	3.98 km	Seven routes (17, 4, 12, 18, 3, 1, 11)
Great Bromley	PRoW - bridleway	1.03 km	Two routes (24, 27)
Great Bromley	PRoW - byway	0.8 km	One route (10)
Great Bromley	PRoW - footpath	10.6km	Twenty routes (14, 8, 11, 26, 3, 5, 2, 18, 4, 20, 25, 1, 22, 21, 17, 28, 15, 23, 7, 12)
Great Clacton	PRoW - bridleway	0.83 km	Two routes (24, 24)
Great Clacton	PRoW - footpath	14.76 km	Thirty six routes (32, 17, 36, 20, 35, 34, 45, 18, 7, 28, 25, 39, 38, 40, 27, 37, 44, 22, 33, 19, 8, 41, 42, 43, 29, 29, 23, 23, 26, 26, 46, 46, 48, 13, 13, 49)
Great Oakley	PRoW - bridleway	1.03 km	One route (3)
Great Oakley	PRoW - footpath	10.17 km	Twenty-one routes (1, 25, 12, 8, 7, 2, 29, 19, 5, 4, 23, 11, 13, 27, 20, 26, 24, 24, 31, 30, 32)
Langham	PRoW - bridleway	0.04 km	One route (45)
Langham	PRoW - footpath	2.32 km	Eight routes (53, 35, 33, 49, 49, 54, 55, 56)
Lawford	PRoW - bridleway	1.79 km	Two routes (32, 49)
Lawford	PRoW - byway	0.89 km	One route (57)
Lawford	PRoW - footpath	20.72 km	Thirty seven routes (12, 20, 18, 22, 8, 14, 10, 13, 17, 15, 24, 11, 51, 33, 55, 28, 52, 40, 39, 38, 41, 36, 37,



PRoW	Description	Total Length of the PRoW within the LAI	No. of Instances (Route ID)
			31, 45, 43, 54, 48, 2, 4, 23, 25, 21, 19, 46, 27, 58)
Little Bentley	PRoW - footpath	5.41 km	Seven routes (5, 8, 9, 7, 4, 1, 3)
Little Bromley	PRoW - bridleway	0.51 km	One route (8)
Little Bromley	PRoW - byway	0.08 km	One route (22)
Little Bromley	PRoW - footpath	10.09 km	Fifteen routes (1, 15, 16, 14, 13, 12, 3, 17, 21, 11, 7, 5, 4, 2, 20)
Little Clacton	PRoW - bridleway	6.24 km	Seven routes (19, 7, 12, 13, 15, 10, 21)
Little Clacton	PRoW - footpath	4.3 km	Ten routes (17, 8, 16, 11, 4, 3, 20, 5, 2, 18)
Manningtree	PRoW - footpath	0.14 km	One route (1)
Mistley	PRoW - bridleway	1.61 km	One route (13)
Mistley	PRoW - footpath	13.55 km	Twenty-six routes (21, 3, 16, 7, 1, 19, 18, 2, 15, 4, 4, 5, 24, 11, 14, 12, 23, 25, 8, 20, 20, 26, 28, 29, 30)
Ramsey	PRoW - footpath	0.33 km	One route (31)
St Osyth	PRoW - bridleway	1.11 km	Two routes (23, 26)
St Osyth	PRoW - footpath	3.47 km	Eight routes (1, 12, 27, 14, 15, 22, 13, 28)
Stratford St Mary	PRoW - footpath	4.02 km	Seven routes (12, 13, 14, 15, 16, 18, 27)
Stutton	PRoW - footpath	0.7 km	Two routes (22, 23)
Tendring	PRoW - bridleway	0.19 km	One route (24)
Tendring	PRoW - footpath	14.88 km	Nineteen routes (18, 10, 21, 11, 14, 15, 13, 23, 7, 3, 16, 5, 19, 1, 2, 20, 8, 22, 17)
Thorpe Le Soken	PRoW - bridleway	0.7 km	One route (5)
Thorpe Le Soken	PRoW - footpath	18.08 km	Twenty routes (17, 19, 13, 14, 18, 1, 2, 2, 4, 3, 15, 8, 21, 10, 22, 7, 11, 12, 20, 23)
Weeley	PRoW - footpath	12.12 km	Seventeen routes (18, 2, 11, 14, 12, 1, 15, 19, 10, 5, 16, 4, 3, 8, 17, 7, 20)



PRoW	Description	Total Length of the PRoW within the LAI	No. of Instances (Route ID)
Wix	PRoW - bridleway	0.2 km	One route (38)
Wix	PRoW - footpath	24.27 km	Forty three routes (23, 16, 35, 13, 14, 32, 31, 37, 15, 5, 3, 10, 8, 11, 4, 30, 20, 21, 36, 17, 33, 7, 22, 1, 1, 2, 2, 2, 12, 12, 18, 18, 25, 25, 27, 27, 28, 28, 29, 29, 34, 34, 12)
Wrabness	PRoW - bridleway	0.36 km	One route (20)
Wrabness	PRoW - footpath	1.86 km	Seven routes (14, 17, 15, 16, 12, 13, 1)

CYCLEWAYS

- 3.7.78 There are two Cycleways within the LAI (shown on Figure 3.10: Onshore Recreation), both of which are part of the wider National Cycle Network (NCN); these are National Cycle Route (NCR) 150 and NCR 51. NCR 150 crosses the route of the proposed development near the proposed landfall site, whilst NCR 51 is not crossed by the proposed route and is located in the far north western corner of the LAI. Although a mode of transport and so also assessed in Volume 3, Chapter 8: Traffic and Transport, the cycleways are considered to be regionally important recreational assets, and may also be utilised by walkers and horse riders as well as cyclists for recreational purposes.
- 3.7.79 NCR 150 is an off-road cycle route present along the coast between Frinton-on-Sea and Clacton-on-Sea where it follows the seafront Esplanade and crosses the proposed cable route close to the proposed landfall locations. It is approximately 10.5 km and also accommodates recreational walking along the paved, asphalt surfaces.
- 3.7.80 NCR 51 route is an on-road cycle route, which connects Harwich to Colchester, enters the LAI at its far north western outreaches. This route does not enter the proposed Red Line Boundary or interact with any of the proposed onshore workings, being almost 5 km away from the OnSS, however, it does briefly enter the LAI. NCR 51 is part of a 304.6 km long-distance cycle route from Oxford to Felixstowe and traverses both on and off-road sections, with the leg within the LAI being on-road.

PROMOTED ROUTES

- 3.7.81 Of the nine promoted routes in Essex (including the English Coastal Path), three enter the LAI:
- > The Essex Way, which is a 130 km combination of footpaths and roads beginning in Epping in the south west of the County and continuing to Harwich in the north east and is designated as a National Trail by Natural England. The Essex Way passes through the far north western corners of the LAI; however, it does not enter the nearby vicinity of the proposed Red Line Boundary, thus, does not cross the path of the proposed cable route.
 - > Tendring Hundred Hinterland which is a large circular route in the north west of the LAI and is crossed six times by the proposed cable route and Red Line Boundary and is located within 2 km of the proposed OnSS site; and

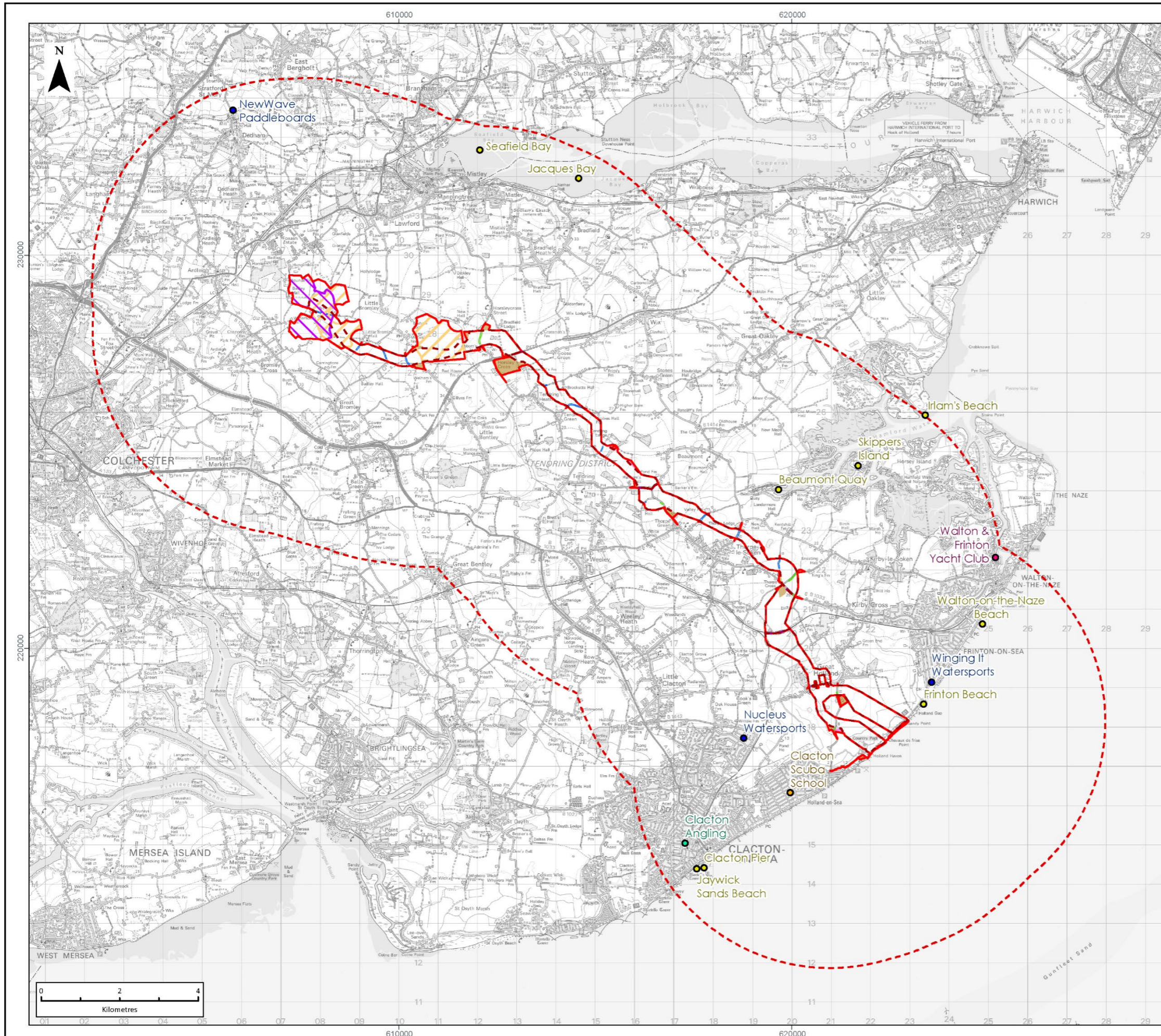


- > The England Coast Path – this route which follows the entire coast of England has not yet been created within the stretch that passes through the LAI, but it provisionally follows the coastline and therefore would pass through the LAI. It is expected to be in place prior to construction of the VE project.

OFFSHORE RECREATION

3.7.82 The offshore recreational activities that have been identified as key assets for recreation within the LAI Study Area which could be impacted by the construction or operation of the proposed development, as shown on Figure 3.17, include:

- > Bathing;
- > Water sports;
- > Scuba Diving;
- > Recreational angling; and
- > Recreational sailing.



LEGEND

- Onshore Red Line Boundary
- Onshore Red Line Boundary 5 km Buffer
- Onshore Export Cable Corridor
- Onshore Cable Route Section Division
- National Grid Area of Search
- Onshore Substation Areas of Search
- Temporary Construction Compounds
- Works Access Required
- Haul Road Crossings
- Haul Road Access
- Beach

Offshore Recreation

- Angling Store
- Scuba Diving
- Watersports
- Yacht Club

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PROJECT TITLE:
 FIVE ESTUARIES OFFSHORE WINDFARM

DRAWING TITLE:
 Offshore Recreation

VER	DATE	REMARKS	Drawn	Checked
1	24/02/2023	PEIR Submission	DB	JO

DRAWING NUMBER:
 FIGURE 3.17

SCALE: 1:100,000 PLOT SIZE: A3 DATUM: OSGB 1936 COORDINATE SYSTEM: British National Grid.





- 3.7.83 Bathing in the coastal waters is a popular recreational activity in Essex for residents and tourists alike, with the beaches of Essex being considered a major economic asset in terms of tourism, and a recreational asset regarding the free public usage of the beaches.
- 3.7.84 Regarding the quality of the beaches, Keep Britain Tidy, on behalf of the Foundation for Environmental Education, present yearly awards for beach quality and cleanliness; the Blue Flag Award and the Seaside Awards. The Blue Flag is an international award for beaches whose water quality is considered to be excellent, has environmental education programmers and are well-managed, whilst the Seaside Awards are presented to what they consider to be the best beaches in England, with 80 Blue flag and 128 Seaside Awards presented in 2022 (Keep Britain Tidy, 2022).
- 3.7.85 In Tendring, the district which wholly encapsulated the coastal LAI Study Area, there were two Blue Flags issued:
- > Dovercourt Bay; and
 - > Brightlingsea.
- 3.7.86 Whilst there were seven Seaside Awards issued in Tendring:
- > Brightlingsea;
 - > Dovercourt Bay;
 - > Clacton on Sea (Martello Tower);
 - > Frinton on Sea;
 - > Walton Albion;
 - > Walton The Naze; and
 - > Harwich.
- 3.7.87 It is noted that Walton the Naze and Harwich are considered to be non-bathing beaches and are therefore excluded from the assessment (Walton the Naze is covered by Walton Albion).
- 3.7.88 Of the beaches mentioned above, there are no Blue Flag beaches within the LAI and three Seaside Award beaches; Clacton-on-Sea, Frinton-on-Sea and Walton Albion (Walton-on-the-Naze). The Red Line Boundary of the proposed landfall locations do not directly intersect any of these beaches, or any others used for bathing, however, is located between the southern end of the Frinton-on-Sea beach and the northern end of the Holland-on-Sea beach, the latter of which is not awarded but is directly connected to the Clacton-on-Sea beach; it is not proposed to be located close to the Walton-on-the-Naze beach.
- 3.7.89 A further method of analysing the quality of bathing waters is the Bathing Water Directive (2006/7/EC), which although the UK are no longer in the European Union (EU), the Directive mains applicable to the UK as retained legislation. The beaches within the LAI and their respective grades are shown on Table 3.22 (Environment Agency, 2022), whereby beaches are rated from 'Poor', 'Sufficient', 'Good' and 'Excellent', with 'Poor' considered a failing grade.



Table 3.22: Beaches in the LAI

Beach	Grade
Walton-on-the-Naze	Good
Frinton-on-Sea	Good
Holland-on-Sea	Excellent
Clacton-on-Sea	Excellent
Clacton (Groyne 41)	No Longer Designated (consistently poor ratings)
Clacton Beach Martello Tower	Good

3.7.90 Quality effects on the local bathing waters are considered in Volume 2, Chapter 3: Marine Water and Sediment Quality.

WATER SPORTS

3.7.91 Due to Essex's status as a potential beachside tourist destination, there are several opportunities for water sports off of the coast of the LAI Study Area, including kayaking, canoeing, surfing, paddle boarding, jet skiing, wind surfing, amongst many others.

3.7.92 The LAI is home to several resources used for water sports including the beaches themselves as well as Nucleus Watersports in Clacton-on-Sea and Winging It Watersports in Frinton-on-Sea, shown on Figure 3.17: Offshore Recreation, with Nucleus Watersports providing equipment for canoeing and kayaking and Winging It Watersports providing equipment and coaching for wind surfing, wing surfing and paddle boarding.

SCUBA DIVING

3.7.93 It is understood from anecdotal evidence that diving occurs within the offshore Study Area, of which a section is included within the LAI Study Area. Diving within the offshore Study Area and in the wider Outer Thames Estuary tend to be clustered closer inshore, associated with wrecks. Diving has not been identified in the VE array areas given the distance required to travel from the shore to the site, and that the sand banks provide limited interest to divers, with Clacton Scuba School the only provider of scuba lessons and equipment within the LAI.

RECREATIONAL ANGLING

3.7.94 There are several clubs and stores related to angling within the coastal LAI, for both shore fishing and boat fishing, with the volume activity for these considered to be seasonal, weather-dependent and species-dependent (some fish may only be in the area at certain times of year).

3.7.95 There are some examples of clubs which offer sea fishing excursions within the LAI, including Clacton Boat Club and Kaimoana Charter Fishing, with a further variety of stores offering fishing supplies and boats.



- 3.7.96 Tendring District Council (2022b) offers several areas for fishing within the District, of which the LAI is entirely within, and for still water assets it includes:
- > St Osyth Beach Holiday Park and Fishing Lake;
 - > Ardleigh Reservoir near Colchester;
 - > Clay Fields Green Lane Farm Fishery, Weeley (off A133 Clacton bypass);
 - > Lake Walk Lake, off Coopers Lane, Clacton On Sea;
 - > Bobby George Lakes, Slough Lane, Ardleigh CO7 7RU;
 - > Homestead Lake Caravan Park, Thorpe Road, Weeley CO16 9JN; and
 - > Earls Hall Fisheries, St Johns Road, Clacton.
- 3.7.97 The resource also includes one river, Holland Brook, Great Clacton (Pickers Ditch to above Fan Bridge on right bank), and two areas for shore fishing:
- > Clacton Pier, CO15 1QX; and
 - > Walton Pier, Pier Approach, Walton-On-The-Naze, CO14 8ES.
- 3.7.98 For these piers, anglers remain on the pier and fish off of the side, they do not need a licence for this activity, however, they do need to pay a daily charge of £7.50 and £9.00, respectively. Tendring District Council also highlight Fishing Trips; however, all of these are beyond the LAI in Brightlingsea.
- 3.7.99 Fishing further inland within the LAI is considered with a smaller buffer of 500 m to accommodate the low level of impact that the onshore cable route and OnSS workings would have on this type of activity, and only those which are promoted are considered, to reflect the informal nature of angling which could potentially occur anywhere with fish present. When considering these factors, there are no suitable recreational angling sites within 500 m of the proposed development's Red Line Boundary.
- 3.7.100 Impacts on commercial fishing is given, and assessed, in Volume 2, Chapter 8: Commercial Fisheries.

RECREATIONAL SAILING

- 3.7.101 The RYA's (Royal Yachting Association) Coastal Atlas (2019) identifies medium-use recreational sailing routes within the vicinity of the Inner Gabbard and Galloper banks. As per guidance in the MCA's MGN 654, consultation with recreational stakeholders has been carried out to identify any recreational vessels not required to broadcast via AIS. Further details are provided in Volume 2, Chapter 10: Shipping and Navigation.
- 3.7.102 There are a relatively high number of inshore sailing clubs and organisations in the vicinity of VE, particularly along the Orwell Estuary, as well as numerous sailing schools and other training establishments along this stretch of coastline. The Essex coast is popular for sailing regattas and races. The Vuurschepen and North Sea Races, occurring in May, will potentially cross through the VE array areas as part of a 180 nautical mile (nm) course from Scheveningen (the Netherlands) to Harwich and Harwich to Scheveningen, respectively.



3.7.103 Across the inshore section of the cable route there is overlap with a general boating area with an area marked as being of high-level usage along the coastline between the Orwell and Blackwater Estuaries. The general coastal and inshore area within the region is popular for dinghy sailing and racing, which are undertaken from various sailing clubs as well as independently run from beaches and harbours within the area.

3.8 MITIGATION MEASURES

3.8.1 The VE project would adopt the embedded mitigation measures outlined in Volume 3, Chapter 1: Onshore Project Description, which would act as an in-built mechanism to reduce or avoid any potential socio-economic, tourism or recreational impacts.

3.8.2 The embedded mitigation contained in Table 3.23 are mitigation measures or commitments that have been identified and adopted as part of the evolution of the project design of relevance to the Socio-Economic, Tourism and Recreation chapter, these include project design measures, compliance with elements of good practice and use of standard protocols. Where the assessment determined significant effects accounting for embedded mitigation, further measures may be required, which are presented as additional mitigation.

3.8.3 Table 3.38 assesses the significance of the residual effects with this additional mitigation applied.

Table 3.23: Embedded Mitigation Related to Socio-Economics, Tourism and Recreation

Parameter	Embedded Mitigation Measures
General	
Project design	The VE project has undergone a detailed site selection and design process to determine the locations and manage the impacts of the landfall, OnSS and cable route to enable the selection of the area with the lowest level of adverse impacts, including avoiding nationally promoted routes such as the proposed English Coastal Path, major tourism assets and key waterbodies.
PRoW temporary closure and diversions	An Volume 5, Annex 8.4: Outline Public Access Management Plan (PAMP) has been prepared with the aim of determining the option with the lowest possible impact to users if diversions are needed or, in the unlikely case of, temporary closures. Any closures or diversions of PRoWs would be communicated to the relevant authorities in advanced of the works commencing, indicating the extent, duration and mitigation opportunities present.



Parameter	Embedded Mitigation Measures
Employment, Skills and Education Strategy	The VE project has the potential to increase local demand for housing through the need for a skilled workforce. An Employment, Skills and Education Strategy would be considered to seek to identify and secure a greater contingent of local workforce, increasing skills locally and lowering the number of workers needed from beyond the boundaries of the WSA.
Construction	
Onshore cable	When passing through areas of major roads (A120), the landfall (and NCR 150) and certain environmental areas and PRowS, the use of Horizontal Directional Drilling (HDD) will be employed to avoid any severance or physical disruption.
Traffic management	The Volume 5, Annex 8.3: Outline Construction Traffic Management Plan (CTMP) would offer commitments to the usage of traffic management measures, such as controlled crossings, and would be implemented to minimise the impacts of areas where a PRow is crossed by construction access routes.
Rolling construction	<p>The construction of the onshore ECC would take place in phases, potentially working on several sections at a time, rather than the construction works and any potential associated closures or diversions occurring concurrently throughout the entire route for the 18+ month ECC construction. In addition to this, the OnSS is expected to be constructed over a 27+ month period, as detailed in Volume 3, Chapter 1: Onshore Project Description.</p> <p>This, as well as the ducted approach detailed in Volume 3, Chapter 1: Onshore Project Description, would allow for progressive reinstatement of ECC to its original state as soon as practicable, minimising the closures and lessening the impact of the construction process.</p>
Construction hours	<p>The construction of the VE project is anticipated to be daytime only 07:00 to 19:00 from Monday to Saturday, with no work where noise is audible beyond the site boundary on Sundays, Bank Holidays or in the night-time without prior agreement.</p> <p>Certain “time critical activities” would occur outside these hours. Any requirement to work outside of these normal hours would only occur with prior agreement with the Local Authorities – as detailed in Volume 7, Report 3: Draft Code of Construction Practice.</p>



Parameter	Embedded Mitigation Measures
Noise and Vibration Control Measures	<p>Noise impacts would be reduced by the implementation of noise and vibration control measures throughout the construction period.</p> <p>Construction works will be undertaken in accordance with the best practicable means (as defined in Section 72 of the Control of Pollution Act 1974) to minimise noise and vibration effects.</p> <p>The relevant noise control measures are detailed in Volume 7, Report 3: Draft Code of Construction Practice.</p>
Operation And Maintenance	
Inspection and maintenance	<p>As a result of the design of the project, the underground cables and associated infrastructure are sourced and installed so that they require zero scheduled maintenance over its operational lifespan.</p> <p>Link boxes and test pits would be installed to facilitate any inspections of the cabling needed, which would have little to no impact on the nearby amenity.</p> <p>In the unlikely event of maintenance being required, the impacted sections of the cables which are affected would be isolated, whereby they can be removed and replaced using the installed cable ducts.</p>
Decommissioning	
<p>It is anticipated that the OnsSS building will be demolished, and all external switchgear/infrastructure removed. Cable ducts for Onshore ECC to be left in situ with cables removed, which would result in no effect.</p> <p>The Socio-Economic, Tourism and Recreation assessment assumes that the relevant mitigation measures applied during the decommissioning of the VE project would be similar to those during the construction phase. As such, it is assumed that the embedded mitigation shown for the construction phase would be applicable during the decommissioning phase as well.</p>	

3.9 ENVIRONMENTAL ASSESSMENT: CONSTRUCTION PHASE

IMPACT OF CONSTRUCTION ACTIVITY ON EMPLOYMENT

OVERVIEW

3.9.1 At PEIR stage, data is not available with regard to project expenditure and jobs to undertake a quantitative assessment. This section therefore summarises the proposed approach and methodology intended to be used in the ES to quantify the economic impacts of the proposed VE project within the WSA.



3.9.2 As noted within Section 3.4, it is not known whether the port location for offshore construction and operational maintenance activities would be located within the WSA. The assessment of effects will therefore consider two alternative scenarios: one in which the port activities will be located within the WSA, and one in which they will be located elsewhere. Assessing the impacts on these two scenarios provides an economic best and worst case scenario, whilst the likely event that the VE project operations port is within the WSA and construction port is outwith it (or vice versa), would be adequately covered within this range.



- 3.9.3 The approach will provide quantified estimates of direct, indirect, and induced jobs and Gross Value Added (GVA) that are likely to be created during:
1. the development, construction and installation phase; and
 2. the operation & maintenance phase of the project.
- 3.9.4 With respect to decommissioning, the nature and type of likely effects could be expected to be similar to those anticipated to occur during the construction phase. However, the considerable potential for future technological innovation and progress relating to decommissioning activities potentially up to 40 years or so in the future means that it is not currently possible to predict the scale and duration of expenditure that would be required to decommission the project. Another principal source of uncertainty concerns the potential future locations of a decommissioning supply chain that would have the equipment, skills, expertise, and workforce to undertake large scale offshore decommissioning activities.
- 3.9.5 The consequence of these types of uncertainty mean that it is not possible to produce meaningful quantified estimates of the employment and GVA consequences of the decommissioning phase in the same way that would be done for the construction and operational stages.
- 3.9.6 In the Scoping Report, the WSA for the assessment of jobs and GVA was provisionally set at the boundary of the Essex and Suffolk County areas. The definition of this area for quantification of jobs and GVA is now confirmed. It is also the intention of the assessment to quantify the potential GVA and employment effects for the UK as whole in order to provide a benchmark for the likely local contributions.
- 3.9.7 As indicated in the Scoping Report, quantitative modelling will be undertaken to assess the potential effects in the WSA economy from the construction and operational phases of the project. The approach to this modelling will be informed by the current standard industry approach: *“Methodology for measuring the UK content of UK Offshore wind farms”* produced by BVG Associates (2015).
- 3.9.8 Inputs into the economic model will make use of estimates of likely project expenditure from a number of sources including industry benchmark studies (for example, the "Guide to an Offshore Wind Farm: updated and extended", a 2019 study produced for Crown Estates by BVG), and published industry data from sources such as the Office for National Statistics and would be verified relative to the project specifics from the development team.
- 3.9.9 The categories of costs for which project lifetime expenditure estimates will be developed include those shown on Table 3.24.



Table 3.24: Project Expenditure Categories

Project Phase or Sub-Phase	Category
Development	<ul style="list-style-type: none"> > Project management; > Project development and consenting; > Surveying; and > Project engineering and design.
Construction and manufacturing	<ul style="list-style-type: none"> > Capex project management; > Turbines and towers; > Foundations; > Inter-array cables and export cables; and > Onshore sub-station components.
Installation	<ul style="list-style-type: none"> > Turbine integration; > Installation of foundations; > WTG installation; > Cable array installation; > Export cable installation; > Onshore construction; > Transportation; and > Ports and harbours.
Operations	<ul style="list-style-type: none"> > Maintenance of turbines and other plant; > Operational support; > Surveys and monitoring; and > Insurance, etc.

3.9.10 Capital expenditure estimates and associated percentage spend for each category will be used to inform the establishment of two impact scenarios for the VE project covering supply chain and economic impacts:

- > a Low Case scenario (without port); and
- > a High Case scenario (with port).

3.9.11 The use of these scenarios is a standard method of accounting for the uncertainty associated with both the project expenditure estimates and final project procurement (supplier) decisions.

3.9.12 The scenarios will be developed by VE and will represent an informed view on the likelihood of the potential for project procurement in each expenditure category across the WSA and UK areas. This assessment will take into account current and potential future supply chain capability in each category.



- 3.9.13 Supply chain categories that are considered as part of the impact scenarios would include various contracting levels, covering manufacturing, transport and logistics, equipment and service providers, and port infrastructure. Current supply chain capabilities will be informed through discussions with the VE project team, supplemented with consultations with selected regional and local stakeholders, such as the New Anglia Local Enterprise Partnership and the East of England Energy Group.
- 3.9.14 The assessment will also be informed by a review of the assumptions that underpin other recently developed and pipeline offshore wind farms located in the vicinity of the VE project. This review of other projects is expected to yield information that will be useful in the cumulative impact assessment for the VE project.
- 3.9.15 Based on the expected expenditure levels for, respectively, the Low Case and High Case scenarios disaggregated by spatial areas (WSA, UK), the next step is to convert these financial estimates into predictions of the likely annual employment and GVA effects that would be consequentially produced in each year where relevant expenditure occurs.
- 3.9.16 These impacts will be estimated for:
- > Net outputs: which exclude the value of supplies and services that are purchased from outside the impact area through all tiers of supply chains;
 - > Full time equivalent job years generated within the WSA and the UK as a whole; and
 - > GVA generated in the impact areas. The GVA for a business is its contribution to national Gross Value Added as measured by its operational profit over a year plus its remuneration of employees, and with its depreciation and business rates added back.
- 3.9.17 The FTE estimates relate to jobs that would be based within the study areas, including employees within the areas who are not normally resident in that area.
- 3.9.18 Quantification of job (and GVA) estimates will provide distinct estimates for two types of effects:
- > **Direct and indirect effects:** these include jobs (and GVA) in the project development team plus those found in companies that comprise the supply chain for the project; and
 - > **Induced effects:** these are additional job (and GVA) effects that are generated through any additional downstream project procurement at a more local level plus the additional stimulus created through the local expenditure of a portion of their earnings by the project workforce.
- 3.9.19 Estimates of direct and indirect jobs and GVA associated with project expenditure will be estimated using benchmark ratios for relevant industrial activities based on Standard Industrial Classification categories used by ONS. Data sources to be used in this process include the ONS Annual Business Survey and the ONS Business Register and Employment Survey.
- 3.9.20 Downstream (induced) effects that are generated from direct and indirect effects will be quantified using induced multiplier coefficients sourced from appropriate national input-output models.



IMPACT OF CONSTRUCTION ACTIVITY ON THE DISPLACEMENT OF VISITORS WITHIN THE WSA

OVERVIEW

- 3.9.21 This section addresses whether the construction of the proposed development is likely to result in any potential competition for accommodation within the WSA, and therefore whether there is a risk of displacement of tourism visitors from the local economy during the construction period.
- 3.9.22 At PEIR stage, the data used for numbers of workers likely to be involved in the project have been based on high level estimations for the total employees per month working on the ECC during the construction period and the total peak OnSS construction workforce, which have been provided by VE. Further refinement of these numbers and estimates for the total number of workers during the offshore construction and the operational phase for VE will be provided in the ES.
- 3.9.23 The data provided identified the monthly peak construction workforce associated with the onshore ECC works, as displayed on Figure 3.18.

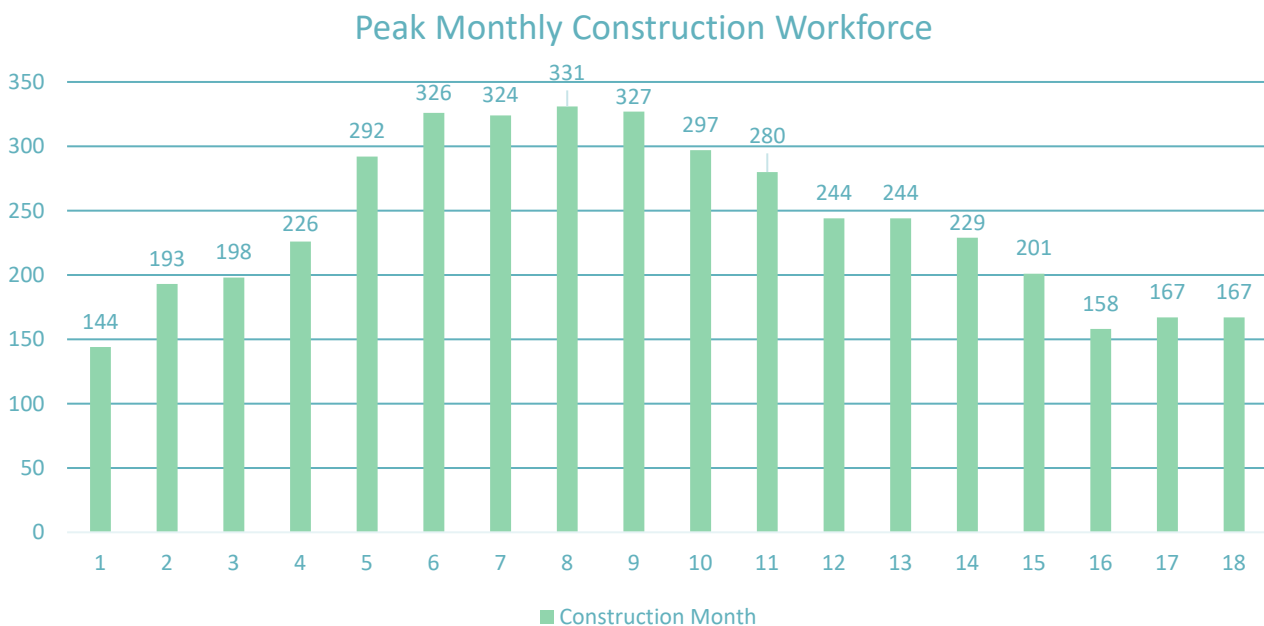


Figure 3.18: Peak Monthly ECC Construction Workforce

- 3.9.24 The VE project estimates a peak number of workers at the OnSS to be approximately 75, during the 24+ month construction period.



- 3.9.25 The VE project has the potential to support a peak ECC workforce of approximately 331 average persons on site - with a minimum of 144 persons on site and an average of 241.56 persons on site per month – for the purposes of the assessment, the worst-case scenario of the peak number of ECC workers (331) and the peak number of OnSS workers (75) will be used concurrently, totalling 406 peak onshore workers. It is noted that the offshore construction port activities may or may not be located within the WSA, therefore, for the ES stage assessment, the best and worst case scenarios, that none or all ports would be located within the WSA, would be assessed, which would adequately cover the scenario the some would be located within the WSA, and others would not.
- 3.9.26 The baseline analysis presented in Section 3.7 of this assessment indicates that it is not possible to quantify the number of bedrooms available in the WSA to accommodate overnight stays, achieving a greater understanding of the wider availability of accommodation in the WSA will be part of the ES-stage consultations. However, estimates generated as part of the baseline analysis indicate that there are currently in the order of 637,253 serviced accommodation rooms within Essex, including hotels, bed and breakfasts, caravans, camping etc and excluding any non-serviced accommodation and staying with friends and family.

MAGNITUDE OF IMPACT

- 3.9.27 Based on the worst-case scenario for the total number of the monthly onshore construction workforce, estimated to be approximately 406 workers, the demand for construction-related accommodation is estimated to represent approximately 0.064% of the serviced accommodation stock in Essex.
- 3.9.28 Demand for accommodation in Suffolk is considered to be more heavily linked to the locations of the construction and operations port, as well as the number of offshore construction workforce and offshore operations workforce. As this information is expected to be obtained and refined during the ES phase of the project, the impacts of the VE project, individually and cumulatively, will be assessed in the ES prior to the submission of the final DCO.
- 3.9.29 On this basis, the overall magnitude of impact on the receptor at the level of Essex is assessed as **Negligible**.

SENSITIVITY OF THE RECEPTOR

- 3.9.30 The baseline analysis outlines that there were average occupancy rates of around 38% across 2020, rising to 52% in 2021, and were 76% in 2019. This is dependent on the time of the year, with the summer season likely to have higher occupancy rates.
- 3.9.31 The average occupancy rates indicate that there are good levels of capacity available. On this basis, the sensitivity of the receptor is therefore assessed as **Low**. However, it is likely that the average occupancy rates disguise greater pressure during holiday periods, which would result in a higher level of sensitivity at such times. As the data for this is not readily available, a precautionary approach has been taken and the peak period sensitivity for accommodation is taken to be **Medium**.



SIGNIFICANCE OF RESIDUAL EFFECT

- 3.9.32 With the sensitivity of the receptor for the peak accommodation period (worst-case scenario), for the onshore OnSS and ECC construction, is adjudged to be **Medium**, and the magnitude of impact identified as **Negligible**, the significance of the residual effect on the receptor is therefore assessed as **Negligible** and **not significant**.
- 3.9.33 It should be noted that the volume of locally sourced construction workforce is not known, which could reduce the number of accommodation spaces needed. The embedded mitigation measure of the Employment, Skills and Education Strategy put in place to encourage the correct skills and training to enable local take up of construction and operational jobs also has an element in reducing the impact on this receptor.

IMPACT OF CONSTRUCTION ACTIVITY ON HEALTHCARE SERVICES WITHIN THE WSA

OVERVIEW

- 3.9.34 The assessment of effects on healthcare services is the subject of ongoing data collection and will be addressed in full in the ES. The assessment will consider the impacts that the onshore and offshore construction and workforce will have on the local healthcare services within Essex and Suffolk, where most relevant.
- 3.9.35 These impacts could be in regard to the potential for the additional external workforce needing specialist, general practitioner or hospital care and the potential extra strains that this would have on the local services.
- 3.9.36 This data would be heavily dependent on the number of workers coming from beyond the WSA boundaries, as well as the location(s) of the offshore workforce and the number of offshore workers.
- 3.9.37 The assessment will combine the numbers of external workers and the relative baseline levels of the current healthcare services available in the appropriate locations, as well as information gained from statutory consultations at the ES stage.

IMPACT OF CONSTRUCTION ACTIVITY ON ONSHORE RECREATIONAL ROUTES WITHIN THE LAI

OVERVIEW

- 3.9.38 This section assesses how recreational activities within the LAI may be affected by the construction of the VE project, to what degree and whether the embedded mitigations are sufficient to avoid any significant adverse effects. It focusses on construction of the landfall, the onshore cable route and the OnSS.
- 3.9.39 The evidence presented within the baseline analysis (see Section 3.7, Subsection 'Onshore Recreation') indicates that there are several onshore recreational receptors that may be affected by onshore construction activity, which include:
- > Public Rights of Way;
 - > Long-distance walking routes;
 - > National Cycle Routes; and
 - > Promoted routes.



MAGNITUDE OF IMPACT

3.9.40 The analysis as part of the baseline research has identified four types of onshore recreational routes to assess within the LAI. The magnitude will be in reference to the greatest level of effect of the onshore and landfall workings, including the construction of the landfall, the installation of the onshore cable route and the construction of the OnSS.

3.9.41 Table 3.25 identifies and assesses the potential magnitude of the impact of the construction of the VE project on these five types of onshore recreational activities.

Table 3.25: Magnitude of the Impact of Construction on Onshore Recreation

Receptor	Magnitude	Justification
Public Rights of Way	Low	PRoWs are located throughout the LAI, with the majority being short, local routes. The magnitude of change to any individual PRoWs directly affected would be Low due to alternatives available within the network and embedded mitigation to be provided in accordance with Volume 5, Annex 8.4: Outline Public Access Management Plan (PAMP).
Long-Distance routes	Low / Medium	<p>The crossing of the provisional route of the England Coast Path is expected to be undertaken by HDD, and therefore there would be no direct impact.</p> <p>The Tendring Hundred Hinterland route is passed by the proposed cable route at several points, often close together, and is located close to the proposed OnSS site. When combined with the embedded mitigations provided by the Volume 5, Annex 8.4: Outline Public Access Management Plan (PAMP), the magnitude of change is considered to be Low.</p> <p>The Essex Way is within the LAI. However, this is in the far north of the LAI and would remain unimpacted by the onshore construction works and result in no effect.</p>
National Cycle Routes	Negligible	<p>The implementation of HDD techniques means that there would be no physical breakages of the NCR 150 route, although there may be in-direct impacts related to noise and visual effects, which are assessed in Volume 3, Chapter 9: Airborne Noise and Vibration and Volume 3, Onshore Chapter 2: Landscape and Visual. Magnitude of impact would be no more than Negligible.</p> <p>There would be no impact on NCR 51 due to distance.</p>

SENSITIVITY OF THE RECEPTOR

3.9.42 The sensitivity of each receptor is identified in Table 3.26, with justifications provided for use in establishing the significance of the effect.



Table 3.26: Sensitivity of Onshore Recreational Receptors During Construction

Receptor	Sensitivity	Justification
Public Rights of Way	Low	The PRowS are abundant and located throughout the LAI. These are not regionally or nationally promoted routes, but are important locally.
Long-Distance routes	High	The three long-distance routes identified within the LAI are promoted nationally and are considered to be an important part of the LAI's identity and recreational offer, as well as a potential draw for tourists.
National Cycle Routes	High	National Cycle Routes are promoted regionally and nationally and therefore considered to be an important part of the LAI's identity and recreational offer, as well as a potential draw for tourists.

SIGNIFICANCE OF RESIDUAL EFFECT

3.9.43 The significance of the residual effects has been tabulated in Table 3.27, and, using the methodology set out in Section 0, has been assessed by combining the magnitude of the impact with the considered sensitivity of the receptor. It is assumed that any impact on Onshore Recreation would be part of the phased working programme and would therefore be localised and temporary in nature.

Table 3.27: Significance of Construction Effects on Onshore Recreational Receptors

Receptor	Sensitivity	Magnitude	Significance of Effect
Public Rights of Way	Low	Low	Negligible
Long-Distance Routes	High	Low	Moderate (significant)
National Cycle Routes	High	Negligible	Minor (not significant)

3.9.44 The level of effect on one of the Long-Distance Routes, the Tendring Hundred Hinterland route, has potential to be **Moderate (Adverse)** which is **Significant**, albeit that the duration would be short term and reversible. However, further inclusions to Volume 5, Annex 8.4: Outline Public Access Management Plan (PAMP) could garner a greater understanding of the usage of this route, it's importance on the local, regional and national scales and accounting for the route in its entirety, rather than the individual sections of the PRowS and roads which comprise it; it is likely that the residual effect can be reduced to **Low** and **Not Significant**.



IMPACT OF CONSTRUCTION ACTIVITY ON OFFSHORE RECREATION

OVERVIEW

- 3.9.45 This section assesses recreational activities that may be affected by the construction of offshore and coastal aspects the VE project, to what degree and whether the embedded mitigations are sufficient to adequately reduce any adverse effects. It focuses on construction of the landfall, the preparation, excavation and installation of the offshore export cables, turbines and turbine foundations.
- 3.9.46 The evidence presented within the baseline analysis (see Section 3.7, Subsection 'Offshore Recreation') indicates that there are several offshore receptors that may be affected by the offshore and coastal construction activity, which include:
- > Bathing;
 - > Water sports;
 - > Scuba diving;
 - > Recreational angling; and
 - > Recreational sailing.

MAGNITUDE OF IMPACT

- 3.9.47 The magnitude of impact due to construction will be in reference to the greatest level of effect of the offshore and landfall workings, including the construction of the landfall, the preparation, excavation and installation of the offshore export cables, OnSSs turbines and turbine foundations.
- 3.9.48 Table 3.28 identifies and assesses the potential magnitude of the impact of the construction of the VE project on the five types of offshore recreational activities identified.



Table 3.28: Offshore Magnitude of Change

Receptor	Magnitude	Justification
Bathing	Low	<p>The areas of the landfall construction would not be directly impacting any of the main beaches including those identified as either awarded or having a Bathing Waters Directive status. However, the workings would be between Frinton and Clacton beaches, possibly reducing the enjoyment of these recreational assets.</p> <p>It is not expected that work adjacent to the identified beaches would be extensive or intrusive enough to actively deter visitors to the sites, nor is likely that the offshore workings would be close enough to significantly impact the enjoyment of the beaches.</p> <p>Further impacts related to noise are assessed in Volume 3, Chapter 9: Airborne Noise and Vibration and the visual impacts are assessed in Volume 3, Chapter 2: Onshore Landscape and Visual and Volume 2, Chapter 10: Seascape, Landscape and Visual.</p>
Water sports	Low	<p>The installation of the turbines, OnSS, landfall and offshore export cables would result in temporary restrictions in specific areas in which the water sport activities could take place.</p>
Scuba Diving	Low	<p>The installation of the turbines, OnSS, landfall and offshore export cables would result in temporary restrictions in the areas which the diving activities could take place.</p>
Recreational angling	Low	<p>Shoreline angling would remain unimpacted by the offshore workings of the VE project.</p> <p>However, the installation of the turbines, OnSS, landfall and offshore export cables would result in temporary restrictions in the areas which offshore angling activities could take place.</p>
Recreational sailing	Low	<p>The installation of the turbines, OnSS, landfall and offshore export cables would result in temporary restrictions in the areas which sailing activities could take place.</p>

SENSITIVITY OF THE RECEPTOR

3.9.49 The sensitivity of each offshore recreational receptor is identified in Table 3.29, with justifications provided for the significance of the effect.



Table 3.29: Offshore Receptor Sensitivity

Receptor	Sensitivity	Justification
Bathing	Medium	<p>The beaches of the LAI, including those flanking either side of the potential landfall locations, are used extensively by residents and tourists and are an important part of the Tendring and Essex economies. The Blue Flag, Seaside Award and Bathing Waters Directive statuses of these bathing waters and beaches contribute to value of the asset as being of regional importance.</p> <p>Landscape and visual effects on the offshore workings from the shoreline viewpoints are considered in greater detail in the Volume 2, Chapter 10: Seascape, Landscape and Visual Impact Assessment.</p>
Water sports	Low	<p>The waters offshore of the LAI are used for water sports, although the majority such as paddle boarding, kayaking, and confined to close to shore. The main areas of offshore working would be approximately 37.3km offshore, well beyond the distance where many of these sports would take place.</p> <p>The exclusion zones of the offshore workings would temporarily restrict the usage of the waters for sport; however, it would still leave a wide area of coastline available within the LAI and beyond. Water sports are considered to be of low sensitivity due to the ease of the adaptation to change.</p>
Scuba Diving	Low	<p>Diving sites have not been identified within the VE array area and have a tendency to be conducted closer to the shore and amongst the wrecks to the south.</p> <p>The exclusion zones of the offshore workings would temporarily restrict the usage of the waters for diving; however, a wide area of coastline would still be available within the LAI and beyond. Recreational diving is considered to be of low sensitivity due to the ease of the adaptation to change.</p>
Recreational angling	Low	<p>The exclusion zones of the offshore workings would temporarily restrict the usage of the waters for recreational angling; however, a wide area of coastline would still be available within the LAI and beyond. Recreational angling is considered to be of low sensitivity due to the ease of the adaptation to change.</p>



Receptor	Sensitivity	Justification
Recreational sailing	Low	<p>There is extensive usage of recreational sailing crafts along the coastline and extending further from the coast, including competitive sailing. However, a wide area of coastline would still be available within the LAI and beyond.</p> <p>Recreational sailing is considered to be of low sensitivity due to the ease of the adaptation to change.</p> <p>Volume 2, Chapter 9: Shipping and Navigation provides further details and assesses the level of impact on sailing crafts.</p>

SIGNIFICANCE OF RESIDUAL EFFECT

3.9.50 The significance of the residual effects has been tabulated in Table 3.30, and, using the methodology set out in Section 3.5, has been assessed by combining the magnitude of the impact with the considered sensitivity of the receptor. It is assumed that any impact on Offshore Recreation would be part of the phased working programme and would therefore be localised and temporary in nature.

Table 3.30: Offshore Recreation Significance of Effect

Offshore Receptor	Sensitivity of the Receptor	Magnitude of the Impact	Significance of Effect
Bathing	Medium	Low	Minor adverse (not significant)
Water sports	Low	Low	Negligible
Scuba Diving	Low	Low	Negligible
Recreational angling	Low	Low	Negligible
Recreational sailing	Low	Low	Negligible

IMPACT OF CONSTRUCTION ACTIVITY ON TOURISM RECEPTORS

OVERVIEW

3.9.51 The onshore construction activity related to the VE project may have a direct effect on tourism and visitor attractions (referred to as tourism receptors) located within the LAI. The Scoping Opinion confirmed the exclusion of indoor facilities from the scope of the assessment.



3.9.52 This section assesses the extent to which onshore construction activity would have a direct effect on tourism receptors located within the LAI. For the ES, the assessment will draw on the assessments reported in other chapters submitted with the ES, including:

- > Volume 2, **Chapter 10: Seascape, Landscape and Visual Impact;**
- > Volume 3, **Chapter 2: Onshore landscape and Visual;**
- > Volume 3, **Chapter 8: Traffic and Transport;** and
- > Volume 3, **Chapter 9: Airborne Noise and Vibration.**

MAGNITUDE OF IMPACT

3.9.53 The analysis as part of the baseline research has identified 14 tourism assets within the LAI. The magnitude will be in reference to the greatest level of effect of the onshore workings, including the construction of the landfall, the construction of the ECC and the OnSS.

3.9.54 Table 3.31 identifies and assesses the potential magnitude of the impact of the construction of the VE project on the tourism assets.

Table 3.31: Tourism Receptor Magnitude of Change

Receptor	Magnitude	Justification
Walton & Frinton Yacht Club	Negligible	The Yacht Club is situated on Walton Mere and sufficiently separated from the construction activities as to experience only negligible impact.
Frinton on Sea Lawn Tennis Club	Low	The Tennis Club may receive some indirect impacts such as noise or visual, due to its proximity to the Red Line Boundary. However, impacts are expected to be short term only and unlikely to be disruptive to people taking part in active sport.
Clacton Pavilion	Negligible	The receptor is located at the edge of the LAI boundary and is unlikely to be in receipt of any significant visual effects. The receptor is similarly considered to be of a large enough distance to the workings that noise and traffic impacts would be negligible.
Clacton Pier	Negligible	The receptor is located at the edge of the LAI boundary and is unlikely to be in receipt of any significant visual effects. The receptor is similarly considered to be of a large enough distance to the workings that noise and traffic impacts would be negligible.



Receptor	Magnitude	Justification
Walton Pier	Negligible	<p>The receptor is located at the edge of the LAI boundary and is unlikely to be in receipt of any significant visual effects.</p> <p>The receptor is similarly considered to be of a large enough distance to the workings that noise and traffic impacts would be negligible.</p>
Frinton Golf Club	Low	<p>Frinton Golf Club would potentially be impacted by the construction of the landfall as it is located within the Red Line Boundary of the proposed working areas. Impacts would, however, be reduced by the planned usage of HDD to bypass the Golf Course. The experience of users of the Golf Course, including both tourism visitors and recreational users, may be adversely affected, although embedded mitigation measures including the Volume 7, Report 3: Draft Code of Construction Practice would reduce the level of impact.</p>
Holland Haven Country Park	Low	<p>The country park is partially located within the Red Line Boundary; however, the usage of HDD would restrict the level to which the Country Park would be impacted by the construction noise, traffic and visual effects, each of which have been assessed further in their respective Chapters. The experience of visitors to the Country Park may be adversely affected, although embedded mitigation measures including the Volume 7, Report 3: Draft Code of Construction Practice would reduce the level of impacts from noise, traffic and lighting.</p>
Great Holland Pits Nature Reserve	Low	<p>The Red Line Boundary passes to the east of the Nature Reserve, but does not directly impact it.</p> <p>Disturbance to ecological receptors due to traffic, construction noise or visual impacts are assessed in the relevant chapters.</p> <p>The experience of visitors to the Nature Reserve may be adversely affected, although embedded mitigation measures including the Volume 7, Report 3: Draft Code of Construction Practice would reduce the level of impacts would reduce the level of impacts from noise, traffic and lighting.</p>



Receptor	Magnitude	Justification
Walton-on-the-Naze Beach	Negligible	<p>The receptor is located at the edge of the LAI boundary and is unlikely to be in receipt of any significant visual effects.</p> <p>The receptor is similarly considered to be of a large enough distance to the workings that noise and traffic impacts would be negligible.</p>
Skippers Island Beach	Negligible	<p>The receptor is located at the edge of the LAI boundary and is unlikely to be in receipt of any significant visual effects.</p> <p>The receptor is similarly considered to be of a large enough distance to the workings that noise and traffic impacts would be negligible.</p>
Beaumont Quay Beach	Negligible	<p>The receptor is located at the edge of the LAI boundary and is unlikely to be in receipt of any significant visual effects.</p> <p>The receptor is similarly considered to be of a large enough distance to the workings that noise and traffic impacts would be negligible.</p>
Frinton-on - Sea Beach	Low	<p>Frinton-on-Sea Beach is located to the north of the landfall site along the coastline. Although not directly impacted by the construction of the landfall, users of the Beach may experience indirect adverse visual impacts. Impacts would, however, be reduced by the planned usage of HDD for the landfall construction.</p>
Clacton-on - Sea Beach	Low	<p>Similarly to Frinton-on-Sea Beach, Clacton-on-Sea Beach is not located within the VE project Red Line Boundary, however, is located on the adjacent coastline to the south of the proposed landfall sites.</p> <p>Although not directly impacted by the construction of the landfall, users of the Beach may experience indirect adverse visual impacts. Impacts would, however, be reduced by the planned usage of HDD for the landfall construction.</p>
Jaywick Sands Beach	Negligible	<p>The receptor is located at the edge of the LAI boundary and is unlikely to be in receipt of any significant visual effects.</p> <p>The receptor is similarly considered to be of a large enough distance to the workings that noise and traffic impacts would be negligible.</p>



SENSITIVITY OF THE RECEPTOR

3.9.55 The sensitivities of each of the potential tourism receptors considered within the assessment are shown on Table 3.32, with justifications for their sensitivity provided.

Table 3.32: Tourism Receptor Sensitivity

Receptor	Sensitivity	Justification
Walton & Frinton Yacht Club	Low	Walton & Frinton Yacht Club is considered to be of local importance to residents within Essex and particularly within Tendring
Frinton on Sea Lawn Tennis Club	Low	Frinton on Sea Lawn Tennis Club is considered to be of local importance to residents within Essex and particularly within Tendring
Clacton Pavilion	Medium	Clacton Pavilion is located to the south of the proposed landfall sites and is an important tourist destination for the local area and is considered a local landmark. This is considered a medium sensitivity tourism asset due to its ability to draw in tourists who are already visiting the area and it being a focal point for the town.
Clacton Pier	Medium	Similarly, Clacton Pier is an important tourist destination for the local area and is considered a local landmark. This is considered a medium sensitivity tourism asset due to its ability to draw in tourists who are already visiting the area and it being a focal point for the town.
Walton Pier	Medium	Walton Pier is located to the north of the proposed landfall sites and is considered to be draw for tourists already visiting the area and a focal point for the town; it is therefore rated as a medium sensitivity asset.
Frinton Golf Club	Low	Frinton Golf Club is considered to be of local importance to residents within Essex and particularly within Tendring
Holland Haven Country Park	Medium	Holland Haven already includes the adjacent presence of a water treatment facility and large overhead cables. It is a popular destination for local residents including for dog walkers.
Great Holland Pits	Medium	The Great Holland Pits include visitor features including footpaths and a car park. They are considered to be draw for tourists already visiting the area and local residents.



Receptor	Sensitivity	Justification
Walton-on-the-Naze Beach Skippers Island Beach Beaumont Quay Beach Frinton-on-the-Sea Beach Clacton-on-the-Sea Beach Jaywick Sands Beach	Medium	The beaches of Tendring are considered important assets in respect of tourism, although there are several high-quality beaches throughout the County and the District which can also be accessed via a short walk or drive in the immediate vicinity of one another. They are considered to be draw for tourists already visiting the area and local residents.

SIGNIFICANCE OF EFFECTS

3.9.56 The significance of construction effects on tourism receptors has been tabulated in Table 3.33, and, using the methodology set out in Table 3.8, has been assessed by combining the magnitude of the impact with the sensitivity of the receptor.

Table 3.33: Significance of Construction Effects on Tourism Receptors

Tourism Receptor	Sensitivity Of The Receptor	Magnitude Of The Impact	Significance Of Effect
Walton & Frinton Yacht Club	Low	Negligible	Negligible
Frinton on Sea Lawn Tennis Club	Low	Low	Negligible
Clacton Pavilion	Medium	Negligible	Negligible
Clacton Pier	Medium	Negligible	Negligible
Walton Pier	Medium	Negligible	Negligible
Frinton Golf Club	Low	Low	Negligible
Holland Haven Country Park	Medium	Low	Minor adverse (not significant)
Great Holland Pits	Medium	Low	Minor adverse (not significant)
Walton-on-the-Naze Beach	Medium	Negligible	Negligible



Tourism Receptor		Sensitivity Of The Receptor	Magnitude Of The Impact	Significance Of Effect
Skippers Beach	Island	Medium	Negligible	Negligible
Beaumont Beach	Quay	Medium	Negligible	Negligible
Frinton-on-the-Sea Beach		Medium	Low	Minor adverse (not significant)
Clacton-on-the-Sea Beach		Medium	Low	Minor adverse (not significant)
Jaywick Beach	Sands	Medium	Negligible	Negligible

IMPACT OF CONSTRUCTION ACTIVITY ON COMMUNITY FACILITIES

OVERVIEW

3.9.57 This section assesses the extent to which onshore construction activity would have a direct effect on community facilities located within the LAI. For the ES, the assessment will draw on the assessments reported in other chapters submitted with the ES, including:

- > Volume 3, Chapter 2: Onshore Landscape and Visual;
- > Volume 3, Chapter 8: Traffic and Transport; and
- > Volume 3, Chapter 9: Airborne Noise and Vibration.

MAGNITUDE OF IMPACT

3.9.58 The baseline analysis has identified seven potential community facilities within approximately 500 m of the Onshore Red Line Boundary (some adjacent Community Facilities have also been included despite being beyond 500 m), and includes one community hall, one place of worship, one police station, three primary schools and one secondary school.

3.9.59 Table 3.34 identifies and assesses the potential magnitude of the impact of the construction of the VE project on these nine community facilities.



Table 3.34: Community Magnitude of Impact

Community Receptor	Magnitude Of Impact	Justification
Little Bromley Hall	Low	Located adjacent to the Onshore Red Line Boundary; there is potential for the Hall to be impacted by noise, visual and / or traffic disruptions, which are assessed in the respective Chapters.
Great Holland Church	Negligible	Located within the 500 m buffer, but not expected to experience more than negligible traffic, noise and / or visual impacts.
Thorpe-Le-Soken Police Station	Negligible	Located beyond the 500 m buffer and outside of any areas of construction, it is not anticipated that the receptor would experience any adverse impacts relating to construction activity. Impacts related to traffic and / or road diversions on emergency services are assessed in Volume 3, Chapter 8: Traffic and Transport.
Tendring Primary School	Low	Located within the 500 m buffer, but not expected to experience more than negligible traffic, noise and / or visual impacts. Impacts related to traffic and / or temporary road diversions on emergency services are assessed in Volume 3, Chapter 8: Traffic and Transport.
Rolph Church of England Primary School and Nursery	Negligible	Located beyond the 500 m buffer and outside of any areas of construction, it is not anticipated that the receptor would experience any adverse impacts relating to construction activity. Impacts related to traffic and / or temporary road diversions on emergency services are assessed in Volume 3, Chapter 8: Traffic and Transport.
Holland Haven Primary School	Negligible	Located beyond the 500 m buffer and outside of any areas of construction, it is not anticipated that the receptor would experience any adverse impacts relating to construction activity. Impacts related to traffic and / or temporary road diversions on emergency services are assessed in Volume 3, Chapter 8: Traffic and Transport.



Community Receptor	Magnitude Of Impact	Justification
Tendring Technology College	Negligible	<p>Located beyond the 500 m buffer and outside of any areas of construction, it is not anticipated that the receptor would experience any adverse impacts relating to construction activity.</p> <p>Impacts related to traffic and / or temporary road diversions on emergency services are assessed in Volume 3, Chapter 8: Traffic and Transport.</p>

SENSITIVITY OF THE RECEPTOR

3.9.60 The Community Receptors are considered to each have a **Medium** level of sensitivity, this is due to them being essential for the community's health and wellbeing, however, they would have an adaptability to the level of change proposed with the onshore aspects of the VE project. There are also no proposals within the project to directly affect, interfere or disturb with any community facility or their operation, with mitigations in place as standard as part of the CoCP.

SIGNIFICANCE OF RESIDUAL EFFECT

3.9.61 The significance of the residual effects has been tabulated in Table 3.35, and, using the methodology set out in Section 0, has been assessed by combining the magnitude of the impact with the considered sensitivity of the receptor. It is assumed that any impact on Community Facilities would be part of the phased working programme and would therefore be localised and temporary in nature.

Table 3.35: Community Significance of Effect

Community Receptor	Sensitivity of the Receptor	Magnitude of the Impact	Significance of Effect
Little Bromley Hall	Medium	Low	Minor adverse (not significant)
Great Holland Church	Medium	Low	Minor adverse (not significant)
Thorpe-Le-Soken Police Station	Medium	Negligible	Negligible
Tendring Primary School	Medium	Low	Minor adverse (not significant)
Rolph Church of England Primary School and Nursery	Medium	Negligible	Negligible



Community Receptor	Sensitivity of the Receptor	Magnitude of the Impact	Significance of Effect
Holland Haven Primary School	Medium	Negligible	Negligible
Tendring Technology College	Medium	Negligible	Negligible

3.10 ENVIRONMENTAL ASSESSMENT: OPERATIONAL PHASE

IMPACT OF OPERATIONAL ACTIVITY ON EMPLOYMENT

OVERVIEW

3.10.1 The proposed method of the WSA assessment is detailed in Paragraph 3.9.1. A full quantitative assessment will be provided in the ES in line with this methodology once details of operational expenditure and employment are known.

IMPACT OF OPERATIONAL ACTIVITY ON THE ECONOMY

OVERVIEW

3.10.2 The proposed method of the WSA assessment is detailed in Paragraph 3.9.1. A full quantitative assessment will be provided in the ES in line with this methodology once details of operational expenditure and employment are known.

IMPACT OF OPERATIONAL ACTIVITY ON THE TOURISM ECONOMY

OVERVIEW

3.10.3 The ES will provide a review of literature and experience from other offshore wind farm development with regard to the impact of the presence of turbines on the tourism economy. Currently, the operational workforce of projects of a similar scale are not considered to be of a magnitude that would result in the displacement of tourism visitors, whilst simultaneously providing an additional revenue stream for accommodation businesses. However, further work is needed to identify the citing of the operational workers and the operational port, as well as the numbers of the workforce needed and their relative locations.

3.10.4 Impacts on the coastal viewpoints are thought to occur at the closest coastline, in Suffolk. The preliminary findings of the Volume 2, Chapter 10: Seascape and Landscape Visual Assessment show that, due to the considerable distance from both the Suffolk and Essex coastline, there would only be 'in-direct' changes, rather than 'on' or 'within' the landscape.

3.10.5 When accounting for this within a socio-economic, tourism and recreational context, it is considered that this would result in **no effect** in the deterrence of tourists from the WSA's coastline assets.



IMPACT OF OPERATIONAL ACTIVITY ON ONSHORE RECREATION

OVERVIEW

- 3.10.6 Once constructed, the only onshore infrastructure on the surface during the operational phase would be the link boxes, Transition Joint Bay (TJB) manhole and OnSS; the first two are at ground level and not considered to be of a scale which could significantly impact socio-economic, tourism and recreation. The working width of the ECC route will have been reinstated to their former use.
- 3.10.7 The onshore export cables are designed to avoid maintenance throughout their operational life. Unplanned maintenance associated with the onshore cable route may involve the repair of onshore cable faults and is an unlikely occurrence. Inspection of the onshore cable route can be undertaken at the link boxes and will not require excavation or other disruptive works.

MAGNITUDE OF IMPACT

- 3.10.8 On the basis of the above, the magnitude of impact of routine inspection on onshore recreation receptors is therefore assessed as **Negligible**.

SENSITIVITY OF THE RECEPTOR

- 3.10.9 The sensitivity of the onshore recreation receptors during the operational phase remains unchanged from that assessed during the construction phase, and ranges from **Low** to **High**.

SIGNIFICANCE OF RESIDUAL EFFECT

- 3.10.10 Given that the magnitude of impact is considered to be **Negligible** magnitude of impact, the operational phase is therefore expected to have a residual effect of no more than **Minor** adverse, which is **Not Significant**.

IMPACT OF OPERATIONAL ACTIVITY ON OFFSHORE RECREATION

OVERVIEW

- 3.10.11 The operational lifetime of VE is expected to be up to 40 years. Overall, it is anticipated that maintenance activities will fall into two categories; preventative maintenance which would be carried out according to regular scheduled services and corrective maintenance which covers unexpected repairs, components replacement, retrofit campaigns and breakdowns.
- 3.10.12 The Volume 2, Chapter 9: Shipping and Navigation assessment suggests that there will be up to 1,776 annual vessel round trips. In addition, the offshore project description indicates that up to 8 cable repairs may be needed throughout the project's lifetime, which may lead to reduced amenity and access to the offshore area.

MAGNITUDE OF IMPACT

- 3.10.13 In the majority of potential maintenance cases, preventative maintenance can be undertaken via normal service vessels, and will therefore not result in any impact to offshore receptors.



3.10.14 On the basis of the above, the magnitude of impact of VE operational activity on offshore recreation activity is therefore assessed as **Negligible** for the majority of offshore receptors identified. This would have potential to increase to **Low** if repairs are required, due to a potential reduction in the area in which these activities can take place.

SENSITIVITY OF THE RECEPTOR

3.10.15 The sensitivity of offshore recreation receptors during the operational phase of VE remains unchanged from that assessed during the construction phase, and ranges from **Low** (for water sports, scuba diving, recreational angling and recreational sailing), to **Medium** (for bathing).

SIGNIFICANCE OF RESIDUAL EFFECT

3.10.16 Table 3.36 below provides an overview of the assessment of significance of residual effect of operational activity on offshore recreation receptors.

Table 3.36: Operational Residual Effects on Offshore Recreational Receptors

Receptor	Sensitivity of Receptor	Magnitude of Impact	Significance of Effect
Bathing	Medium	Negligible / Low	Minor adverse (not significant)
Water Sports	Low	Negligible / Low	Negligible (not significant)
Scuba Diving	Low	Negligible / Low	Negligible (not significant)
Recreational Angling	Low	Negligible / Low	Negligible (not significant)
Recreational Sailing	Low	Negligible / Low	Negligible (not significant)

IMPACT OF OPERATIONAL ACTIVITY ON TOURISM RECEPTORS

OVERVIEW

3.10.17 Once the onshore construction work on VE is completed, the only visible infrastructure would be the OnSS and manhole covers on the TJBs and link boxes at joint bays.

MAGNITUDE OF IMPACT

3.10.18 Maintenance work associated with the normal operations of the onshore infrastructure (including the landfall, cable route, OnSS and associated infrastructure) would have an overall limited impact on tourism receptors. On this basis, the magnitude of impact of routine maintenance on tourism receptors is therefore assessed as **Negligible**.

SENSITIVITY OF THE RECEPTOR

3.10.19 The sensitivity of tourism receptors during the operational phase of VE remains unchanged from that assessed during the construction phase, as described in Table 3.32, and ranges from Low to Medium.



SIGNIFICANCE OF RESIDUAL EFFECT

3.10.20 Given that the onshore infrastructure is being designed to require no repairs, the assessment is based on operational activities having a **Negligible** magnitude of impact. With the sensitivity of the receptors ranging from **Low** to **Medium**, the operational phase of VE is expected to have a **Negligible** level of effect.

3.11 ENVIRONMENTAL ASSESSMENT: DECOMMISSIONING PHASE

3.11.1 No decision has yet been made regarding the final decommissioning policies for the Project as it is recognised that industry best practice, rules and legislation change over time. The detail and scope of decommissioning works will be determined by the relevant legislation and guidance at the time of decommissioning and will be agreed with the regulator with decommissioning plan provided.

3.11.2 However, it is considered likely that the proposed onshore substation would be removed and will be reused or recycled and that the onshore cables would also be removed and recycled, with the transition bays and cable ducts (where used) left in situ. For the purposes of a worst-case scenario, it is considered that magnitude of impact and effects associated with decommissioning would be no greater than those identified for the construction phase.

3.11.3 In principle, it is assumed that the magnitude of impact for all effects considered will mirror (but is likely to be lower than) the magnitude relating to the project's construction phase. The sensitivity of each receptor is also assumed not to change and, as such, a repetition of the construction phase assessment is considered to be unnecessary.

3.12 ENVIRONMENTAL ASSESSMENT: CUMULATIVE EFFECTS

CUMULATIVE IMPACT OF CONSTRUCTION ON EMPLOYMENT

OVERVIEW

3.12.1 The approach to cumulative assessment takes into account the Cumulative Impact Assessment Guidelines issued by RenewableUK in June 2013, together with comments made in response to other renewable energy developments, and the Planning Inspectorate 'Advice Note 9: Rochdale Approach'.

3.12.2 The approach to the socio-economics cumulative effect assessment is in line with that outlined in Volume 1, Annex 3.1: Cumulative Effects Assessment Methodology. The projects and plans that will be selected as relevant to the assessment of impacts to socio-economics will be based upon an initial screening exercise undertaken on a long list. Each project, plan or activity will be considered and scoped in or out on the basis of effect– receptor pathway, data confidence and the temporal and spatial scales involved.

3.12.3 A full cumulative impact assessment will form part of the final Environmental Statement at DCO submission, to the extent that the number of locations and origins of the ports is available at ES stage.



3.12.4 The specific projects scoped into this cumulative effect assessment, and the tiers into which they have been allocated, will be presented in a tabular format which includes a note of the degree of certainty regarding each specific project and outlined here in Table 3.37. The cumulative assessment will identify the relevant socio-economic impacts along with the scenarios and justifications considered and present a qualitative conclusion.

Table 3.37: Description of Tiers of other developments considered for cumulative effect assessment.

Tiers	Development Stage
Tier 1	Projects under construction.
	Permitted applications, whether under the Planning Act 2008 or other regimes, but not yet implemented.
	Submitted applications, whether under the Planning Act 2008 or other regimes, but not yet determined.
Tier 2	Projects on the Planning Inspectorate's Programme of Projects where a Scoping Report has been submitted.
	Projects under the Planning Act 2008 where a PEIR has been submitted for consultation.
Tier 3	Projects on the Planning Inspectorate's Programme of Projects where a Scoping Report has not been submitted.
	Identified in the relevant Development Plan (and emerging Development Plans with appropriate weight being given as they move closer to adoption) recognising that much information on any relevant proposals will be limited.
	Identified in other plans and programmes (as appropriate) which set the framework for future development consents/ approvals, where such development is reasonably likely to come forward.

3.12.5 Currently, the project which could have a significant cumulative impact in combination with VE are considered to be:

- > North Falls Offshore Wind Farm (NF OWF);
- > NGET East Anglia Connection Node to Substation; and
- > Sizewell C nuclear power station.

3.12.6 VE have kept a wide RLB at this stage to allow maximum flexibility for working with North Falls on the best ECC alignment for both projects to lay their cables whilst minimising the impact to the environment, communities and each other. At the substation VE are exploring how a co-located substation may work within SSA-West. VE have maintained the option to locate its OnSS within SSA East..

3.12.7 VE will continue to work with North Falls to look at opportunities for co-ordination during construction. More information will be provided with the DCO application.

3.12.8 Receptors identified for specific consideration of cumulative effects comprise:

- > Economy
- > Employment



- > Healthcare service
- > Tourism economy
- > Tourism accommodation
- > Onshore recreation
- > Offshore recreation
- > Tourism assets.

3.13 INTER-RELATIONSHIPS

3.13.1 The potential for inter-related impacts has already been undertaken throughout this chapter, through the consideration of the following PEIR chapters:

- > Volume 2, Chapter 3: Marine Water and Sediment Quality;
- > Volume 2, Chapter 9: Commercial Fisheries;
- > Volume 2, Chapter 10: Shipping and Navigation;
- > Volume 2, Chapter 11: Seascape, Landscape and Visual Impact;
- > Volume 2, Chapter 13: Other Marine Users and Activities;
- > Volume 3, Chapter 2: Landscape and Visual Impact Assessment;
- > Volume 3, Chapter 8: Traffic and Transport;
- > Volume 3, Chapter 9: Noise and Vibration; and
- > Volume 3, Chapter 11: Human Health and Climate Change.

3.14 SUMMARY OF EFFECTS

3.14.1 The methodology for the assessment of the construction and operational phase impacts in relation to employment, the economy, healthcare services and the tourism economy, as well as the cumulative effects assessment, have been outlined in the preceding sections.

3.14.2 Upon further ES stage consultation and greater understanding of some key data regarding the VE project, these impacts will be fully assessed within the ES and submitted as part of the DCO.

3.14.3 A summary of the assessment of significant impacts, any relevant mitigation measures and the residual effects on the socio-economic, tourism and recreational receptors is shown on Table 3.38.



Table 3.38: Summary of Residual Effects

Description of Impact	Sensitivity	Effect	Additional Mitigation Measures	Residual Effect
Construction				
Community Facilities				
Little Bromley Hall	Medium	Low	None Proposed	Minor adverse (not significant)
Great Holland Church	Medium	Low	None Proposed	Minor adverse (not significant)
Thorpe-Le-Soken Police Station	Medium	Negligible	None Proposed	Negligible
Tendring Primary School	Medium	Low	None Proposed	Minor adverse (not significant)
Rolph Church of England Primary School and Nursery	Medium	Negligible	None Proposed	Negligible
Holland Haven Primary School	Medium	Negligible	None Proposed	Negligible
Tendring Technology College	Medium	Negligible	None Proposed	Negligible
Onshore Recreation				
Public Rights of Way	Low	Low	None Proposed	Negligible
Long-Distance routes	High	Low	Further consultation and greater inclusion to the PAMP	Minor (not significant)
National Cycle Routes	High	Low	None Proposed	Minor (not significant)
Offshore Recreation				
Bathing	Medium	Low	None Proposed	Minor adverse (not significant)



Description of Impact	Sensitivity	Effect	Additional Mitigation Measures	Residual Effect
Water sports	Low	Medium	None Proposed	Minor adverse (not significant)
Scuba Diving	Low	Medium	None Proposed	Minor adverse (not significant)
Recreational angling	Low	Low – Medium	None Proposed	Minor adverse (not significant)
Recreational sailing	Low	Medium	None Proposed	Minor adverse (not significant)
Tourism Receptors				
Walton & Frinton Yacht Club	Low	Negligible	None Proposed	Negligible
Frinton on Sea Lawn Tennis Club	Low	Low	None Proposed	Minor adverse (not significant)
Clacton Pavilion	High	Negligible	None Proposed	Negligible
Clacton Pier	High	Negligible	None Proposed	Negligible
Walton Pier	High	Negligible	None Proposed	Negligible
Frinton Golf Club	Low	Low	None Proposed	Negligible
Holland Haven Country Park	Medium	Low	None Proposed	Minor adverse (not significant)
Great Holland Pits	Medium	Low	None Proposed	Minor adverse (not significant)
Walton-on-the-Naze Beach	Medium	Negligible	None Proposed	Negligible
Skippers Island Beach	Medium	Negligible	None Proposed	Negligible
Beaumont Quay Beach	Medium	Negligible	None Proposed	Negligible



Description of Impact	Sensitivity	Effect	Additional Mitigation Measures	Residual Effect
Frinton-on-the-Sea Beach	Medium	Low	None Proposed	Minor adverse (not significant)
Clacton-on-the-Sea Beach	Medium	Low	None Proposed	Minor adverse (not significant)
Jaywick Sands Beach	Medium	Negligible	None Proposed	Negligible
Displacement of Visitors				
Accommodation	Medium	Negligible	None Proposed	Negligible
Operation and Maintenance				
Onshore Recreation				
Onshore Recreational Routes	Low – High	Negligible – Low	None Proposed	Minor adverse (not significant)
Offshore Recreation				
Bathing	Medium	Negligible	None Proposed	Low adverse (not significant)
Water Sports	Low	Negligible	None Proposed	Negligible (not significant)
Scuba Diving	Low	Negligible	None Proposed	Negligible (not significant)
Recreational Angling	Low	Negligible	None Proposed	Negligible (not significant)
Recreational Sailing	Low	Negligible	None Proposed	Negligible (not significant)
Tourism Receptors				
Walton & Frinton Yacht Club	Low	Negligible	None Proposed	Negligible
Frinton on Sea Lawn Tennis Club	Low	Low	None Proposed	Minor adverse (not significant)



Description of Impact	Sensitivity	Effect	Additional Mitigation Measures	Residual Effect
Clacton Pavilion	High	Negligible Low	- None Proposed	Minor adverse (not significant)
Clacton Pier	High	Negligible Low	- None Proposed	Minor adverse (not significant)
Walton Pier	High	Negligible Low	- None Proposed	Minor adverse (not significant)
Frinton Golf Club	Low	Negligible Low	- None Proposed	Negligible
Holland Haven Country Park	Low	Negligible Low	- None Proposed	Negligible
Great Holland Pits	Medium	Negligible Low	- None Proposed	Minor adverse (not significant)
Walton-on-the-Naze Beach	Medium	Negligible Low	- None Proposed	Minor adverse (not significant)
Skippers Island Beach	Medium	Negligible Low	- None Proposed	Minor adverse (not significant)
Beaumont Quay Beach	Medium	Negligible Low	- None Proposed	Minor adverse (not significant)
Frinton-on-the-Sea Beach	Medium	Negligible Low	- None Proposed	Minor adverse (not significant)
Clacton-on-the-Sea Beach	Medium	Negligible Low	- None Proposed	Minor adverse (not significant)
Jaywick Sands Beach	Medium	Negligible Low	- None Proposed	Minor adverse (not significant)



3.15 NEXT STEPS

3.15.1 The following steps will be undertaken in order to progress the Socio-economic Assessment from PEIR stage to DCO Application stage:

- > Once more detailed project design information is available, the assessment presented in this chapter along with the proposed mitigation will be reviewed, updated, and presented in the ES which will accompany the DCO application;
- > Refinement of data regarding the construction and operational workforces will inform the economic modelling at the ES stage;
- > Due to lack of publicly available data on bed occupancy data VE intend to undertake further consultation with stakeholders;
- > The assessment of effects on healthcare services is the subject of ongoing data collection and will be addressed in full in the ES which will accompany the DCO application; and
- > Production of an Outline Employment, Skills and Education Strategy
- > A full cumulative impact assessment will be undertaken and form part of the ES which will accompany the DCO application.



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