The Great Grid Upgrade

Sea Link

Sea Link

Volume 6: Environmental Statement

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Part 2 Suffolk
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Traffic and Transport

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7. Traffic and Transport

7.1 Introduction

7.1.1 This chapter of the Environmental Statement (ES) presents the assessment of the likely significant traffic and transport effects that could result from the Proposed Project (as described in **Application Document 6.2.1.4 Part 1 Introduction Chapter 4 Description of the Proposed Project**).

7.1.2 This chapter describes the methodology used, the datasets that have informed the assessment, baseline conditions, mitigation measures and the traffic and transport residual significant effects that could result from the Proposed Project. Traffic and transport effects associated with the Suffolk Onshore Scheme relate to temporary increases in traffic levels on the highway network during the construction and decommissioning phases of the Proposed Project (noting that operational effects are scoped out) and both temporary and permanent interactions with Public Rights of Way (PRoW) during all phases.

7.1.3 The Order Limits, which illustrate the boundary of the Proposed Project, are illustrated on **Application Document 2.2.1 Overall Location Plan Order Limits** and the Suffolk Onshore Scheme Boundary is illustrated on **Application Document 2.2.2 Suffolk Location Plan Suffolk Onshore Scheme**.

7.1.4 This chapter should be read in conjunction with:

- **Application Document 6.2.1.3 Part 1 Introduction Chapter 3 Main Alternatives Considered**;
- **Application Document 6.2.1.4 Part 1 Introduction Chapter 4 Description of the Proposed Project**;
- **Application Document 6.2.1.5 Part 1 Introduction Chapter 5 EIA Approach and Methodology**;
- **Application Document 6.2.1.6 Part 1 Introduction Chapter 6 Scoping Opinion and EIA Consultation**; and
- **Application Document 6.2.2.13 Part 2 Suffolk Chapter 13 Suffolk Onshore Scheme Inter-Project Cumulative Effects**.

7.1.5 This chapter is supported by the following figures:

- **Application Document 6.4.1.4.7 Suffolk Onshore Scheme Traffic Routes during Construction and Operation**; and
- **Application Document 6.4.2.7 Traffic and Transport**.

7.1.6 This chapter is supported by the following appendices:

- **Application Document 6.3.2.7.A Appendix 2.7.A Transport Assessment Note**;
- **Application Document 6.3.2.7.B Appendix 2.7.B Traffic and Transport Thematic Meeting Minutes**;
- **Application Document 6.3.2.7.C Appendix 2.7.C Receptor Sensitivity Levels**;

- **Application Document 6.3.2.7.D Appendix 2.7.D Baseline Traffic Movements**;
- **Application Document 6.3.2.7.E Appendix 2.7.E Construction Worker Trip Distribution**;
- **Application Document 6.3.2.7.F Appendix 2.7.F Saturday Trip Generation Tables**;
- **Application Document 6.3.2.7.G Appendix 2.7.G Traffic Flow Diagrams**;
- **Application Document 6.3.2.7.H Appendix 2.7.H Preliminary Highway Impact Assessment**;
- **Application Document 6.3.2.7.I Appendix 2.7.I Magnitude of Change**; and
- **Application Document 6.3.2.7.J Appendix 2.7.J Traffic and Transport Assessments**.

7.1.7 This chapter is supported by the following application documents:

- **Application Document 7.5.3 Outline Onshore Construction Environmental Management Plan (CEMP)**;
- **Application Document 7.5.3.1 CEMP Appendix A Outline Code of Construction Practice**;
- **Application Document 7.5.3.2 CEMP Appendix B Register of Environmental Actions and Commitments (REAC)**;
- **Application Document 7.5.1.1 Outline Construction Traffic Management and Travel Plan – Suffolk (Outline CTMTP – Suffolk)**; and
- **Application Document 7.5.9.1 Outline Public Rights of Way Management Plan – Suffolk (Outline PRoWMP – Suffolk)**.

7.2 Regulatory and Planning Context

7.2.1 This section sets out the legislation and planning policy that is relevant to the traffic and transport effects assessment. A full review of compliance with relevant national and local planning policy is provided within the **Application Document 7.1 Planning Statement** submitted as part of the application for Development Consent.

7.2.2 Policy generally seeks to minimise traffic and transport effects from development and to avoid significant adverse effects. This applies particularly to considering transport issues at an early stage and proposing mitigation measures to promote sustainable development to avoid unacceptable or severe impacts where necessary.

Legislation

7.2.3 There is no transport specific legislation relevant to the Proposed Project.

National Policy

National Policy Statements

7.2.4 National Policy Statements (NPS) set out the primary policy tests against which the application for a Development Consent Order (DCO) for the Proposed Project would be

considered. Table 7.1 provides details of the elements of NPS for Energy (EN-1) (Department of Energy and Climate Change, 2023) that are relevant to this chapter.

7.2.5 NPS for Electricity Networks Infrastructure (EN-5) (Department for Energy Security and Net Zero, 2023) applies to electricity networks specifically but provides no further guidance on traffic and transport considerations.

7.2.6 NPS EN-3 Renewable Energy Infrastructure has relevance to the Proposed Project, but only in respect of the offshore elements. As such it has no relevance to the assessment of traffic and transport effects.

Table 7.1 NPS EN-1 requirements relevant to traffic and transport

NPS EN-1 section	Where this is covered in the ES
Part 5.14.5 *"If a project is likely to have significant transport implications, the applicant's ES (see Section 4.3) should include a transport appraisal. The DfT's Transport Analysis Guidance (TAG) and Welsh Governments WelTAG provides guidance on modelling and assessing the impacts of transport schemes."*	This ES chapter has been prepared using the National Planning Practice Guidance; Travel Plans, Transport Assessments and Statements and includes the components that typically form part of a Transport Assessment (see **Application Document 6.3.2.7.A Appendix 2.7.A Transport Assessment Note**). The Proposed Project is not expected to have significant transport implications and the approach to prepare **Application Document 6.3.2.7.A Appendix 2.7.A Transport Assessment Note** has been agreed with Suffolk County Council and National Highways.
Part 5.14.6 "[…] *Applicants should consult with National Highways and Highways Authorities as appropriate on the assessment and mitigation to inform the application to be submitted."*	National Highways has been consulted to review the approach for the assessment work following the feedback received within the Scoping Opinion and at Statutory Consultation. Details of the comments which have been received and the approach which has been agreed with National Highways to address these comments are included in the Transport Assessment Note (**Application Document 6.3.2.7.A Appendix 2.7.A Transport Assessment Note**). Frequent meetings have been held with Suffolk County Council (SCC) as the Highway Authority as documented in **Application Document 6.3.2.7.B Appendix 2.7.B Traffic and Transport Thematic Meeting Minutes**.
Part 5.14.7 "The applicant should prepare a travel plan including demand management and monitoring measures to mitigate transport	Details of control management measures including those relating to construction staff travel movements are set out within

NPS EN-1 section	Where this is covered in the ES
impacts. The applicant should also provide details of proposed measures to improve access by active, public and shared transport to: • *reduce the need for parking associated with the proposal* • *contribute to decarbonisation of the transport network* • *improve user travel options by offering genuine modal choice."*	**Application Document 7.5.1.1 Outline CTMTP – Suffolk**. SCC Highways has been consulted throughout the ES process.
Part 5.14.8 *"The assessment should also consider any possible disruption to services and infrastructure (such as road, rail and airports)."*	An assessment of the forecast impacts on the road network as a result of the Proposed Project during the construction and decommissioning phases is set out in Section 7.9 of this ES chapter. The Proposed Project is not anticipated to disrupt rail infrastructure/services or airports. Details relating to the usage and management of railway level crossings are set out within **Application Document 7.5.1.1 – Outline CTMTP – Suffolk**.
Part 5.14.9 *"If additional transport infrastructure is needed or proposed, it should always include good quality walking, wheeling and cycle routes, and associated facilities (changing/storage etc.) needed to enhance active transport provision."*	The site compounds will include staff welfare facilities including changing/storage facilities and sufficient space will be allocated to accommodate cycle parking for construction staff. Any new permissive paths or diverted Public Rights of Way (PRoW) will be designed to be of an equivalent standard/quality to existing provision as a minimum. Any temporarily closed PRoW will be reinstated following the completion of the works. Further details are set out within **Application Document 7.5.1.1 – Outline CTMTP – Suffolk** and **Application Document 7.5.9.1 – Outline PRoWMP – Suffolk**.
Part 5.14.10 *"Applicants should discuss with network providers the possibility of co-funding by government for any third-party benefits. Guidance has been issued which explains the circumstances where this may be possible, although the government cannot guarantee in advance that funding will be available for any given uncommitted scheme at any specified time."*	Discussions relating to potential third-party (community) benefits with respect to PRoW have been held with the local authority (see **Application Document 6.2.2.1 Part 2 Suffolk Chapter 1 Landscape and Visual** and **Application Document 6.2.2.10 Part 2 Suffolk Chapter 10 Socio-Economic**. **Recreation and Tourism**) and further details of these discussions/measures are documented within **Application Document 7.5.3.2 CEMP Appendix B**

NPS EN-1 section	Where this is covered in the ES
	Register of Environmental Actions and Commitments (REAC) and **Application Document 7.5.9.1 – Outline PRoWMP – Suffolk**.
Part 5.14.14 *"The Secretary of State may attach requirements to a consent where there is likely to be substantial HGV traffic that:* • *control numbers of HGV movements to and from the site in a specified period during its construction and possibly on the routing of such movements* • *make sufficient provision for HGV parking, and associated high quality drive facilities either on the site or at dedicated facilities elsewhere, to support driver welfare, avoid 'overspill' parking on public roads, prolonged queuing on approach roads and uncontrolled on-street HGV parking in normal operating conditions* • *ensure satisfactory arrangements for reasonably foreseeable abnormal disruption, in consultation with network providers and the responsible police force."*	Further details about HGV management, including movements, routing, compounds/parking and the management of abnormal loads are provided within **Application Document 7.5.1.1 – Outline CTMTP – Suffolk**, which also includes a commitment to restrict HGV traffic on Sundays/Bank Holidays.
Part 5.14.15 *"The Secretary of State should have regard to the cost-effectiveness of demand management measures compared to new transport infrastructure, as well as the aim to secure more sustainable patterns of transport development when considering mitigation measures."*	**Application Document 7.5.1.1 – Outline CTMTP – Suffolk** includes mitigation measures designed to manage and accommodate travel demand during the construction phase. New transport infrastructure is only proposed where essential to the Proposed Project or in order to mitigate effects (e.g. for PRoW).
Part 5.14.18 *"A new energy NSIP may give rise to substantial impacts on the surrounding transport infrastructure and the Secretary of State should therefore ensure that the applicant has sought to mitigate these impacts, including during the construction phase of the development and by enhancing active, public and shared transport provision and accessibility."*	Whilst the Proposed Project is not a new energy generating facility, mitigation measures required to manage or mitigate potential effects of the Proposed Project are reported in Sections 7.8 and 7.10 of this chapter as well as **Application Document 7.5.1.1 – Outline CTMTP – Suffolk** and **Application Document 7.5.9.1 – Outline PRoWMP – Suffolk**. The Proposed Project is not expected to result in any significant traffic and transport effects as a result of these measures, as demonstrated within Sections 7.9 and 7.11 of this chapter.
Part 5.14.19 *"Where the proposed mitigation measures are insufficient to reduce the impact on the transport infrastructure to acceptable levels, the Secretary of State should consider*	The proposed mitigation set out within Sections 7.8 and 7.10 of this chapter as well as within **Application Document 7.5.1.1 – Outline CTMTP – Suffolk** and

NPS EN-1 section	Where this is covered in the ES
requirements to mitigate adverse impacts on transport networks arising from the development, as set out below."	**Application Document 7.5.9.1 – Outline PRoWMP – Suffolk**, is designed to reduce the impact of the Proposed Project on transport infrastructure to acceptable levels. The Proposed Project is not expected to result in any significant traffic and transport effects as a result of these measures, as demonstrated within Sections 7.9 and 7.11 of this chapter.
Part 5.14.11 *"Where mitigation is needed, possible demand management measures must be considered. This could include identifying opportunities to:* • *reduce the need to travel by consolidating trips* • *locate development in areas already accessible by active travel and public transport* • *provide opportunities for shared mobility* • *re-mode by shifting travel to a sustainable mode that is more beneficial to the network* • *retime travel outside of the known peak times* • *reroute to use parts of the network that are less busy".*	Demand management measures identified as part of the mitigation of the Proposed Project are reported in Section 7.8 of this chapter as well as **Application Document 7.5.1.1 – Outline CTMTP – Suffolk**.
Part 5.14.12 *"If feasible and operationally reasonable, such mitigation should be required, before considering requirements for the provision of new inland transport infrastructure to deal with remaining transport impacts. All stages of the project should support and encourage a modal shift of freight from road to more environmentally sustainable alternatives, such as rail, cargo bike, maritime and inland waterways, as well as making appropriate provision for and infrastructure needed to support the use of alternative fuels including charging for electric vehicles."*	The requirements of the Proposed Project are such that the only feasible method, resulting in least disruption, is to make use of the existing highway network during both the construction and operational phases. Nonetheless, the proposed mitigation set out within Sections 7.8 and 7.10 of this chapter as well as within **Application Document 7.5.1.1 – Outline CTMTP – Suffolk** and **Application Document 7.5.9.1 – Outline PRoWMP – Suffolk** includes demand management measures and is designed to reduce the impact of the Proposed Project on transport infrastructure to acceptable levels. New transport infrastructure is only proposed where essential to the Proposed Project or in order to mitigate effects e.g. for PRoW.

National Planning Policy Framework

7.2.7 The National Planning Policy Framework (NPPF) as revised in December 2024 (Ministry of Housing, Communities and Local Government, 2024) sets out national

planning policies that reflect priorities of the Government for operation of the planning system and the economic, social, and environmental aspects of the development and use of land. The NPPF has a strong emphasis on sustainable development, with a presumption in favour of such development. The NPPF has the potential to be considered important and relevant to the Secretary of State's (SoS) decision regarding the application for development consent for the Proposed Project.

7.2.8 Table 7.2 below provides details of the elements of the NPPF that are relevant to this chapter, and how and where they are covered in the ES.

Table 7.2 NPPF requirements relevant to traffic and transport

NPPF section	Where this is covered in the ES
Paragraph 109 outlines that: *"'transport issues should be considered from the earliest stages of plan-making and development proposals'; this should involve:* *- making transport considerations an important part of early engagement with local communities;* *- ensuring patterns of movement, streets, parking and other transport considerations are integral to the design of schemes, and contribute to making high quality places;* *- understanding and addressing the potential impacts of development on transport networks;* *- realising opportunities from existing or proposed transport infrastructure, and changing transport technology and usage – for example in relation to the scale, location or density of development that can be accommodated;* *- identifying and pursuing opportunities to promote walking, cycling and public transport use; and* *- identifying, assessing and taking into account the environmental impacts of traffic and transport infrastructure – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains."*	Transport issues have been considered from an early stage (including at the previous ES Scoping stage) and have informed the design of the Proposed Project (such as defining the Order Limits and identifying any improvements to facilitate construction access or retain PRoW access). Further details of management measures and mitigation are included in within Sections 7.8 and 7.10 of this chapter, as well as within **Application Document 7.5.1.1 – Outline CTMTP – Suffolk** and **Application Document 7.5.9.1 – Outline PRoWMP – Suffolk**. An assessment of potential transport and traffic effects is contained within Section 7.9 of this chapter.
Paragraph 115 outlines the key considerations when assessing sites to be allocated for development in plans or specific development applications. These are: *"-sustainable transport modes are prioritised taking account of the vision for the site, the type of development and its location;* *- safe and suitable access to the site can be achieved for all users;* *- the design of streets, parking areas, other transport elements and the content of associated*	Details of key considerations for traffic and transport including access, capacity/congestion and highway safety are set out within this chapter (Section 7.9) as well as **Application Document 7.5.1.1 – Outline CTMTP – Suffolk** and **Application Document 7.5.9.1 – Outline PRoWMP – Suffolk**. Mitigation has been identified where necessary (Sections 7.8 and 7.10) to prevent the Proposed Project from having any

NPPF section	Where this is covered in the ES
standards reflects current national guidance, including the National Design Guide and the National Model Design Code; and *- any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree through a vision-led approach."*	significant impacts on the transport network.
Paragraph 116 states that *"Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network, following mitigation, would be severe, taking into account all reasonable future scenarios."*	Based on the assessment carried out within this ES chapter, the Proposed Project is not expected to have an unacceptable impact on highway safety or result in any severe residual cumulative impacts on the road network with the proposed mitigation in place. This is demonstrated within Section 7.9 of this chapter, as well as within **Application Document 6.2.2.13 Part 2 Suffolk Chapter 13 Suffolk Onshore Scheme Inter-Project Cumulative Effects**.
Within this context, paragraph 117 states that applications for development should: *"- give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;* *- address the needs of people with disabilities and reduced mobility in relation to all modes of transport;* *- create places that are safe, secure and attractive - which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;* *- allow for the efficient delivery of goods, and access by service and emergency vehicles; and* *- be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations."*	This traffic and transport assessment presented in this chapter (Section 7.9) includes an assessment of severance, pedestrian delay, non-motorised user amenity, fear and intimidation, driver delay, road safety, hazardous/large loads and Public Rights of Way (PRoW) diversions and closures in accordance with the 2023 Institute of Environmental Management and Assessment (IEMA) Guidelines for the Environmental Assessment of Traffic and Movement (IEMA, 2023). PRoW and national/regional walking and cycling routes will be managed where required to ensure that these routes remain safe, secure and attractive for pedestrians and cyclists to avoid any conflicts. Further details are set out in **Application Document 7.5.9.1 – Outline PRoWMP – Suffolk**. The proposed access points and internal haul roads have been designed to accommodate construction vehicles (including large goods and servicing vehicles) as well as emergency

NPPF section	Where this is covered in the ES
	vehicles. Further details are set out within **Application Document 7.5.1.1 – Outline CTMTP – Suffolk**. The proposed car park for construction workers within the site compound will include EV charging facilities to enable charging of plug-in and other ultra-low emission vehicles.
As outlined in Paragraph 118, *"all developments that will generate significant amounts of movement should be required to provide a travel plan, and the application should be supported by a vision-led transport statement or transport assessment so that the likely impacts of the proposal can be assessed and monitored."*	The Proposed Project is not expected to generate a significant amount of movements during the operational phase and an Operational Travel Plan is not therefore required. However, **Application Document 7.5.1.1 – Outline CTMTP – Suffolk** includes measures to reduce/manage construction phase staff movements. This ES chapter includes the components which typically form part of a Transport Assessment (TA) as demonstrated by the Transport Assessment Note (TAN) held in **Application Document 6.3.2.7.A Appendix 2.7.A Transport Assessment Note**.

National Planning Practice Guidance

7.2.9 The Government's National Planning Practice Guidance: Travel Plans, Transport Assessments and Statements (Department for Levelling Up, Housing and Communities and Ministry of Housing, 2014) provides advice on when a TA or a Transport Statement is required, and what they should contain. The most relevant paragraphs are summarised below:

- Paragraph 002 states that:

  "Travel Plans, Transport Assessments and Statements are all ways of assessing and mitigating the negative transport impacts of development in order to promote sustainable development. They are required for all developments which generate significant amounts of movements";

- Paragraphs 004 and 005 state that:

  "Transport Assessments and Statements are ways of assessing the potential transport impacts of developments (and they may propose mitigation measures to promote sustainable development. Where that mitigation relates to matters that can be addressed by management measures, the mitigation may inform the preparation of Travel Plans)";

- Paragraph 006 states that TAs:

  "Support national planning policy which sets out that planning should actively manage patterns of growth in order to make the fullest possible use of public transport, walking and cycling, and focus significant development in locations which are or can be made sustainable";

- Paragraph 007 states that TAs should be:

  "Established at the earliest practicable possible stage of a development proposal" and *"be tailored to particular local circumstances".* In addition, they should *"be brought forward through collaborative ongoing working between the local planning authority/transport authority, transport operators, rail network operators, Highways Agency* [now National Highways] *where there may be implications for the strategic road network and other relevant bodies*"; and

- Paragraphs 013 to 015 provide further details of when a TA is required, how the need and scope of a TA should be established and what information should be included.

7.2.1 As agreed with SCC Highways, **Application Document 6.3.2.7.A Appendix 2.7.A Transport Assessment Note** has been prepared to identify where the information that would typically form part of a standalone TA can be found in the various chapters and reports that have been prepared for the Suffolk Onshore Scheme. This approach is designed to reduce repetition between documents. This shows that the majority of the information that would typically be contained within a standalone TA is set out within this chapter, with the remaining information contained in other documents such as **Application Document 7.5.1.1 Outline CTMTP – Suffolk** and **Application Document 7.5.9.1 Outline PRoWMP – Suffolk**. Nonetheless, **Application Document 6.3.2.7.A Appendix 2.7.A Transport Assessment Note** includes further information where necessary, including in response to feedback received from National Highways.

Local Planning Policy

7.2.2 The Suffolk Onshore Scheme (refer to **Application Document 2.2.2 Suffolk Location Plan**) lies entirely within the jurisdiction of SCC at a county level, and East Suffolk Council (ESC) at a district level. County and local planning policy that is relevant to a study of traffic and transport, and has informed the assessment of effects in this chapter, are as follows:

- Suffolk's Local Transport Plan (2011-2031) (Suffolk County Council, 2011); and
- East Suffolk Council – Suffolk Coastal Local Plan (2020) (East Suffolk Council, 2020).

Suffolk's Local Transport Plan (2025 – 2040)

7.2.3 The Local Transport Plan was prepared by SCC and includes the following vision for the future of transport across the county up to 2040:

"In 2040, Suffolk's transport emissions will have reached net zero because a connected and integrated network of sustainable transport solutions will have boosted economic growth and opportunities for us and our businesses. We will be healthier, happier, and our quality of life will be significantly improved through place-based enhancements that are designed to enable us to thrive."

7.2.4 The document outlines four themes that provide the context within which the vision will be realised, and the policies and interventions will be developed to 2040:

- decarbonisation of transport;
- a strong, sustainable and fair economy;
- health, wellbeing and social inclusion; and
- creating better places.

7.2.5 The Local Transport Plan (LTP) recognises the potential of promoting transport systems with the aim of reducing carbon emissions. In addition, the LTP supports the County's Corporate Strategy to meet the following objectives:

- strengthening Suffolk's economy;
- providing value for money for the Suffolk taxpayer;
- protecting and enhancing Suffolk's environment; and
- promoting and supporting the health and wellbeing of all people in Suffolk.

7.2.6 The key measures proposed within the Implementation Plan are region, mode, and route specific and both support and are supported by other policies and strategies across Suffolk.

Local Plans

7.2.7 The Suffolk Onshore Scheme (refer to **Application Document 2.2.2 Suffolk Location Plan**) lies within the jurisdiction of (ESC). Local planning policy for ESC consists of two parts; the Suffolk Coastal Local Plan (East Suffolk Council, 2020) and the Waveney Local Plan (Waveney District Council, 2019). The Suffolk Onshore Scheme lies within the Suffolk Coastal District. Local Plan policies that are relevant to traffic and transport assessment matters and have been considered as part of this chapter, or the supporting management plans, are detailed in Table 7.3.

Table 7.3 Local planning policies relevant to traffic and transport

Suffolk Coastal Local Plan - Policy	Where this is covered in the ES
SCLP7.1: Sustainable Travel *Development proposals should be designed from the outset to incorporate measures that will encourage people to travel using non-car modes to access home, school, employment, services and facilities.* *Development will be supported where:* *a) Any significant impacts on the highways network are mitigated;* *b) It is proportionate in scale to the existing transport network;*	This policy is not considered to be applicable to this ES assessment which assesses the construction and decommissioning phases of the Proposed Project, where construction workers will predominantly travel by car. Nevertheless, sustainable travel will be promoted for usage by construction staff travelling to/from the Proposed Project where practicable. Measures relating to construction workers are identified within **Application Document 7.5.1.1 – Outline CTMTP – Suffolk**.

Suffolk Coastal Local Plan - Policy	Where this is covered in the ES
c) All available opportunities to enable and support travel on foot, by cycle or public transport have been considered and taken; *d) It is located close to, and provides safe pedestrian and cycle access to services and facilities;* *e) It is well integrated into and enhances the existing cycle network including the safe design and layout of new cycle routes and provision of covered, secure cycle parking;* *f) It is well integrated into, protects and enhances the existing pedestrian routes and the public rights of way network;* *g) It reduces conflict between users of the transport network including pedestrians, cyclists, users of mobility vehicles and drivers and does not reduce road safety; and* *h) The cumulative impact of new development will not create severe impacts on the existing transport network.* *Development will be expected to contribute to the delivery of local sustainable transport strategies for managing the cumulative impacts of growth. Opportunities to improve provision of or access to public transport, in rural and urban areas will be supported. Proposals for new development that would have significant transport implications should be accompanied by a Travel Plan. A Travel Plan will be required for proposals for:* *i) New large-scale employment sites;* *j) Residential development of 80 or more dwellings; and* *k) A development that when considered cumulatively with other developments, is likely to have a severe impact on the local community or road network. In consultation with the Highway Authority, the scale, location and nature of development will be considered in determining how the transport impacts of development should be assessed. As indicative thresholds a Transport Statement will be required for development of 50 - 80 dwellings and a Transport Assessment and Travel Plan will be required for developments of over 80 dwellings.* *Non-residential development will be considered on a case-by-case basis dependent on the volume of movements anticipated with the use proposed.*	In relation to part g), the effects of the development will be largely restricted to the construction period. The proposed mitigation set out within Sections 7.8 and 7.10 of this chapter as well as within **Application Document 7.5.1.1 – Outline CTMTP – Suffolk** and **Application Document 7.5.9.1 – Outline PRoWMP – Suffolk** includes demand management measures to reduce the impact of the Proposed Project on transport infrastructure (minimising potential conflicts with other users), as well as measures to safely manage any potential interactions between construction vehicles and PRoW users within the Order Limits. In response to part h), an assessment of cumulative impacts is set out within **Application Document 6.2.2.13 Part 2 Suffolk Chapter 13 Suffolk Onshore Scheme Inter-Project Cumulative Effects**. Given that the proposal has impacts largely confined to the construction phase, the measures typically included within a Travel Plan are provided within **Application Document 7.5.1.1 – Outline CTMTP – Suffolk**, which includes measures to manage the impact of staff travel.

Suffolk Coastal Local Plan - Policy	Where this is covered in the ES
Policy SCLP7.2: Parking Proposals and Standards: Traffic Management *The Council will work with partners to ensure that vehicle parking provision is protected and managed to support the economy and sustainable communities. The level of parking provision required will depend on the location, type and intensity of use. Proposals that minimise congestion, encourage sustainable transport modes and reduce conflict between road users across the plan area will be supported. Proposals involving vehicle parking will be supported where they take opportunities to make efficient use of land and they include:* *a) The provision of safe, secure, and convenient off-street parking of an appropriate size and quantity including addressing the need for parking or secure storage for cars, cycles and motorcycles, and where relevant, coaches and lorries;* *b) Opportunities to reduce the recognised problem of anti-social parking or potential problems that may arise which impacts the quality of life or vitality of an area for residents and visitors;* *c) Appropriate provision for vehicle charging points and ancillary infrastructure associated with the increased use of low emission vehicles; and* *d) The incorporation of sustainable drainage systems (SuDS), permeable surfacing materials* *and means of protecting water quality in drainage schemes should be ensured.* *Where proposals involve public transport improvements or redevelopments, the Council will encourage the provision of Park & Ride facilities, if appropriate. Proposals will be expected to have regard to the parking standards contained in the Suffolk Guidance for Parking (including subsequent revisions), excluding the elements of the Guidance related to 'Residential Parking Design', unless other local planning considerations indicate otherwise. Proposals should also accord with both the East Suffolk Area Parking Plan and the Suffolk Parking Management Strategy, or Neighbourhood Plans for the area where applicable.*	The Suffolk Guidance for Parking is not considered to be applicable to the construction phase of the Proposed Project. An appropriate level of car parking provision will be provided for construction workers within the main construction compound to meet the expected level of peak parking demand whilst minimising the risk of 'overspill' parking on the surrounding highway network. Further details on parking are provided within **Application Document 7.5.1.1 – Outline CTMTP – Suffolk**. Car parking will be contained within the construction compounds on the basis that all forecast demand would be contained within each compound site and away from the public highway. The compounds will include dedicated spaces for construction vehicles and minibuses, which will assist in promoting sustainable travel between different parts of the site.

Additional Guidance

7.2.8 SCC has prepared a 'Public Rights of Way and Green Access' Supplementary Guidance Document (Suffolk County Council, 2024) which outlines how, in principle, the Council:

- expects promoters of infrastructure projects to consider the importance of, and impacts upon, PRoW or Green Access when developing their projects;
- considers that PRoW and Green Access need to be treated in a different way to other types of highways, because of their unique characteristics and status; and
- expects that infrastructure scheme promoters will mitigate and compensate for the adverse impact of construction and operation of their schemes, in accordance with the mitigation hierarchy set out within NPS EN-1 (Department of Energy and Climate Change, 2023).

7.2.9 The Proposed Project has been designed to minimise impacts on PRoW as far as practicable and details on management and mitigation relating to PRoW are set out within **Application Document 7.5.9.1 Outline PRoWMP – Suffolk**. An assessment of PRoW Diversions and Closures during the construction phase is also set out within this chapter.

7.3 Scoping Opinion and Consultation

Scoping

7.3.1 A Scoping Report for the Proposed Project was issued to the Planning Inspectorate (PINS) on 24 October 2022 (**Application Document 6.14 Environmental Scoping Report 2022**) and a Scoping Opinion (Planning Inspectorate, 2022) was received from PINS, on behalf of the SoS on 1 December 2022 (**Application Document 6.15 Scoping Opinion 2022**).Table 7.4 sets out the comments raised in the Scoping Opinion and how these have been addressed in this ES. The Scoping Opinion takes account of responses from prescribed consultees as appropriate. **Application Document 6.3.1.6.A Appendix 1.6.A Response to Scoping Opinion** provides responses to the comments made by the prescribed consultees at scoping stage and how each comment has been considered.

Table 7.4 Comments raised in the Scoping Opinion

ID	Inspectorate's comments	Response
3.7.1	*Traffic and Transport effects –operational and maintenance phase* The Applicant proposes to scope out transport effects on roads and users associated with the operational phase and maintenance activities on the basis that vehicle movements associated with the operation of the site and maintenance requirements are anticipated to be infrequent and low. The Inspectorate	Noted, traffic and transport effects associated with the operational and maintenance phase are scoped out of the assessment. Details of the likely number and type of vehicles required during the operational and maintenance phase of the development are provided in Section 7.9. In summary, this is likely to include up to four daily car/Light Goods Vehicle (LGV) trips associated

ID	Inspectorate's comments	Response
	agrees that on this basis, this matter can be scoped out from further assessment. The ES should provide a description of the likely number and type of vehicles required during all phases of development to support this conclusion.	with two staff members who will be on-site or on-call at all times for the proposed Saxmundham Converter Station. In addition, there will be monthly substation inspections and annual maintenance visits for Friston Substation and Saxmundham Converter Station which would be carried out using LGVs and potentially HGVs on rare occasions where equipment needs to be replaced.
3.7.2	*Hazardous loads – operational and maintenance phase* The Applicant proposes to scope out impacts from hazardous and dangerous loads during the operational and maintenance phase on the basis that few hazardous loads are anticipated. The Inspectorate agrees to scope this matter out but would expect the ES to provide a reasoned justification as to why such loads are likely to be infrequent during the operation and maintenance phase.	Noted, hazardous loads during the operational and maintenance phase are scoped out of the assessment, as HGVs (including any hazardous/large loads) are expected to rarely access the site during this phase (see Section 7.4).
3.7.3	*Driver delay on PRoW and National/regional walking and cycling routes – construction and decommissioning* The Inspectorate agrees to scope this matter out on the basis that PRoW and national and regional walking and cycling routes are not utilised by drivers limiting the impact pathway.	Noted, this is scoped out of the assessment.
3.7.4	*Decline in road safety on PRoW and national/regional walking and cycling routes – construction and decommissioning* The Inspectorate agrees to scope this matter out on the basis that PRoW and national and regional walking and cycling routes are not utilised by drivers limiting the impact pathway.	Noted, this is scoped out of the assessment.
3.7.5	*Additional hazardous loads on PRoW and national/regional walking and cycling routes – construction and decommissioning* The Inspectorate agrees to scope this matter out on the basis that PRoW and national and regional walking and cycling routes are not utilised by drivers limiting the impact pathway.	Noted, this is scoped out of the assessment.

ID	Inspectorate's comments	Response
3.7.6	*PRoW diversions or closures on road links, road junctions and national/regional walking and cycling routes – construction and decommissioning* The Inspectorate agrees that significant effects on road links, road junctions and national/regional walking and cycling routes as a result of closures or diversions of PRoW during construction and decommissioning are unlikely and this matter can be scoped out.	Noted, this is scoped out of the assessment.
3.7.7	*Study area* Whilst it is acknowledged that the study area is yet to be confirmed, this should be informed by the extent of the affected road network.	Noted. The study area reflects the extent of the affected road network and has been agreed with SCC Highways.

7.3.2 Following the feedback received in the Scoping Opinion, a transport scoping meeting was held with SCC Highways on 9 June 2023 to provide the local highway authority with a project update and to agree the scope of the Traffic and Transport chapter and the approach to the supporting deliverables. The meeting minutes are provided in **Application Document 6.3.2.7.B Appendix 2.7.B Traffic and Transport Thematic Meeting Minutes**.

7.3.3 In terms of feedback received from National Highways at the time of the Scoping Opinion, the following comment was made with respect to the Suffolk Onshore Scheme:

"In respect to this proposal the A14 which we look after is crossed or could be potentially affected by construction traffic. It is unlikely that once the proposed transmission line is complete that there will be any impact upon the SRN [Strategic Road Network] we do not object to the principle of the electricity transmission network proposed by the Sea Link.

We appreciate the scheme is at an early stage of design and construction is some way off. We will need to agree how and where cables cross our network, you will also need to assess construction traffic impact upon the network and if necessary, mitigate, at this stage it is difficult to comment other than in broad principals as it will depend on where, when and how much traffic is generated by the construction activity.

I note that there are other proposals in the area, notably Sizewell, East Anglia Green, management of the cumulative construction impacts of these projects could be an issue as they follow similar timelines and affect similar geographical locations."

7.3.4 The potential for the Suffolk Onshore Scheme to impact the SRN is reviewed within **Application Document 6.3.2.7.A Appendix 2.7.A Transport Assessment Note**. This demonstrates that the Suffolk Onshore Scheme is not expected to result in any impacts on the SRN during the construction or operational period. For context, the nearest portion of the SRN to the study area is the Seven Hills Interchange, between the A12 and A14, which is located some 25 km to the southwest of the study area (as measured from the A12 junction with the A1094). No instances of cables crossing the SRN are proposed, and no accesses will be provided from/on the SRN.

Statutory Consultation

7.3.5 Statutory Consultation for the Proposed Project took place between 24 October and 18 December 2023. A further Targeted Consultation exercise, on the main changes to the Proposed Project introduced after the 2023 statutory consultation, was undertaken between 8 July and 11 August 2024. In addition, a project update and a local engagement exercise took place between 22 November 2024 and 12 January 2025, focusing on design amendments made following Targeted Consultation. A summary of relevant feedback received during consultation relating to traffic and transport is provided below. Further details about how consultation responses have informed the assessment are provided in **Application Document 5.1 Consultation Report** and **Application Document 5.1.9 Appendix H Summary 2023 Response**.

7.3.6 A summary of the feedback received from SCC is as follows:

- A concern has been raised regarding the use of the B1121 to access the converter station site, as well as the potential use of the B1119. Section 7.9 of this Chapter includes details on the use of the access proposals and forecast movements along this route. **Application Document 7.5.1.1 Outline CTMTP – Suffolk** provides further details of construction routing, vehicle types and any constraints along this route. It should be noted that construction traffic travelling to/ from the access on the B1119 will be limited to mobilisation works only, where there will be a limited number of construction vehicles (fewer than ten HGVs per day).
- A concern has been raised regarding working hours including Sundays and bank holidays. Further details of Sunday/ bank holiday working arrangements and the matter of assessment for working hours is set out within Section 7.9 of this Chapter. **Application Document 7.5.1.1 Outline CTMTP – Suffolk** also provides further details on any restrictions to be imposed to works on Sundays/ bank holidays.
- Further information has been requested on how each of the accesses will be used, including secondary routes. These details are set out within Section 7.9 of this Chapter, as well as within **Application Document 6.3.2.7.A Appendix 2.7.A Transport Assessment Note** and **Application Document 7.5.1.1 Outline CTMTP – Suffolk**.
- In terms of Abnormal and Indivisible Loads, there will be a requirement to implement temporary traffic management and to engage with the highway authority including with respect to the capacity of structures; particularly the rail overbridge on the B1121 Main Road. This is acknowledged within **Application Document 7.5.1.1 Outline CTMTP – Suffolk** where further details are provided.
- In terms of PRoW and open access, it has been requested that sufficient land is provided to offset impacts within the Order Limits, including to accommodate any proposed diversions so that access can be retained to transport links. This is considered within **Application Document 7.5.9.1 Outline PRoWMP – Suffolk**, where PRoW diversions will be provided where necessary, within the Order Limits, to bypass any proposed closures and to retain access.
- A concern has been raised regarding cumulative traffic impacts. These are considered within Section 7.7 of this Chapter and assessed within **Application Document 6.2.2.13 Part 2 Suffolk Chapter 13 Suffolk Onshore Scheme Inter-Project Cumulative Effects**. This has been based on **Application Document 6.4.2.13.1 Suffolk Onshore Scheme Short List Developments**, which includes more than 25 developments including Sizewell C Nuclear Power Station, East Anglia

ONE North Offshore Windfarm and East Anglia TWO Offshore Windfarm. Further details on the schemes included as part of the cumulative assessment are also provided within **Application Document 6.3.2.7.A Appendix 2.7.A Transport Assessment Note**.

7.3.7 National Highways also provided comments regarding the Suffolk Onshore Scheme on 12 December 2023 which was followed by further written feedback on 21 October 2024 to agree an approach with respect to the items raised. Details of these comments and how these have been both agreed with National Highways and subsequently addressed are set out within **Application Document 6.3.2.7.A Appendix 2.7.A Transport Assessment Note**.

7.3.8 The proposed assessment methodology set out in Section 7.4 has continued to be developed through discussions with the with the local highway authorities.

Further Engagement

7.3.9 A meeting was held with SCC Highways in December 2023 to agree the scope of the traffic surveys. At the request of SCC, the proposed survey specification was subsequently updated to include the A1094/Sternfield Road/Church Road junction as an additional survey location, as well as the B1069 Leiston Road/B1353 Aldringham Lane and B1122 Aldeburgh Road/B1353 Aldringham Lane junctions. The specification was also updated to conduct the Automatic Traffic Counts (ATCs) over a 14-day period. The surveys were subsequently carried out in January and February 2024 based on the agreed (updated) specification, avoiding the February half-term period. The traffic count locations are shown on **Application Document 6.4.2.7.5 Traffic Count Locations**.

7.3.10 Two further thematic meetings were held with SCC and ESC following statutory consultation, as part of further stakeholder engagement specific to this ES chapter. The meeting minutes associated with these meetings are held in **Application Document 6.3.2.7.B Appendix 2.7.B Traffic and Transport Thematic Meeting Minutes**. A summary of the topics covered is set out below.

7.3.11 In February 2024, a meeting was held with SCC and ESC to provide a project update, run through statutory consultation feedback, and to cover the deliverables to be produced as part of the DCO submission.

7.3.12 In July 2024, a meeting was held with SCC and ESC to review the proposed design changes to the Suffolk Onshore Scheme as part of the targeted consultation period between 8 July and 11 August 2024, including potential implications to the traffic and transport assessment. The meeting was also used to cover the proposed scope of **Application Document 7.5.9.1 – Outline PRoWMP – Suffolk** and the feedback previously received on PRoW as part of the statutory consultation.

7.3.13 Further consultation was held with National Highways, as recorded by email on 21 October 2024 to agree the approach for addressing their comments as detailed within **Application Document 6.3.2.7.A Appendix 2.7.A Transport Assessment Note**.

Summary of Scope of Assessment

7.3.14 This section details what aspects have been scoped in and scoped out of the assessment through the scoping process and consultation with stakeholders.

Aspects scoped into the assessment

7.3.15 The scope of this assessment covers temporary impacts relating to traffic and transport during the construction and decommissioning stages of the Proposed Project.

7.3.16 In accordance with the 2023 IEMA Guidelines for the Environmental Assessment of Traffic and Movement (IEMA, 2023), the following criteria have been considered in this assessment:

- Severance of communities;
- Pedestrian delay (incorporating delay to all non-motorised users);
- Non-motorised user amenity;
- Fear and intimidation on and by road users;
- Road vehicle driver and passenger delay;
- Road user and pedestrian safety; and
- Hazardous/large loads.

7.3.17 In addition, the following criterion has been considered in this assessment for the construction and decommissioning stages of the Proposed Project:

- PRoW diversions and closures (both temporary and permanent effects).

Aspects scoped out of the assessment

7.3.18 As identified in Table 7.4, traffic and transport effects associated with the operational and maintenance phase are scoped out of the assessment, on the basis that:

- vehicle movements associated with the operation of the site and maintenance requirements are anticipated to be infrequent and low; and
- any PRoW diversions required during the construction phase will either remain in place permanently (subject to agreement with SCC) or will otherwise be removed with the original PRoW reinstated (if preferred by SCC).

7.3.19 In addition, an assessment of the railway network has been scoped out from this Traffic and Transport chapter given that:

- Trenchless methods will be employed when installing cables to avoid any potential impacts on the railway.
- The use of any existing level crossings by construction vehicles will be managed to ensure rail and road user safety. This is expected to only include the level crossing on the B1122 (circa 550 m east of the A12) which will only be used by the transformer AIL vehicle and managed accordingly (road closure).

7.4 Approach and Methodology

7.4.1 **Application Document 6.2.1.5 Part 1 Introduction Chapter 5 EIA Approach and Methodology** sets out the overarching approach which has been used in developing the ES. This section describes the technical methods used to determine the baseline conditions, the sensitivity of the receptors and the magnitude of effects and sets out the significance criteria that have been used for the traffic and transport assessment.

Guidance Specific to the Traffic and Transport Assessment

7.4.2 The traffic and transport assessment has been carried out in accordance with the following good practice guidance documents:

- Government's National Planning Practice Guidance; Travel Plans, Transport Assessments and Statements (Department for Levelling Up, Housing and Communities and Ministry of Housing, 2014); and
- The Institute of Environmental Management and Assessment (IEMA) Guidelines for the Environmental Assessment of Traffic and Movement (IEMA, 2023), which provides guidance on examining the environmental impacts of developments in terms of traffic and transportation.

Baseline Data Gathering and Forecasting Methods

7.4.3 The traffic and transport baseline environment conditions described in Section 7.7 have been informed by the following data sources and site surveys:

- Baseline traffic data for the surrounding highway network, based on Automatic Traffic Counts (ATCs) and Manual Classified Counts (MCCs) carried out in January and February 2024 (see **Application Document 6.4.2.7.5 Traffic Count Locations** for the locations of these counts);
- Traffic growth calculated using National Road Traffic Forecast (NRTF) growth factors, with National Transport Model (NTM) adjustments applied within the Trip Ends Model Program (TEMPro) Version 8.1 (Department for Transport, 2023) utilising National Trip Ends Model (NTEM) dataset v8.0;
- Personal Injury Accident (PIA) data from SCC (Suffolk County Council, 2024) for the most recently available five-year period and covering the agreed study area, shown on **Application Document 6.4.2.7.1 Traffic and Transport Study Area in Suffolk**;
- Collision rates calculated from the Department for Transport's (DfT's) Reported road collisions, vehicles and casualties tables for Great Britain (Department for Transport, 2024);
- Ordnance Survey (OS) Base Mapping to ascertain an accurate geographical representation of the areas in the vicinity of the Proposed Project;
- Local travel and network information gathered from various online sources including local public transport operators and SCC's Definitive Map and Statement of PRoW (Suffolk County Council, 2024);
- For cumulative schemes, planning application documents held on the PINS Examination Library (e.g. for Nationally Significant Infrastructure Projects) or the planning register for the relevant local planning authority (e.g. ESC or Mid Suffolk Council) have informed **Application Document 6.2.2.13 Part 2 Suffolk Chapter 13 Suffolk Onshore Scheme Inter-Project Cumulative Effects**. Further details of the schemes and documents reviewed are set out within **Application Document 6.3.2.7.A Appendix 2.7.A Transport Assessment Note**;
- The construction staff distribution (see **Application Document 6.3.2.7.E Appendix 3.2.E Construction Worker Trip Distribution**) has been informed by 2021 Census data (TS060 – Industry dataset) (Office for National Statistics, 2021) based on the number of existing residents who live within a 60-minute catchment of the site and work within the construction industry. Whilst it is acknowledged that the dataset was

collected during the COVID-19 pandemic, this represents the latest information currently available (as opposed to using information from the 2011 Census) and is considered to be appropriate for identifying the districts where construction workers live rather than to estimate travel patterns; and

- Route planning software, such as Google Maps (Google, 2024), used to inform the review of the most direct and functional routes to the Proposed Project (in combination with the above).

7.4.4 It should be noted that no surveys of PRoW have been carried out as the proposed management and mitigation relating to PRoW as set out within **Application Document 7.5.9.1 Outline PRoWMP – Suffolk** will be put in place irrespective of existing usage levels, to retain safe PRoW access for all users. The proposed scope of **Application Document 7.5.9.1 Outline PRoWMP – Suffolk** was also reviewed during the meeting held with SCC and ESC in July 2024 which did not include a requirement to carry out any PRoW surveys.

Assessment Criteria

7.4.5 The assessment criteria for traffic and transport are previously identified in Section 7.3 and are in accordance with the 2023 IEMA Guidelines for the Environmental Assessment of Traffic and Movement (IEMA, 2023).

7.4.6 The 2023 IEMA guidelines set out two ‘rules of thumb’ in identifying potential links for analysis:

- Rule 1: include highway links where traffic flows will increase by more than 30% (or the number of HGVs will increase by more than 30%); and
- Rule 2: include any other specifically sensitive areas (e.g. accident black spots, conservation areas, hospitals, links with high pedestrian flows etc.) where traffic flows have increased by 10% or more.

7.4.7 The above has been used as a starting point for the assessments and further details of the adopted criteria (which vary depending on the type of assessment) are set out further below in Table 7.10, Table 7.11 and Table 7.12. It should also be noted that a negligible magnitude of change has been assigned where there is expected to be fewer than 30 additional vehicle trips per hour during each of the assessment periods as a result of the Suffolk Onshore Scheme, irrespective of the proportional increase in traffic flows.

7.4.8 Notwithstanding the above, the exact criteria varies by assessment type (see Table 7.10, Table 7.11 and Table 7.12 further below) and the assessment of Hazardous/Large Loads considers the likelihood of road links and junctions being used by Abnormal Indivisible Loads (AILs) or Hazardous Loads without reference to percentage increases.

7.4.9 In addition to the above, potential transport-related effects have also been considered by other topics, including the following examples:

- Potential effects of construction traffic on sites of ecological and nature conservation value are considered in **Application Document 6.2.2.2 Part 2 Suffolk Chapter 2 Ecology and Biodiversity**;
- Potential effects of construction traffic on air quality are considered in **Application Document 6.2.2.8 Part 2 Suffolk Chapter 8 Air Quality**;

- Potential effects of construction traffic on noise and vibration are considered in **Application Document 6.2.2.9 Part 2 Suffolk Chapter 9 Noise and Vibration**;
- Potential effects of construction traffic on tourists, visitor attractions and other businesses are considered in **Application Document 6.2.2.10 Part 2 Suffolk Chapter 10 Socio-economics, Recreation and Tourism**; and
- Potential effects of any PRoW closures/diversions on the amenity of PRoW are considered in **Application Document 6.2.2.1 Part 2 Suffolk Chapter 1 Landscape and Visual** and **Application Document 6.2.2.10 Part 2 Suffolk Chapter 10 Socio-economics, Recreation and Tourism**.

7.4.10 The type of traffic which is anticipated to be generated by the Suffolk Onshore Scheme has been categorised as follows: primarily general traffic, LGVs, HGVs and AILs. The vehicle routing and movements associated with the Proposed Project's construction have been considered and discussed through consultation with SCC and ESC.

7.4.11 The road link and road junction receptors which may be impacted have been identified based on the locations and volumes of the proposed construction traffic i.e. the forecast increase in vehicle movements. This has been completed by identifying the percentage increases in vehicular activity along the identified construction routes when compared to baseline traffic count data (factored up to the future baseline year of 2028 which represents the peak period of construction for the Suffolk Onshore Scheme based on total annual forecast construction traffic movements) for road links and junctions within the traffic and transport study area.

7.4.12 The walking and cycling route receptors (including PRoW) have been identified based on the locations where these pass through the Order Limits and may experience interactions with the Proposed Project.

7.4.13 Typically, when assessing the impacts of traffic effects, there are a range of particular groups and locations which may be sensitive to changes in traffic conditions compliant with the criteria previously outlined. These are outlined in the 2023 IEMA Guidance (IEMA, 2023) as 'Affected Parties', as follows:

- People at home;
- People at work;
- Sensitive and/or vulnerable groups (including young age, older age, income, health status, social disadvantage and access and geographic factors);
- Locations with concentrations of vulnerable users (e.g. hospitals, places of worship and schools);
- Retail areas;
- Recreational areas;
- Tourist attractions;
- Collisions clusters and routes with road safety concerns; and
- Junctions and highway links at (or over) capacity.

7.4.14 As a general rule, the forecast changes to baseline (magnitude of change), the relative value/sensitivity/importance of the affected receptor and the scale, nature and significance of the effect (consequence) should be considered. In addition, the

anticipated effect should be classified as short-term, medium-term, or long-term, as well as permanent or temporary.

7.4.15 To calculate the trip distribution of workers travelling to and from the proposed construction compounds each day, a simple gravity model has been developed based on 2021 Census data (representing the latest information currently available) for construction workers living within a 60-minute catchment area of the site. In view of the COVID-19 pandemic, this dataset has only been used to identify the districts where construction workers live rather than to estimate travel patterns.

7.4.16 Assessments have been undertaken for the peak period of construction (as agreed with SCC), which is 2028 for the Suffolk Onshore Scheme based on total annual forecast construction traffic movements, although daily access peaks have also been considered for alternative years where necessary to provide a robust assessment. Construction traffic associated with the Suffolk Onshore Scheme has been distributed onto the local highway network to calculate the resultant percentage increases on each link and junction. The assessments include the weekday peak hours, as well as Saturday lunchtime (12pm-1pm), 12-hour weekday and 24-hour average day periods.

7.4.17 Baseline traffic flows have been factored up to the identified peak year of construction (2028) by adopting growth factors derived from TEMPro v8.1 (Department for Transport, 2023) utilising NTEM dataset v8.0 for the relevant areas impacted by the Suffolk Onshore Scheme. Meanwhile, the peak construction traffic flows have been derived by analysing construction traffic data and construction programmes provided by Design Engineers.

Sensitivity of traffic receptors

7.4.18 The general criteria for defining the importance or sensitivity of receptors are set out in Table 7.5, which applies to the assessments of Severance, Pedestrian Delay, Non-Motorised User Amenity and Fear & Intimidation. Key factors influencing this include:

- the value of the receptor or resource based upon empirical and/or intrinsic factors, for example considering any legal or policy protection afforded which is indicative of the receptor or resources' value internationally, nationally, or locally; and
- the sensitivity of the receptor or resource to change, for example is the receptor likely to acclimatise to the change. This will consider legal and policy thresholds which are indicative of the ability of the resources to absorb change.

Table 7.5 Categorising the overall sensitivity of receptors (Severance, Pedestrian Delay, Non-Motorised User Amenity, and Fear and Intimidation)

Receptor sensitivity	Receptor examples
Very High	**Road links and junctions**: More than two sensitive uses present (e.g. schools, play areas, care/retirement homes, hospitals, places of worship, historic buildings) and/or a primarily residential street with properties on both sides of the carriageway. **Walk/cycle links including PRoW**: Heavily trafficked highway with on-road pedestrian/cycle route.

Receptor sensitivity	Receptor examples
High	**Road links and junctions**: Two sensitive uses present (e.g. schools, play areas, care/retirement homes, hospitals, places of worship, historic buildings) and/or a large number of residential properties present. **Walk/cycle links including PRoW**: Lightly trafficked highway with on-road pedestrian/cycle route.
Medium	**Road links and junctions** (at least one of the following): - One sensitive use present (e.g. school, play area, care/retirement home, hospital, place of worship, historic building). - Many residential properties with direct frontage to highway link being used as construction route. - Pedestrians using footways, PRoW and/or crossings on highway link. - Cyclists using on-road designated cycle routes along highway link. **Walk/cycle links including PRoW**: Heavily trafficked highway with off-road pedestrian/cycle route.
Low	**Road links and junctions** (at least one of the following): - Few residential properties with direct frontage to the highway link being used as a construction traffic route. - Workplaces with direct frontage to highway link being used as construction route. - Cyclists using off-road designated cycle routes along highway link. **Walk/cycle links including PRoW**: Lightly trafficked highway with off-road pedestrian/cycle route.
Negligible	**Road links and junctions**: No receptors along link. **Walk/cycle links including PRoW**: Pedestrian/cycle route not running alongside highway.

7.4.19 The general criteria for defining the importance or sensitivity of road link and road junction receptors for the assessment of Driver Delay are set out in Table 7.6. This has been determined based on the queue length data provided in the baseline traffic data that was collected to inform this ES chapter (see Section 7.7 for further details).

Table 7.6 Categorising the overall sensitivity of receptors (Driver Delay)

Receptor sensitivity	Receptor examples
Very High	**Road junctions**: High queuing (10+ vehicles) on 3+ arms of the junction during the weekday peak hours. For example, a busy roundabout or signalised junction within a built-up area.

Receptor sensitivity	Receptor examples
	Road links: Not applicable (captured by assessment of road junctions where applicable).
High	**Road junctions**: High queuing (10+ vehicles) on 1-2 arms of the junction OR moderate queuing (5-9 vehicles) on 3+ arms of the junction during the weekday peak hours. For example, a busy roundabout or signalised junction outside of a built-up area. **Road links**: High queuing (10+ vehicles) on this link, on the approach to junction(s) within the study area.
Medium	**Road junctions**: Moderate queuing (5-9 vehicles) on 1-2 arms of the junction OR low queuing (3-4 vehicles) on 3+ arms of the junction. For example, a roundabout or signalised junction outside of a built-up area or a busy priority junction within a built-up area. **Road links**: Moderate queuing (5-9 vehicles) on this link, on the approach to junction(s) within the study area.
Low	**Road junctions**: Low queuing (3-4 vehicles) on 1-2 arms of the junction. For example, a priority junction outside of a built-up area. **Road links**: Low queuing (3-4 vehicles) on this link, on the approach to junction(s) within the study area.
Negligible	**Road junctions**: Very low queuing (0-2 vehicles) on all arms of the junction. For example, a lightly trafficked priority junction. **Road links**: Very low queuing (0-2 vehicles) on this link, on the approach to junction(s) within the study area.

7.4.20 The general criteria for defining the importance or sensitivity of road link and road junction receptors for the assessment of Road Safety are set out in Table 7.7. The collision rate for road links has also been calculated and compared with national road safety statistics provided within Road Casualties for Great Britain (Department for Transport, 2024) to determine an appropriate receptor sensitivity level. These criteria have been determined based on the full Personal Injury Accident (PIA) data that was provided by SCC for the most recently available five-year period (see Section 7.7 for further details).

Table 7.7 Categorising the overall sensitivity of receptors (Road Safety)

Receptor sensitivity	Receptor examples
Very High	Road links and road junctions: 10+ collisions in five years, or more than four serious or two fatal collisions in five years.

Receptor sensitivity	Receptor examples
High	Road links and road junctions: 7-9 collisions (with up to four serious collisions and/or one fatal collision) in five years.
Medium	Road links and road junctions: 5-6 collisions (with up to two serious collisions and/or one fatal collision) in five years.
Low	Road links and road junctions: 3-4 collisions in five years (with up to one serious collision and no fatal collisions) in five years.
Negligible	Road links and road junctions: Fewer than three collisions (with no serious or fatal collisions) in five years.

7.4.21 The general criteria for defining the importance or sensitivity of road link and road junction receptors for the assessment of Hazardous/Large loads are set out in Table 7.8 based on the same full PIA data provided by SCC.

Table 7.8 Categorising the overall sensitivity of receptors (Hazardous/Large Loads)

Receptor sensitivity	Receptor examples
Very High	Road links and road junctions: More than five collisions classified as serious or fatal (or more than two fatal collisions) involving a large vehicle* in five years.
High	Road links and road junctions: 4-5 collisions classified as serious or fatal (or two fatal collisions) involving a large vehicle* in five years.
Medium	Road links and road junctions: 2-3 collisions classified as serious or fatal (or one fatal collision) involving a large vehicle* in five years.
Low	Road links and road junctions: One serious collision involving a large vehicle* in five years.
Negligible	Road links and road junctions: No serious or fatal collisions involving a large vehicle* in five years.

*for the purposes of identifying baseline sensitivity levels above, large vehicles include goods vehicles (3.5 tonnes or greater), buses, coaches, Public Service Vehicles (PSVs) and agricultural vehicles

7.4.22 The general criteria for defining the importance or sensitivity of PRoW receptors for the assessment of PRoW diversions and closures are set out in Table 7.9.

Table 7.9 Categorising the overall sensitivity of receptors (PRoW Diversions and Closures)

Receptor sensitivity	Receptor examples
Very High	Main route of excellent quality expected to be well used, with no alternative route(s) of equivalent quality available.

Receptor sensitivity	Receptor examples
High	Main route of good quality, expected to be fairly well used, with no alternative route(s) available.
Medium	Main route of good quality, expected to be fairly well used, with alternative route(s) available OR a minor route of mixed quality, expected to be lightly used, with no alternative route(s) available.
Low	Minor route of mixed quality, expected to be lightly used, with alternative route(s) available.
Negligible	Poor quality route which appears to be inaccessible, out of use or rarely used.

7.4.23 The levels of sensitivity which have been attributed to the receptors identified in Section 7.6 based on the information presented above are summarised in Section 7.7 and within **Application Document 6.3.2.7.C Appendix 2.7.C Receptor Sensitivity Levels**.

Magnitude of traffic effects

7.4.24 As identified within the 2023 IEMA guidelines (IEMA, 2023), the magnitude of each impact represents the level of change from the baseline conditions.

7.4.25 This assessment considers a range of potential effects that could be experienced during the construction stage of the Suffolk Onshore Scheme and this section identifies how magnitude has been considered for each.

7.4.26 **Severance** is defined in the 2023 IEMA guidelines as the:

"Perceived division that can occur within a community when it becomes separated by major traffic infrastructure. The term is used to describe a complex series of factors that separate people from places and other people. Severance may result from the difficulty of crossing a heavily trafficked road or a physical barrier created by infrastructure.".

7.4.27 The guidelines state that changes in traffic flow of 30%, 60% and 90% are regarded as producing 'slight', 'moderate' and 'substantial' changes in severance respectively. However, caution should be observed when applying these thresholds to very low baseline flows which are unlikely to experience severance impacts even with high percentage changes in traffic.

7.4.28 **Pedestrian Delay** (incorporating delay to all non-motorised users) is considered to be affected by the changes in volume, composition or speed of traffic, in terms of their respective impacts on the ability of pedestrians to crossroads. The assessment of pedestrian delay serves as a proxy for the delay that other modes of non-motorised users may experience when crossing roads. In general, increases in traffic levels and/or traffic speeds are likely to lead to greater increases in pedestrian delay.

7.4.29 **Non-Motorised User Amenity** is broadly defined as:

"The relative pleasantness of a journey, and is considered to be affected by traffic flow, traffic composition and pavement width/separation from traffic."

7.4.30 The guidance suggests that a tentative threshold for judging the significance of changes in non-motorised user amenity would be where the traffic flow (or HGV component) is halved or doubled.

7.4.31 **Fear and Intimidation** occurs through a combination of traffic flow, speed, proportion of HGVs and the proximity of traffic to people. These indicators are often heightened by a perceived lack of protection or buffers from the highway or through narrow or non-existent footways. The assessment considers each road on a case-by-case basis, however there are thresholds provided in the 2023 IEMA guidelines which are presented in Table 7.11.

7.4.32 **Driver Delay** is an effect cited in the 2023 IEMA guidance and relates to incremental increases in traffic (as outlined in Table 7.10). However, traffic delays are only likely to be significant when the traffic on the network surrounding the development is already at, or close to, the capacity of the system. As a further consideration, where any temporary road closures or traffic management is likely to be in place to enable the construction of the Suffolk Onshore Scheme, any additional potential delay caused by these resultant diversion routes has been reported.

7.4.33 **Road Safety** considers Personal Injury Accident (PIA) data obtained for the most recent five-year period available at junctions and links along the proposed construction traffic routes. The sensitivity of discrete areas of the highway network can then be determined following a detailed review of the baseline characteristics including the collision rate and any collision clusters. This has been used to assess whether the additional traffic during construction of the Suffolk Onshore Scheme would be likely to have a detrimental effect on road safety.

7.4.34 With regard to **Hazardous/Large Loads**, the guidance states that the transportation of dangerous or hazardous loads by road should be recognised including specialist loads that might be involved in the construction or decommissioning phases of the development. Where the number of movements is considered to be significant, risk or catastrophe analysis should be carried out to illustrate the potential for an accident and the likely effect of such an effect. Appropriate routes for abnormal load movements should be considered, with mitigation strategies to secure safe passage. Vehicles transporting gas and oil during the Proposed Project would be categorised as Hazardous Loads. There will also be the requirement for abnormal loads which are categorised as Large Loads. The assessment of HGVs has been informed by the equivalent assessment of Road Safety based on the forecast increase in HGVs.

7.4.35 In view of the above, the impacts of Hazardous/Large Loads have been considered, in the form of a qualitative risk assessment to establish the likelihood and extent of such effects. The projected impacts of the Suffolk Onshore Scheme will be measured separately, dependent upon the receptor, for the construction and decommissioning periods. **Application Document 7.5.1.1 – Outline CTMTP – Suffolk** includes details of measures that will be employed to ensure the safe vehicular transport of components to and from the Suffolk Onshore Scheme.

7.4.36 Table 7.10, Table 7.11 and Table 7.12 summarise the criteria that have been used to assess the magnitude of effect (based on increases i.e. ‘adverse’ effects), along with the thresholds that have been used to determine whether effects are considered large, medium, small or negligible. The various thresholds identified for the proportional increases in traffic flow relate to weekday peak hour flows, Saturday lunchtime flows and daily flows (whichever is highest). Within these tables, neither the sensitivity of receptors, nor the duration of effects, is taken into consideration. These tables are formed using 2023 IEMA Guidelines and professional experience.

7.4.37 In terms of magnitude of change for road links and junctions, a negligible magnitude of change has been assigned where there is expected to be fewer than 30 additional

vehicle trips per hour during each of the assessment periods as a result of the Suffolk Onshore Scheme, irrespective of the proportional increase in traffic flows.

7.4.38 Furthermore, caution has been observed when applying the thresholds to road links or road junctions with very low baseline flows, given that these are unlikely to experience impacts even with high percentage changes in traffic. In consideration of this, the level of magnitude has been downgraded by a single category (from Large to Medium, or from Medium to Small) where the baseline traffic flow falls below a certain level. Thresholds adopted are 100 movements (i.e. fewer than two vehicles per minute) in the assessed one-hour period, or below an average of 50 movements per hour (i.e. fewer than one vehicle per minute) when reviewing the 12-hour weekday and 24-hour average day periods. This has been based on total movements where the total percentage change initially results in a High or Medium magnitude, and/or HGV movements where the same applies based on the HGV percentage change.

7.4.39 The level of magnitude also considers the following:

- For the peak hour and Saturday lunchtime assessments, where a 'Large' or 'Medium' magnitude has initially been identified based on the assessment criteria, this has been downgraded by a single category when total traffic levels including construction traffic for the relevant receptor fall below baseline levels (without construction traffic) at other times of the day i.e. higher traffic levels are already experienced on the network without the Proposed Project (so the impact as a result of the Proposed Project is expected to be lower).
- For the 12-hour and 24-hour weekday assessments, where a 'Large' or 'Medium' magnitude has initially been identified based on the assessment criteria, this has been downgraded by a single category when total traffic levels including construction traffic for the relevant receptor fall more than 50% below maximum levels elsewhere on the network i.e. total traffic flows are well within levels accommodated elsewhere on the network and the impact as a result of the Proposed Project is expected to be lower.

Table 7.10 Categorising the overall magnitude of effect of a road link and junction

Impact	Negligible	Small	Medium	Large
Severance	Increase in total traffic flows of under 30% (or increase in HGV flows under 10%).	Increase in total traffic flows of 30-59% (or increase in HGV flows of between 10%-39%).	Increase in total traffic flows of 60%-89% (or increase in HGV flows between 40%-89%).	Increase in total traffic flows or HGV flows of 90% and above.
Pedestrian Delay	The severity of the impact will be determined based on the thresholds identified above for severance.			
Non-Motorised User Amenity	Increase in total traffic flows of under 50%.	Increase in total traffic flows of 50-69%.	Increase in total traffic flows of 70%-99%.	Increase in total traffic flows of 100% or above.

Impact	Negligible	Small	Medium	Large
Fear and Intimidation	No change in overall level based on the degree of hazard scores for daily traffic flows, HGV flows and vehicle speeds (see Table 7.11 below).	One step change in overall level (see Table 7.11 below), but with <400 daily vehicle increase or <500 daily HGV increase.	One step change in overall level (see Table 7.11 below), but with >400 daily vehicle increase or >500 daily HGV increase.	Two step changes in overall level based on the degree of hazard scores for daily traffic flows, HGV flows and vehicle speeds (see Table 7.11 below).
Driver Delay	Increase in total traffic flow of under 30%.	Increase in total traffic flow of between 30% and 59%.	Increase in total traffic flow of between 60% and 89%.	Increase in traffic flow of 90% and above.
Road Safety	Increase in total traffic flows of under 30% (or increase in HGV flows of under 10%).	All links estimated to experience increases in total traffic flows of at least 30% or increases in HGV flows of at least 10% are analysed further on a case-by-case basis.		
Hazardous/Large loads	Based on the probability of a personal injury accident, categorised as fatal or serious, involving a hazardous/large load, occurring.			

7.4.40 Further details relating to fear and intimidation, in terms of calculating magnitude of impact based on the 2023 IEMA guidelines, are provided in Table 7.11 below.

Table 7.11 Categorising the overall magnitude for Fear and Intimidation

Criteria	Degree of hazard (score)			
	Small	Moderate	Great	Extreme
A) Average Hourly Traffic Flow	<600 (0)	600-1,200 (10)	1,200-1,800 (20)	>1,800 (30)
B) Daily HGV Flow	<1,000 (0)	1,000-2,000 (10)	2,000-3,000 (20)	>3,000 (30)
C) Average Speed	<20mph (0)	20-30mph (10)	30-40mph (20)	>40mph (30)
Total Score (A+B+C)	0-20	21-40	41-70	71+

7.4.41 Magnitude of change with respect to Severance and Pedestrian Delay across PRoW receptors and national/regional walking and cycling routes has been categorised as follows, based on professional judgement and experience:

- Negligible:
  - Closures/diversions: None required, or temporary (short-term, one to five days) closures are only required to install safety measures to retain PRoW access throughout construction; and/or
  - Haul road management/crossing points: No interactions with proposed haul road/construction vehicles or management only required for a temporary (short-term) duration of up to four weeks. Up to one haul road crossing point required to retain PRoW access.
- Small:
  - Closures/diversions: Temporary (short-term, one to four weeks) localised closures/diversions are required; and/or
  - Haul road management/crossing points: Proposed haul road/construction vehicles or management required for a temporary (long-term, more than four weeks in any 12-month period) duration. Several haul road crossing points required to retain PRoW access.
- Medium:
  - Closures/diversions: Temporary (long-term, more than four weeks in any 12-month period) or permanent closures/diversions are required, with an increase in journey length of less than 400 m.
- Large:
  - Closures/diversions: A closure without a diversion route for more than five days, or temporary (long-term, more than four weeks in any 12-month period) or permanent closures/diversions are required, with an increase in journey length of more than 400 m.

7.4.42 Magnitude of change with respect to Non-Motorised User Amenity and Fear & Intimidation across PRoW receptors and national/regional walking and cycling routes has been categorised as follows based on professional judgement and experience:

- Negligible: No interactions with proposed haul road/construction vehicles or management only required for an already trafficked PRoW e.g. a Byway Open to All Traffic (BOAT) for a temporary (short-term) duration of up to four weeks.
- Small: Non-trafficked PRoW (e.g. public footway or bridleway) to be used by limited construction vehicles with management/banksmen to avoid any interactions for a temporary period, although not required throughout the entire construction period.
- Medium: PRoW to interact with construction vehicles at haul road crossing points only (to be managed), otherwise to be physically separated. Trafficked PRoW (e.g. BOAT) to be used by limited construction vehicles with management/banksmen to avoid any interactions for a temporary (long-term) period of more than four weeks in any 12-month period (however, not required throughout the entire construction period).
- Large: PRoW to be used by construction vehicles throughout the construction period with management/banksmen.

7.4.43 PRoW diversions and closures have been considered on the basis of the type of impact i.e. whether a temporary or permanent PRoW closure or diversion is proposed, and how long any potential disruption to an existing route would therefore occur for. The assessment considers the indicative thresholds presented in Table 7.12 further below which have been derived based on professional judgement and experience.

Table 7.12 Categorising the overall magnitude of effect of a PRoW diversion and/or closure

Impact	Description
Large	A closure without a diversion route for more than five days, or temporary (long-term, more than four weeks in any 12-month period) or permanent closures/diversions are required, with an increase in journey length of more than 400 m.
Medium	Temporary (long-term, more than four weeks in any 12-month period) or permanent closures/diversions are required, with an increase in journey length of less than 400 m.
Small	Temporary (short-term, one to four weeks) localised closures/diversions are only required.
Negligible	No closures/diversions required, or temporary (short-term, one to five days) closures are only required to install safety measures to retain PRoW access throughout construction.

7.4.44 Table 7.10, Table 7.11, and Table 7.12 above set out the proposed magnitude thresholds for the respective environmental effects that are considered in this assessment. Except for PRoW and national/regional walking and cycling routes, all effects have a proposed magnitude that does not, initially, consider the duration over which an effect is likely to be experienced.

7.4.45 As identified within the 2023 IEMA Guidelines for the Environmental Assessment of Traffic and Movement (IEMA, 2023), duration (long, medium or short term) and permanence (permanent or temporary) should be considered when assessing the overall significance of residual effects.

7.4.46 All of the traffic and transport effects associated with the construction and decommissioning of the Suffolk Onshore Scheme would be temporary effects. Some temporary effects would be likely to last longer than others and these have therefore been reported where necessary. Following the quantitative assessment, effects have been reported by taking into account professional experience on the duration over which these effects are likely to be experienced.

Significance of effects

7.4.47 As set out in **Application Document 6.2.1.5 Part 1 Introduction Chapter 5 EIA Approach and Methodology**, the general approach taken to determining the

significance of effect in this assessment is assigning significance values (Major, Moderate, Minor, and Negligible).

7.4.48 The significance of effect is determined through consideration of two elements; the magnitude of the impact and the sensitivity of the receptor as outlined above. Table 7.13 below shows the matrix that has been used to determine the effect category. Effects which are classified as major or moderate are considered to be significant (shown in bold). Where more than one level of effect is shown in one cell of the matrix, professional judgement (applying a greater weighting to magnitude of effect and to consider duration as set out above) will be used in defining a single category of effect. Further details on this are set out in Section 7.9.

Table 7.13 Significance matrix

Magnitude of effect	Receptor sensitivity				
	Very High	**High**	**Medium**	**Low**	**Negligible**
Large	**Major**	**Major/ Moderate**	**Major/ Moderate/** Minor	**Moderate/** Minor	Minor/ Negligible
Medium	**Major/ Moderate**	**Major/ Moderate**	**Moderate/** Minor	Minor/ Negligible	Negligible
Small	**Major/ Moderate/** Minor	**Moderate/** Minor	**Moderate/** Minor	Minor/ Negligible	Negligible
Negligible	Minor/ Negligible	Minor/ Negligible	Minor/ Negligible	Negligible	Negligible

7.4.49 To inform the assessment work when reviewing forecast construction traffic levels, where either a Moderate or Minor level of effect could be attributed (which applies to four of the cells identified above when excluding Major), a Minor effect has been selected where a small magnitude of change has been identified based on the busiest day of the programme. Otherwise, the duration of effect has been reviewed to determine whether a Moderate or Minor level of effect should be assigned.

Assumptions and Limitations

7.4.50 The scope of assessment within this ES chapter is set out within Table 2.8.7 of the EIA Scoping Report (National Grid , 2022), based on the potential sources and impacts and potential impact pathways with receptors presented in Table 2.8.1 and Table 2.8.2 of the EIA Scoping Report respectively.

7.4.51 This assessment is based on baseline data and Proposed Project design information, as described in **Application Document 6.2.1.4 Part 1 Introduction Chapter 4 Description of the Proposed Project**.

7.4.52 This chapter has been informed by the consultation responses to the EIA Scoping Opinion (Planning Inspectorate, 2022) as set out in **Application Document 6.3.1.6.A**

Appendix 1.6.A Response to Scoping Opinion , the Statutory Consultation and Targeted Consultation responses as set out in **Application Document 5.1 Consultation Report** and the transport scoping and thematic meetings held with SCC and ESC, as set out in Section 7.3.

7.4.53 This assessment considers the peak construction period (expected to take place in 2028 for the Suffolk Onshore Scheme based on total annual forecast construction vehicle movements, but also considering daily access peaks for alternative years where necessary) and includes HGV movements, LGV movements, and vehicle movements associated with construction worker arrivals and departures. Construction traffic forecasts are set out in Section 7.9.

7.4.54 Vehicular access during the construction phase will predominantly be taken from S-BM03 and S-BM04 (B1069 Snape Road) and S-BM09 (B1121 Main Road). A low proportion of construction vehicles (circa 3% in total) is expected across the remaining access points which comprise S-BM01 and S-BM02 (B1122 Leiston Road), S-BM11 (B1121 Saxmundham Road), S-BM10 (A1094 Aldeburgh Road), S-BM12 (B1119 Church Street) and S-BM13 (Thorpe Road). The accesses on Grove Road (S-BM05 and S-BM06) will be used as a vehicle crossover only and no vehicles will therefore turn to/from Grove Road to use these access points. In addition, S-BM08 (B1121 Main Road, northern option at PEI Report stage) no longer forms parts of the proposals.

7.4.55 All of the above access points have been included as part of the assessment by assigning construction vehicle trips to each access (and the associated parts of the highway network) in accordance with the programme of works for each access. Further details on proposed access to the Suffolk Onshore Scheme are set out within Section 7.4 and **Application Document 7.5.1.1 – Outline CTMTP – Suffolk**.

7.4.56 The forecast trip distribution of construction staff vehicles has been based on a simple gravity model which has been developed based on 2021 Census data for construction workers living within a 60-minute catchment area of the site. Whilst it is acknowledged that the dataset was collected during the COVID-19 pandemic, this represents the latest information currently available (as opposed to using information from the 2011 Census) and is considered to be appropriate for identifying the districts where construction workers live rather than to estimate travel patterns. This approach was agreed with SCC Highways during the transport scoping meeting held in June 2023, as documented in **Application Document 6.3.2.7.B Appendix 2.7.B Traffic and Transport Thematic Meeting Minutes**. This ES chapter includes an assessment of the Proposed Project within Section 7.9.

7.4.57 Although the Proposed Project is located close to a number of towns/villages including Saxmundham, Leiston, and Friston, only a small proportion of trips are expected to either originate from or pass through these settlements during the construction, operation and maintenance, and decommissioning phases. The routes to/from the proposed site accesses are illustrated by **Application Document 6.4.2.7.2 Heavy Goods Vehicle (HGV) Routing Plan**. All construction vehicles will travel to/from the access points via the A12, with the majority of these then using the B1121 Main Road for S-BM09 or the A1094 and B1069 Snape Road for S-BM03 and S-BM04. Additional routes with considerably fewer construction vehicle movements include the B1119 Church Street for S-BM12, the B1121 Aldeburgh Road and B1121 Saxmundham Road for S-BM11 (limited to access to existing OHL towers), B1122 Leiston Road for S-BM01 and S-BM02, as well as Thorpe Road for S-BM13.

7.4.58 Following on from the above, whilst some staff may originate from settlements nearby and may travel by public transport or bicycle (the distance is largely considered too far

to walk), these modes are not expected to constitute a significant proportion of trips to the Proposed Project. In addition, whilst some construction workers may travel to the area from further afield and stay in local accommodation/hotels, it is not possible to determine the specifics at this stage (this will be determined post-consent once a contractor has been appointed). Therefore, to provide a robust assessment in terms of road trips, it has been assumed that all construction workers would travel by vehicle to/from the Proposed Project.

7.4.59 The Proposed Project is expected to generate a low level of trips during the operational and maintenance phases, and a review of operational phase transport effects, including abnormal and hazardous loads, has been excluded from the scope of this assessment (see Section 7.9 for further details). In summary, this is likely to include up to four daily car/LGV trips associated with two staff members who will be on-site or on-call at all times for the proposed Saxmundham Converter Station. In addition, there will be monthly substation inspections and annual maintenance visits for Friston Substation and Saxmundham Converter Station, which would be carried out using LGVs and potentially HGVs on rare occasions where equipment needs to be replaced. The potential for abnormal or hazardous loads during the operational period would be subject solely to the replacement of a full transformer, which is not expected during the operational phase.

7.4.60 Further details relating to the assumptions that have been adopted in support of the assessment work (i.e. relating to access points, working hours, trip generation) are set out below as well as within Section 7.9. As set out above, the assessment is based on robust parameters in terms of the length of the construction programme and the peak number of daily vehicle trips associated with the Proposed Project. The approach for the assessment work has also been reviewed and agreed with Suffolk County Council as set out in Section 7.3.

7.4.61 This ES chapter includes the components that typically form part of a TA as demonstrated by **Application Document 6.3.2.7.A Appendix 2.7.A Transport Assessment Note**.

7.5 Basis of Assessment

7.5.1 This section sets out the assumptions that have been made in respect of design flexibility maintained within the Proposed Project and the consideration that has been given to alternative scenarios and the sensitivity of the assessment to changes in the construction commencement year.

7.5.2 Details of the available flexibility and assessment scenarios are presented in **Application Document 6.2.1.4 Part 1 Introduction Chapter 4 Description of the Proposed Project** and **Application Document 6.2.1.5 Part 1 Introduction Chapter 5 EIA Approach and Methodology**.

Flexibility Assumptions

7.5.3 The environmental assessments have been undertaken based on the description of the Proposed Project provided in **Application Document 6.2.1.4 Part 1 Introduction Chapter 4 Description of the Proposed Project**. To take account of the flexibility allowed for in the Proposed Project, consideration has been given to the potential for effects to be of greater or different significance should any of the permanent or

temporary infrastructure elements be moved within the Limits of Deviation (LoD) or Order Limits.

7.5.4 The assumptions made regarding the use of flexibility for the main assessment, and any alternatives assumptions are set out in Table 7.14.

Table 7.14 Flexibility assumptions

Element of flexibility	How it has been considered within the assessment
Lateral LoD HVDC/HVAC cables	All potential road, PRoW and walking/cycling crossing points that could be affected by the HVDC/HVAC cables based on the LoD have been considered (these are Thorpe Road, B1122 Leiston Road, B1069 Snape Road, Grove Road, the King Charles III England Coast Path, Suffolk Coast Path, Sandlings Walk and multiple PRoW). The precise location of the cables does not however influence the number of construction vehicles required, or the assessment of peak construction phase vehicle activity.
Lateral LoD Saxmundham Converter Station and Friston Substation	Lateral movement of Saxmundham Converter Station and the Friston Substation within the LoD will not influence the traffic and transport assessment as construction access will be via the B1121 Main Road (S-BM09) and robust assumptions have been adopted in terms of PRoW closures and diversions.
Vertical LoD Saxmundham Converter Station and Friston Substation	Vertical movement of Saxmundham Converter Station and the Friston Substation within the LoD will not influence the traffic and transport assessment as the assessed level of construction vehicle activity has been based on robust parameters in this regard (i.e. maximum height).
Lateral and Vertical LoD overhead line (where Friston Substation is built as part of the Proposed Project)	Lateral movement of the overhead line within the LoD will not affect the traffic and transport assessment as robust assumptions have been adopted in terms of PRoW clsoures and diversions. Vertical movement of overhead lines within the LoD will not influence the traffic and transport assessment.
Order Limits – temporary construction works	The location of temporary construction works within the Order Limits will not influence the traffic and transport assessment as it will not

Element of flexibility	How it has been considered within the assessment
	change the assessed level of construction vehicle activity on the public highway. Should any additional (or alternative) temporary PRoW closures and diversions be required as a result of temporary construction works, then these would be subject to the same management and mitigation as set out within **Application Document 7.5.9.1 Outline PRoWMP – Suffolk** to ensure that safe access is retained throughout these works.

Consideration of Scenarios

7.5.5 The following scenarios with regards to Friston Substation have been considered in the assessment as described in **Application Document 6.2.1.4 Part 1 Introduction Chapter 4 Description of the Proposed Project**:

- Friston Substation is installed under the extant development consent order granted to Scottish Power Renewables (SPR); or
- Friston Substation is built as part of the Proposed Project.

7.5.6 Friston Substation will be located to the northeast of the B1121 Saxmundham Road. The assessment has been based on construction vehicle numbers for the full construction of Friston Substation, with access via the A1094, B1069 Snape Road, then access point S-BM04. This offers a robust assessment by assuming that Friston Substation will be built as part of the Proposed Project.

7.5.7 Should Friston Substation be installed under the extant development consent order granted to SPR, then this would be expected to reduce peak construction vehicle trips given that the substation would be built before the Proposed Project. This would result in fewer construction vehicle trips via the B1069 Snape Road (access point S-BM04) for example. Operational access to this part of the site would subsequently be taken via B1121 Saxmundham Road (access point S-BM07) rather than the B1069 Snape Road (access point S-BM04).

7.5.8 The following options with regards to the proposed bridge over the River Fromus have been considered in the assessment as described in **Application Document 6.2.1.4 Part 1 Introduction Chapter 4 Description of the Proposed Project**:

- Option 1 - A bridge height of up to 6 m (from the ground level at the abutment to the top of the parapet) with 62 m long approach ramps; and
- Option 2 - A bridge height of up to 4 m (from the ground level at the abutment to the top of the parapet) with 42 m long approach ramps.

7.5.9 As this bridge would carry a private access road which would not be public highway, there would be no potential for different effects between the two options.

7.5.10 There is also optionality regarding the Saxmundham Converter Station construction compound location. Any one of the three areas of land included within the Order Limits

(S02, S03, and S04/05), as illustrated in **Application Document 2.14.1 Indicative General Arrangement Plans – Suffolk**, could be used for this purpose. With regard to effects on traffic and transport receptors, as all three plots would be accessed from the same bell mouth locations, there would be no difference in traffic using the public highway, irrespective of which location is selected. In addition, the level of traffic generated by the setup of the construction compound is the same irrespective of the location. The construction traffic accessing the compounds would also be the same irrespective of location. As such the compound location has no potential to change the findings of the assessment as presented.

Sensitivity Test

7.5.11 It is likely that under the terms of the draft DCO, construction could commence in any year up to five years from the granting of the DCO, which is assumed to be 2026. Consideration has been given to whether the effects reported would be any different if the works were to commence in any year up to year five. Where there is a difference, this is reported in Section 7.12.

7.6 Study Area

7.6.1 The study area for the assessment has been defined based on the area where there is likely to be a transport impact resulting from the construction of the Proposed Project. This includes routes along which HGVs will travel during the works programme, as well as the most likely routes that will be used by construction workers.

7.6.2 The study area has been defined (and agreed) following discussions with SCC during the initial scoping meeting on 9 June 2023 and when reviewing the proposed scope of the traffic surveys in December 2023. This has subsequently been refined based on the latest design, following further discussions and feedback received during Targeted Consultation. This included a review of the highway network and the pedestrian/cycle network, including PRoW that may potentially be affected by the Suffolk Onshore Scheme. The study area is shown on **Application Document 6.4.2.7.1 Traffic and Transport Study Area in Suffolk**.

7.6.3 The following road link receptors have been assessed in relation to the Proposed Project within the agreed study area:

- S-RL1: A12 (south of A1094 junction);
- S-RL2: A12 (between A1094 and B1121 Main Road south junctions);
- S-RL3: A12 (between B1121 Main Road junctions);
- S-RL4: A12 (north of B1121 north junction);
- S-RL5: B1121 Main Road (east of the A12);
- S-RL6: B1121 Main Road (south of B1119 Church Street);
- S-RL7: B1119 Church Street (east of B1121 Main Road);
- S-RL8: B1121 Aldeburgh Road (between A1094 and B1121 Saxmundham Road);
- S-RL9: B1121 Saxmundham Road (north of Grove Road);
- S-RL10: A1094 (between A12 and B1069 Snape Road);

- S-RL11: A1094 Aldeburgh Road (between B1069 Snape Road and B1122 Leiston Road);
- S-RL12: B1069 Snape Road (between A1094 Aldeburgh Road and Aldringham Lane); and
- S-RL13: B1122 Leiston Road (between A1094 Aldeburgh Road and Aldringham Lane).

7.6.4 The following road junction receptors have been assessed in relation to the Proposed Project within the agreed study area:

- S-RJ1: A12/A1094 junction;
- S-RJ2: A12/B1121 (South) junction;
- S-RJ3: A12/B1119 junction;
- S-RJ4: A12/B1121 (North) junction;
- S-RJ5: A12/B1122 junction;
- S-RJ6: B1121 Main Road/B1121 Church Hill junction;
- S-RJ7: B1121 Main Road/B1119 Church Hill signalised junction;
- S-RJ8: B1121 Saxmundham Road/Grove Road/Mill Road junction;
- S-RJ9: A1094 Aldeburgh Road/B1121 Aldeburgh Road junction;
- S-RJ10: A1094 Aldeburgh Road/B1069 Snape Road junction;
- S-RJ11: A1094/B1122 Leiston Road/Church Farm Road roundabout;
- S-RJ12: B1122 Aldeburgh Road/B1353 Aldringham Lane junction;
- S-RJ13: B1069 Leiston Road/B1353 Aldringham Lane junction; and
- S-RJ14: A1094/Sternfield Road/Church Road junction.

7.6.5 The above road link and road junction receptors are shown on **Application Document 6.4.2.7.6 Road Link and Road Junction Receptors**.

7.6.6 The PRoW receptors which have been assessed in relation to the Proposed Project within the agreed study area are listed below (broadly running from east to west). This has been based on the locations where interactions are expected (e.g. PRoW crossing points or PRoW diversions) or where measures will be required to keep PRoW physically separated from the proposed construction routes/works.

- S-P1: E-103/006/0 Public footpath;
- S-P2: E-103/016/0 Public footpath;
- S-P3: E-260/013/A Public footpath;
- S-P4: E-260/012/A Bridleway;
- S-P5: E-354/002/0 Bridleway;
- S-P6: E-354/001/0 Bridleway;
- S-P7: E-354/018/0 Public footpath;
- S-P8: E-354/007/A Public footpath;

- S-P9: E-354/006/0 Public footpath;
- S-P10: E-260/017/0 Public footpath;
- S-P11: E-260/015/0 Public footpath;
- S-P12: E-260/016/0 Public footpath;
- S-P13: E-491/010/0 Bridleway;
- S-P14: E-491/006/0 Public footpath;
- S-P15: E-491/005/0 Public footpath;
- S-P16: E-491/004/0 Public footpath; and
- S-P17: E-460/023/0 Public footpath.

7.6.7 Whilst PRoW E-354/007/0 also crosses the Order Limits, this is not expected to interact with (or be impacted by) the Suffolk Onshore Scheme and this route has therefore been excluded from the assessment.

7.6.8 The following national/regional walking and cycling route receptors have been assessed in relation to the Proposed Project within the agreed study area, based on the locations where the proposed construction routes will cross these routes within the Order Limits or where temporary diversions or closures will be required:

- S-W1: King Charles III England Coast Path;
- S-W2: The Suffolk Coast Path;
- S-W3: Sandlings Walk; and
- S-C1: Regional Cycle Route 42.

7.6.9 The above walking and cycling routes including PRoW are shown on **Application Document 6.4.2.7.4 Walking and Cycling Routes (including PRoW)**.

7.7 Baseline Conditions

Highway Network

7.7.1 The study area (see **Application Document 6.4.2.7.1 Traffic and Transport Study Area in Suffolk**) includes key areas of the surrounding highway network. The most prominent are the A12, the B1121 Main Road to the south of Saxmundham, the A1094 to the west of Aldeburgh, and the B1069 Snape Road. The A1094 has a single lane in each direction and is the main route between Aldeburgh and the A12. The section of the A1094 within the study area includes several farm accesses and is subject to the national speed limit.

7.7.2 The study area also includes the B1122 Leiston Road, which runs from Aldeburgh in the south towards Aldringham, Leiston, and Yoxford in the north. The B1122 is linked to the A1094 to the south and the A12 to the north.

7.7.3 Thorpe Road is a coastal road to the east of the study area which links Aldeburgh in the south with Thorpeness to the north. The route, which operates with the national speed limit, does not connect with any other key routes within the study area.

7.7.4 The B1069 Snape Road bisects the centre of the study area and connects the A1094 to the south with the village of Knodishall Common to the north. Grove Road is also a north-south route through the centre of the study area, running northwards from the village of Friston. Grove Road is unclassified and is a single lane carriageway, subject to a 30mph speed limit in the south and the national speed limit in the north of the study area. School Road forms a junction with Grove Road and runs eastwards towards Knodishall. There are a number of unmade tracks which provide agricultural access within the centre of the study area via the A1094 and the B1069.

7.7.5 The northwest section of the study area includes the A12, which interacts with the B1119 and B1121, which in turn run from Saxmundham to Leiston and Sternfield to Friston respectively. The study area includes the junction between the B1119 and the B1121 within Saxmundham. The B1121 and B1119 operate with a 30mph speed limit within Saxmundham, whereas the B1119 is subject to the national speed limit to the east of Saxmundham.

Baseline Traffic Data

7.7.6 Baseline traffic data has been obtained for the surrounding highway network within the study area based on ATC and MCC surveys carried out in January and February 2024 (see **Application Document 6.4.2.7.5 Traffic Count Locations** for the survey locations). A summary of the 2024 baseline traffic flows is set out below in Table 7.15 for a 12-hour weekday and 24-hour average day, with the remaining periods (including for the peak hours) provided in **Application Document 6.3.2.7.D Appendix 2.7.D Baseline Traffic Movements**.

Table 7.15 2024 baseline weekday (12 hours) and average daily (24 hours) traffic flows

Ref	Receptor Type	Description	Weekday (12 hours)		Average Day (24 hours)	
			HGVs	Total	HGVs	Total
S-RL1	Road Link	A12 (south of A1094)	711	12,709	795	14,231
S-RL2	Road Link	A12 (between A1094 & B1121 Main Rd south junction)	630	9,427	706	10,556
S-RL3	Road Link	A12 (between B1121 Main Road junctions)	586	8,408	653	8,798
S-RL4	Road Link	A12 (north of B1121 Main Road northern junction)	561	8,741	628	9,807
S-RL5	Road Link	B1121 Main Road (east of A12)	118	3,880	104	4,096
S-RL6	Road Link	B1121 Main Road (south of B1119 Church Street)	95	3,766	84	3,979

Ref	Receptor Type	Description	Weekday (12 hours)		Average Day (24 hours)	
			HGVs	Total	HGVs	Total
S-RL7	Road Link	B1119 Church Street (east of B1121 Main Road)	76	2,658	68	2,872
S-RL8	Road Link	B1121 Aldeburgh Road (between A1094 and B1121 Saxmundham Road)	29	944	26	1,041
S-RL9	Road Link	B1121 Saxmundham Road (north of Grove Road)	22	854	17	859
S-RL10	Road Link	A1094 (between A12 and B1069 Snape Road)	210	6,175	192	6,809
S-RL11	Road Link	A1094 Aldeburgh Road (between B1069 Snape Road and B1122 Leiston Road)	83	3,403	92	3,890
S-RL12	Road Link	B1069 Snape Road (between A1094 Aldeburgh Road and Aldringham Lane)	150	5,059	167	5,782
S-RL13	Road Link	B1122 Leiston Road (between A1094 Aldeburgh Road and Aldringham Lane)	121	2,489	101	2,548
S-RJ1	Road Junction	A12/A1094 Junction	764	13,908	855	15,574
S-RJ2	Road Junction	A12/B1121 (South) Junction	646	9,841	723	11,020
S-RJ3	Road Junction	A12/B1119 Junction	604	10,915	671	10,963
S-RJ4	Road Junction	A12/B1121 (North) Junction	582	8,966	650	10,060
S-RJ5	Road Junction	A12/B1122 Junction	668	11,088	747	12,442
S-RJ6	Road Junction	B1121 Main Road/B1121 Church Hill Junction	114	4,093	100	4,322
S-RJ7	Road Junction	B1121 Main Road/B1119 Church Hill Signalised Junction	163	8,041	143	8,502
S-RJ8	Road Junction	B1121 Saxmundham Road/Grove Road/Mill Road Junction	24	985	19	992
S-RJ9	Road Junction	A1094 Aldeburgh Road/B1121 Aldeburgh Road Junction	233	6,953	214	7,669

Ref	Receptor Type	Description	Weekday (12 hours)		Average Day (24 hours)	
			HGVs	Total	HGVs	Total
S-RJ10	Road Junction	A1094 Aldeburgh Road/B1069 Snape Road Junction	226	8,294	251	9,481
S-RJ11	Road Junction	A1094/B1122 Leiston Road/Church Farm Road Roundabout	130	5,194	145	5,937
S-RJ12	Road Junction	B1122 Aldeburgh Road/B1353 Aldringham Lane Junction	166	5,516	139	5,665
S-RJ13	Road Junction	B1069 Leiston Road/B1353 Aldringham Lane Junction	146	4,789	130	4,955
S-RJ14	Road Junction	A1094/Sternfield Road/Church Road Junction	293	8,230	268	9,074

Collision Data

7.7.7 This section provides a summary of the Personal Injury Accident (PIA) data obtained from SCC (Suffolk County Council, 2024) for the most recently available five-year period for the highway network within the agreed study area as shown on **Application Document 6.4.2.7.1 Traffic and Transport Study Area in Suffolk**. The most recently available PIA data covers the period between the start of November 2018 and the end of October 2023. Whilst it is acknowledged that the data includes the period of COVID-19 restrictions between the first lockdown in March 2020 and the start of the 2021 autumn school term (considered by National Highways as representing 'a-typical' traffic conditions), this nonetheless includes more than three years of 'typical' data.

7.7.8 A summary of the PIA data (categorised by severity; slight, serious and fatal) is set out below in Table 7.16 which has been used to inform the assessment of Road Safety in Section 7.9. This also includes a separate summary of collisions involving large vehicles to inform the assessment of Hazardous/Large Loads in Section 7.9.

Table 7.16 Collision review

Receptor Type/Ref	Location	Total collisions				Collisions involving a large vehicle			
		Sl	Se	Fa	Total	Sl	Se	Fa	Total
Road Link (S-RL1)	A12 (south of A1094)	8	1	0	9	1	0	0	1

Receptor Type/Ref	Location	Total collisions				Collisions involving a large vehicle			
		Sl	Se	Fa	Total	Sl	Se	Fa	Total
Road Link (S-RL2)	A12 (between A1094 & B1121 Main Rd south junction)	0	0	0	0	0	0	0	0
Road Link (S-RL3)	A12 (between B1121 Main Road junctions)	1	3	0	4	0	0	0	0
Road link (S-RL4)	A12 (north of B1121 Main Road northern junction)	4	3	0	7	1	1	0	2
Road link (S-RL5)	B1121 Main Road (east of A12)	1	0	0	1	0	0	0	0
Road link (S-RL6)	B1121 Main Road (south of B11191 Church Street)		0	0	1	0	0	0	0
Road link (S-RL7)	B1119 Church Street (east of B1121 Main Road)	7	0	0	7	0	0	0	0
Road link (S-RL8)	B1121 Aldeburgh Road (between A1094 and B1121 Saxmundham Road)	0	0	0	0	0	0	0	0
Road link (S-RL9)	B1121 Saxmundham Road (north of Grove Road)	2	0	0	2	0	0	0	0
Road link (S-RL10)	A1094 (between A12 and B1069 Snape Road)	2	2	0	4	0	0	0	0
Road link (S-RL11)	A1094 Aldeburgh Road (between B1069 Snape Road and B1122 Leiston Road)	2	3	0	5	0	0	0	0
Road link (S-RL12)	B1069 Snape Road (between A1094 Aldeburgh Road and Aldringham Lane)	1	2	0	3	1	0	0	1
Road link (S-RL13)	B1122 Leiston Road (between A1094 Aldeburgh Road and Aldringham Lane)	6	1	0	7	0	0	0	0
Road junction (S-RJ1)	A12/A1094 Junction	4	4	0	8	1	0	0	1
Road junction (S-RJ2)	A12/B1121 (South) Junction	1	0	0	1	0	0	0	0
Road junction (S-RJ3)	A12/B1119 Junction	3	3	0	6	0	1	0	1

Receptor Type/Ref	Location	Total collisions				Collisions involving a large vehicle			
		Sl	Se	Fa	Total	Sl	Se	Fa	Total
Road junction (S-RJ4)	A12/B1121 (North) Junction	1	0	0	1	0	0	0	0
Road junction (S-RJ5)	A12/B1122 Junction	2	1	0	3	0	0	0	0
Road junction (S-RJ6)	B1121 Main Road/B1121 Church Hill Junction	0	0	0	0	0	0	0	0
Road junction (S-RJ7)	B1121 Main Road/B1119 Church Hill Signalised Junction	2	0	0	2	0	0	0	0
Road junction (S-RJ8)	B1121 Saxmundham Road/Grove Road/Mill Road Junction	0	0	0	0	0	0	0	0
Road junction (S-RJ9)	A1094 Aldeburgh Road/B1121 Aldeburgh Road Junction	1	0	0	1	0	0	0	0
Road junction (S-RJ10)	A1094 Aldeburgh Road/B1069 Snape Road Junction	2	0	0	2	0	0	0	0
Road junction (S-RJ11)	A1094/B1122 Leiston Road/Church Farm Road Roundabout	3	1	0	4	0	0	0	0
Road junction (S-RJ12)	B1122 Aldeburgh Road/B1353 Aldringham Lane Junction	1	0	0	1	0	0	0	0
Road junction (S-RJ13)	B1069 Leiston Road/B1353 Aldringham Lane Junction	1	0	0	1	0	0	0	0
Road junction (S-RJ14)	A1094/Sternfield Road/Church Road Junction	1	1	0	2	1	0	0	1

*Sl = slight, Se = serious, Fa = fatal

7.7.9 The review shows that there are several locations where more than five PIAs were recorded within the five-year period, which may suggest that these locations are more sensitive to an increase in traffic from a highway safety perspective. Further details of the collisions at these locations are set out within **Application Document 6.3.2.7.A Appendix 2.7.A Transport Assessment Note**. There are also several locations which appear to have a good safety record with two or fewer PIAs within the five-year period, which suggests that these locations are less sensitive to an increase in traffic from a highway safety perspective. In terms of PIAs involving large vehicles, no locations recorded more than two PIAs involving such vehicles within the five-year period, suggesting that there are not any current issues regarding large vehicle road safety that need to be considered.

7.7.10 Following on from the above, collision rates have been calculated in billion vehicle miles for road links to provide a comparison with national road safety statistics provided within Road Casualties Great Britain (Department for Transport, 2024). The following formula has been used to calculate the collision rate, where 1,826 reflects the number of days

over which the collision data has been sourced (between 01 November 2018 to 31 October 2023).

$$\text{Collision Rate} = \frac{\text{Number of recorded PIAs (per road link) x 1 billion}}{\text{1,826 x AADT (2024) x length of road (miles)}}$$

7.7.11 The above has been informed by the 2024 baseline flows presented in Table 7.15 for an average day (24 hours). The national average collision rate has been calculated for the five-year period between 01 January 2019 and 31 December 2023 using dataset RAS0302: Urban and rural roads, for the appropriate road type. A summary of the comparison is presented in Table 7.17 below.

Table 7.17 Collision rates (road links)

Location	PIAs	AADT (2024)	Link length (miles)	Collision rate	National average
A12 (south of A1094)	9	14,231	1.7	204	175*
A12 (between A1094 & B1121 Main Rd south junction)	0	10,556	0.6	0	175*
A12 (between B1121 Main Road junctions)	4	8,798	2.9	86	175*
A12 (north of B1121 Main Road northern junction)	7	9,807	1.9	206	175*
B1121 Main Road (east of A12, south of Saxmundham)	1	4,096	0.5	267	478^
B1121 Main Road (south of B1119 Church Street)	1	3,979	0.6	229	604^^
B1119 Church Street (east of B1121 Main Road)	7	2,872	1.8	741	478^
B1121 Aldeburgh Road (between A1094 and B1121 Saxmundham Road)	0	1,041	0.5	0	306**
B1121 Saxmundham Road (north of Grove Road)	2	859	1.6	797	306**
A1094 (between A12 and B1069 Snape Road)	4	6,809	2.9	111	175*
A1094 Aldeburgh Road (between B1069 Snape Road and B1122 Leiston Road)	5	3,890	2.6	271	175*

Location	PIAs	AADT (2024)	Link length (miles)	Collision rate	National average
B1069 Snape Road (between A1094 Aldeburgh Road and Aldringham Lane)	3	5,782	1.4	203	306**
B1122 Leiston Road (between A1094 Aldeburgh Road and Aldringham Lane)	7	2,548	2.4	627	306**

*rural A-road **rural other road ^all other roads ^^urban other roads

7.7.12 The above shows that some receptors have a lower collision rate than the national average for the comparable road type and may therefore be less sensitive to a change in traffic flow/type, particularly the A12 between the A1094 and B1121 Main Road (northern) junctions, the B1121 Main Road (south of Saxmundham), as well as the B1069 Snape Road. No PIAs were recorded on the B1121 Aldeburgh Road between the A1094 and B1121 Saxmundham Road. Whilst the B1121 Saxmundham Road (north of Grove Road) has a high collision rate, only two collisions occurred on this part of the network during the five-year period. The B1119 Church Street, A1094 Aldeburgh Road between the B1069 Snape Road and B1122 Leiston Road, as well as B1122 Leiston Road itself have higher collision rates than the national average for the comparable road type and may therefore be more sensitive to a change in traffic flow/type. This information has been used to inform the sensitivity levels of the road link receptors for the assessment of Road Safety within the section below.

Sensitivity of road links and junctions for assessments

7.7.13 Table 7.18 provides a summary of road link and road junction sensitivity to Severance, Pedestrian Delay, Fear &Intimidation, and Non-Motorised User Amenity effects, which have been taken forward for assessment. Further detail on the considerations which inform the sensitivity levels assigned is provided in **Application Document 6.3.2.7.J Appendix 2.7.J Traffic and Transport Assessments**.

Table 7.18 Sensitivity of road links and junctions to severance, pedestrian delay, fear & intimidation and non-motorised user amenity

Ref	Receptor Type	Description	Sensitivity
S-RL1	Road Link	A12 (south of A1094)	Low
S-RL2	Road Link	A12 (between A1094 & B1121 Main Rd south junction)	Negligible
S-RL3	Road Link	A12 (between B1121 Main Road junctions)	Negligible
S-RL4	Road Link	A12 (north of B1121 Main Road northern junction)	Low

Ref	Receptor Type	Description	Sensitivity
S-RL5	Road Link	B1121 Main Road (east of A12)	Low
S-RL6	Road Link	B1121 Main Road (south of B1119 Church Street)	Medium
S-RL7	Road Link	B1119 Church Street (east of B1121 Main Road)	Medium
S-RL8	Road Link	B1121 Aldeburgh Road (between A1094 and B1121 Saxmundham Road)	Medium
S-RL9	Road Link	B1121 Saxmundham Road (north of Grove Road)	High
S-RL10	Road Link	A1094 (between A12 and B1069 Snape Road)	Medium
S-RL11	Road Link	A1094 Aldeburgh Road (between B1069 Snape Road and B1122 Leiston Road)	Medium
S-RL12	Road Link	B1069 Snape Road (between A1094 Aldeburgh Road and Aldringham Lane)	Low
S-RL13	Road Link	B1122 Leiston Road (between A1094 Aldeburgh Road and Aldringham Lane)	High
S-RJ1	Road Junction	A12/A1094 Junction	Negligible
S-RJ2	Road Junction	A12/B1121 (South) Junction	Low
S-RJ3	Road Junction	A12/B1119 Junction	Negligible
S-RJ4	Road Junction	A12/B1121 (North) Junction	Negligible
S-RJ5	Road Junction	A12/B1122 Junction	Low
S-RJ6	Road Junction	B1121 Main Road/B1121 Church Hill Junction	Medium
S-RJ7	Road Junction	B1121 Main Road/B1119 Church Hill Signalised Junction	High
S-RJ8	Road Junction	B1121 Saxmundham Road/Grove Road/Mill Road Junction	High

Ref	Receptor Type	Description	Sensitivity
S-RJ9	Road Junction	A1094 Aldeburgh Road/B1121 Aldeburgh Road Junction	Negligible
S-RJ10	Road Junction	A1094 Aldeburgh Road/B1069 Snape Road Junction	Negligible
S-RJ11	Road Junction	A1094/B1122 Leiston Road/Church Farm Road Roundabout	High
S-RJ12	Road Junction	B1122 Aldeburgh Road/B1353 Aldringham Lane Junction	Medium
S-RJ13	Road Junction	B1069 Leiston Road/B1353 Aldringham Lane Junction	Low
S-RJ14	Road Junction	A1094/Sternfield Road/Church Road Junction	Low

7.7.14 Table 7.19 provides a summary of road link and road junction sensitivity to Driver Delay effects which have been taken forward for assessment. Further detail on the considerations that inform the sensitivity levels assigned is provided in **Application Document 6.3.2.7.J Appendix 2.7.J Traffic and Transport Assessments**.

Table 7.19 Sensitivity of road links and junctions to driver delay

Ref	Receptor Type	Description	Sensitivity
S-RL1	Road Link	A12 (south of A1094)	Low
S-RL2	Road Link	A12 (between A1094 & B1121 Main Rd south junction)	Negligible
S-RL3	Road Link	A12 (between B1121 Main Road junctions)	Negligible
S-RL4	Road Link	A12 (north of B1121 Main Road northern junction)	Negligible
S-RL5	Road Link	B1121 Main Road (east of A12)	Low
S-RL6	Road Link	B1121 Main Road (south of B1119 Church Street)	Medium

Ref	Receptor Type	Description	Sensitivity
S-RL7	Road Link	B1119 Church Street (east of B1121 Main Road)	High
S-RL8	Road Link	B1121 Aldeburgh Road (between A1094 and B1121 Saxmundham Road)	Negligible
S-RL9	Road Link	B1121 Saxmundham Road (north of Grove Road)	Negligible
S-RL10	Road Link	A1094 (between A12 and B1069 Snape Road)	Medium
S-RL11	Road Link	A1094 Aldeburgh Road (between B1069 Snape Road and B1122 Leiston Road)	Negligible
S-RL12	Road Link	B1069 Snape Road (between A1094 Aldeburgh Road and Aldringham Lane)	Medium
S-RL13	Road Link	B1122 Leiston Road (between A1094 Aldeburgh Road and Aldringham Lane)	Negligible
S-RJ1	Road Junction	A12/A1094 Junction	Medium
S-RJ2	Road Junction	A12/B1121 (South) Junction	Low
S-RJ3	Road Junction	A12/B1119 Junction	Medium
S-RJ4	Road Junction	A12/B1121 (North) Junction	Low
S-RJ5	Road Junction	A12/B1122 Junction	Medium
S-RJ6	Road Junction	B1121 Main Road/B1121 Church Hill Junction	Negligible
S-RJ7	Road Junction	B1121 Main Road/B1119 Church Hill Signalised Junction	High
S-RJ8	Road Junction	B1121 Saxmundham Road/Grove Road/Mill Road Junction	Negligible
S-RJ9	Road Junction	A1094 Aldeburgh Road/B1121 Aldeburgh Road Junction	Negligible
S-RJ10	Road Junction	A1094 Aldeburgh Road/B1069 Snape Road Junction	Medium

Ref	Receptor Type	Description	Sensitivity
S-RJ11	Road Junction	A1094/B1122 Leiston Road/Church Farm Road Roundabout	Negligible
S-RJ12	Road Junction	B1122 Aldeburgh Road/B1353 Aldringham Lane Junction	Medium
S-RJ13	Road Junction	B1069 Leiston Road/B1353 Aldringham Lane Junction	Low
S-RJ14	Road Junction	A1094/Sternfield Road/Church Road Junction	High

7.7.15 Table 7.20 provides a summary of road link and road junction sensitivity to Road Safety and to Hazardous/Large Loads effects which have been taken forward for assessment. Further detail on the considerations which inform the sensitivity levels assigned is provided in **Application Document 6.3.2.7.J Appendix 2.7.J Traffic and Transport Assessments**.

Table 7.20 Sensitivity of road links and junctions for assessments of Road Safety and Hazardous/Large loads

Ref	Receptor type	Description	Sensitivity	
			Road safety	Hazardous/large loads
S-RL1	Road Link	A12 (south of A1094)	High^	Negligible
S-RL2	Road Link	A12 (between A1094 & B1121 Main Rd south junction)	Negligible	Negligible
S-RL3	Road Link	A12 (between B1121 Main Road junctions)	Medium*	Negligible
S-RL4	Road Link	A12 (north of B1121 Main Road northern junction)	High^	Low
S-RL5	Road Link	B1121 Main Road (east of A12)	Negligible	Negligible
S-RL6	Road Link	B1121 Main Road (south of B1119 Church Street)	Negligible	Negligible
S-RL7	Road Link	B1119 Church Street (east of B1121 Main Road)	High^	Negligible
S-RL8	Road Link	B1121 Aldeburgh Road (between A1094 and B1121 Saxmundham Road)	Negligible	Negligible

Ref	Receptor type	Description	Sensitivity	
			Road safety	Hazardous/large loads
S-RL9	Road Link	B1121 Saxmundham Road (north of Grove Road)	Negligible	Negligible
S-RL10	Road Link	A1094 (between A12 and B1069 Snape Road)	Low*	Negligible
S-RL11	Road Link	A1094 Aldeburgh Road (between B1069 Snape Road and B1122 Leiston Road)	High^	Negligible
S-RL12	Road Link	B1069 Snape Road (between A1094 Aldeburgh Road and Aldringham Lane)	Low*	Negligible
S-RL13	Road Link	B1122 Leiston Road (between A1094 Aldeburgh Road and Aldringham Lane)	High^	Negligible
S-RJ1	Road Junction	A12/A1094 Junction	High	Negligible
S-RJ2	Road Junction	A12/B1121 (South) Junction	Negligible	Negligible
S-RJ3	Road Junction	A12/B1119 Junction	High	Low
S-RJ4	Road Junction	A12/B1121 (North) Junction	Negligible	Negligible
S-RJ5	Road Junction	A12/B1122 Junction	Low	Negligible
S-RJ6	Road Junction	B1121 Main Road/B1121 Church Hill Junction	Negligible	Negligible
S-RJ7	Road Junction	B1121 Main Road/B1119 Church Hill Signalised Junction	Negligible	Negligible
S-RJ8	Road Junction	B1121 Saxmundham Road/Grove Road/Mill Road Junction	Negligible	Negligible
S-RJ9	Road Junction	A1094 Aldeburgh Road/B1121 Aldeburgh Road Junction	Negligible	Negligible
S-RJ10	Road Junction	A1094 Aldeburgh Road/B1069 Snape Road Junction	Negligible	Negligible
S-RJ11	Road Junction	A1094/B1122 Leiston Road/Church Farm Road Roundabout	Low	Negligible
S-RJ12	Road Junction	B1122 Aldeburgh Road/B1353 Aldringham Lane Junction	Negligible	Negligible
S-RJ13	Road Junction	B1069 Leiston Road/B1353 Aldringham Lane Junction	Negligible	Negligible

Ref	Receptor type	Description	Sensitivity	
			Road safety	Hazardous/large loads
S-RJ14	Road Junction	A1094/Sternfield Road/Church Road Junction	Low	Negligible

*sensitivity level reduced by one category to reflect a lower collision rate than the national average
^sensitivity level kept as High to reflect a comparable/higher collision rate than the national average

Public Transport Network

7.7.16 A high-level review has been carried out for public transport as this is not expected to constitute a key travel mode for construction workers given that no railway stations are located near the site accesses and the opportunity to use bus services would be limited to those living locally. Nonetheless, there may be some potential for construction workers to utilise bus and rail services based on the services summarised below, such as bus route 521 to access S-BM09 on the B1121 Main Road.

7.7.17 There are bus stops in both directions on the B1122 towards the southeast of the study area, circa 800 m to the south of the Order Limits. Bus routes 64, 65, and 522 operate along the B1122. The 522 service operates between Saxmundham and Aldeburgh, with services operating between 7am and 5pm at a frequency of one service per hour in each direction. The 64 service runs from Ipswich to Aldeburgh via Leiston between 6am and 8pm at a frequency of one service per hour in each direction. The 65 service runs from Ipswich to Leiston via Woodbridge between 6am and 3:30pm on an hourly frequency in each direction.

7.7.18 The B1121 within the study area is used by bus route 521 which runs between Aldeburgh and Halesworth via Leiston, Friston, and Saxmundham. The service operates at a frequency of around one service per hour in each direction and can be accessed from stops within and to the south of Saxmundham, including bus stops within 300 m of access S-BM09. Bus route 521 is also served by bus stops within Friston circa 800 m to the west of the Order Limits, and Sandy Lane further to the west. Bus route 522 also operates along the B1119 circa 1 km to the southwest of the Order Limits, with bus stops within Saxmundham.

7.7.19 The closest railway station to the Suffolk Onshore Scheme is Saxmundham railway station which is located a circa 1.2 km walking distance to the north of the proposed site access (S-BM09) on the B1121 Main Road which equates to a circa 15-minute walk time (based on an average walking speed of 4.8 kilometres per hour). Saxmundham station is served by one train per hour to Ipswich and one train per hour to Lowestoft (Greater Anglia). Whilst there is a branch line between Saxmundham and Leiston, this is only used for freight associated with Sizewell Nuclear Power Station rather than for public services.

Active Travel Network

7.7.20 The Aldeburgh to Hopton On Sea section of the King Charles III England Coast Path has been approved (with establishment works planned/in progress) and will run north-south through the study area using existing routes to the east of Thorpe Road. For the purposes of this report, the King Charles III England Coast Path has been included as part of the existing (and future) baseline.

7.7.21 The Suffolk Coast Path crosses the study area, north of Aldeburgh. Within the Order Limits, this comprises a public footpath which runs through agricultural fields to the west of Thorpe Road, as well as a pedestrian route which crosses Thorpe Road to the east and continues northwards parallel to the coastline towards Thorpeness.

7.7.22 Sandlings Walk, which is a promoted route from Ipswich to Lowestoft, runs east to west across the south of the study area. Within the Order Limits, this runs along a bridleway (PRoW E-354/002/0) which runs east-west along a rural (lightly trafficked) access track serving agricultural uses.

7.7.23 Regional Cycle Route 42 runs in a southwest to northeast direction across the study area. This on-carriageway cycle route runs along rural roads including a short section of the A1094 (between Priory Road and Mill Road), as well as Mill Road, Grove Road, School Road, Church Road and the B1119 Saxmundham Road towards Abbey Lane. This crosses the Order Limits on Grove Road.

7.7.24 There are many PRoW that pass through or within close proximity to the Order Limits and could therefore be impact by the Suffolk Onshore Scheme including the following:

- E-103/006/0 Public footpath which runs to the west of Thorpe Road, through agricultural fields (non-trafficked) within the Order Limits. Varying quality, narrow in places. Provides a connection between Thorpe Road and the Coastal Path, B1122 Leiston Road, A1094 Aldeburgh Road and PRoW E-103/016/0.
- E-103/016/0 Public footpath which runs southeast to northwest through a golf course and agricultural fields, largely non-trafficked, although shares a short section of access track. Typically an open route across fields. Provides a connection between Golf Lane and PRoW E-103/006/0 (south), E-103/001/0 and E-260/012/0 (north).
- E-260/013/A Public footpath which runs southeast to northwest through agricultural fields, partly non-trafficked and partly along agricultural access tracks. Varying quality, typically an open route through fields. Provides a connection between A1094 Aldeburgh Road (south) and PRoW E-260/012/A (east).
- E-260/012/A Bridleway which runs north-south through agricultural fields, partly non-trafficked and partly along agricultural access tracks. Varying quality, narrow in places, runs along Sloe Lane to the north. Provides a connection between A1094 Aldeburgh Road (south) and Sloe Lane and PRoW E-260/013/A (north).
- E-354/002/0 Bridleway which runs east-west along a rural (lightly trafficked) access track serving agricultural uses. Typically a good quality route which provides a connection between PRoW E-354/001/0 and PRoW E-354/020/0 (east) and Grove Road and PRoW E-354/004/0 (west).
- E-354/001/0 Bridleway which runs north-south through agricultural fields, partly non-trafficked and partly along agricultural access tracks. Varying quality, narrow in places, runs through fields. Provides a connection between School Road (north) and PRoW E-354/020/0 and E-354/002/0 (south).
- E-354/018/0 Public footpath which runs north-south through agricultural fields (non-trafficked). Open route through fields. Provides a short connection between School Road (north) and PRoW E-354/018/A (south).
- E-354/007/A Public footpath which runs northeast-southwest through agricultural fields (non-trafficked). Open route through fields. Provides a short connection between School Road (north) and Grove Road (west).

- E-354/006/0 Public footpath which runs north-south along an agricultural access track (lightly trafficked). Open route through fields. Provides a connection between Grove Road (south) and PRoW E-354/008/0, E-354/006/0 and E-260/020/0 (north).
- E-354/007/0 Public footpath which runs in a northeast-southwest direction between Grove Road and Church Lane. A short open route though fields, which does not appear to be accessible from Grove Road (due to a hedgerow). This route is also crossed by E-354/006/0 (see above).
- E-260/017/0 Public footpath which broadly runs north-south through agricultural fields, largely non-trafficked. Long route of varying quality, running along tracks and open routes through fields. Provides a connection between Church Lane (south) and PRoW E-260/018/0 and E-260/020/0 (north).
- E-260/015/0 Public footpath which runs southwest-northeast through agricultural fields (non-trafficked). Open route through fields. Provides a short connection between PRoW E-260/017/0 (east) and PRoW E-260/016/0 (west).
- E-260/016/0 Public footpath which runs southwest-northeast along fields and an access road (lightly trafficked). Open route through fields and also partly along a well-surfaced access road. Provides a short connection between PRoW E-260/015/0 (east) and B1121 Saxmundham Road (west).
- E-491/010/0 Bridleway which runs southwest-northeast along rural (lightly trafficked) access tracks serving agricultural uses. Appears to be a good quality route along access tracks. Provides a connection between the B1121 (south) and the B1119 (north).
- E-491/006/0 Public footpath which runs east-west through agricultural fields (non-trafficked) within the Order Limits. Open route through fields. Provides a connection between PRoW E-260/018/0 (east) and PRoW E-460/023/0 (west).
- E-491/005/0 Public footpath which runs north-south through agricultural fields (non-trafficked) within the Order Limits. Appears to be a largely open route through fields. Provides a connection between PRoW E-491/004/0 (south) and PRoW E-491/006/0 (north).
- E-491/004/0 Public footpath which runs east-west through agricultural fields and is predominantly non-trafficked. Appears to be a largely open route through fields. Provides a local connection between PRoW E-491/005/0 and St Mary Magdalene Church.
- E-460/023/0 Public footpath which runs north-south along an agricultural access track (lightly trafficked). Good quality surfaced route. Provides a short connection between B1119 Church Hill (north) and PRoW E-491/006/0 (south).

Sensitivity of walking and cycling routes (including PRoW) for assessments

7.7.25 Table 7.21 provides a summary of PRoW and walking/cycling route sensitivity to Severance, Pedestrian Delay, Fear & Intimidation and Non-Motorised User Amenity effects which have been taken forward for assessment. Further detail on the considerations which inform the sensitivity levels assigned is provided in **Application Document 6.3.2.7.J Appendix 2.7.J Traffic and Transport Assessments**.

Table 7.21 Sensitivity of PRoW and walking/cycling routes to Severance, Pedestrian Delay, Fear and Intimidation and Non-Motorised User Amenity

Ref	Receptor type	Description	Sensitivity
S-P1	PRoW	E-103/006/0	Negligible
S-P2	PRoW	E-103/016/0	Low
S-P3	PRoW	E-260/013/A	Low
S-P4	PRoW	E-260/012/A	Low
S-P5	PRoW	E-354/002/0	Medium
S-P6	PRoW	E-354/001/0	Low
S-P7	PRoW	E-354/018/0	Negligible
S-P8	PRoW	E-354/007/A	Negligible
S-P9	PRoW	E-354/006/0	Low
S-P10	PRoW	E-260/017/0	Low
S-P11	PRoW	E-260/015/0	Negligible
S-P12	PRoW	E-260/016/0	Medium
S-P13	PRoW	E-491/010/0	Medium
S-P14	PRoW	E-491/006/0	Negligible
S-P15	PRoW	E-491/005/0	Negligible
S-P16	PRoW	E-491/004/0	Low
S-P17	PRoW	E-460/023/0	Low
S-W1	National Walking Route	King Charles III England Coast Path	Medium
S-W2	Regional Walking Route	Suffolk Coast Path	Medium
S-W3	Regional Walking Route	Sandlings Walk	Medium
S-C1	Regional Cycling Route	Regional Cycle Route 42	Medium

7.7.26 Table 7.22 provides a summary of PRoW sensitivity to PRoW Diversion and Closure effects which have been taken forward for assessment. This also includes consideration of the King Charles III England Coast Path as requested by SCC. Further detail on the considerations which inform the sensitivity levels assigned is provided in **Application Document 6.3.2.7.J Appendix 2.7.J Traffic and Transport Assessments**.

Table 7.22 Sensitivity of PRoW for PRoW Diversions and Closures

Ref	Receptor type	Description	Sensitivity
S-P1	PRoW	E-103/006/0	Low
S-P2	PRoW	E-103/016/0	Medium
S-P3	PRoW	E-260/013/A	Low
S-P4	PRoW	E-260/012/A	Low
S-P5	PRoW	E-354/002/0	Medium
S-P6	PRoW	E-354/001/0	Low
S-P7	PRoW	E-354/018/0	Negligible
S-P8	PRoW	E-354/007/A	Low
S-P9	PRoW	E-354/006/0	Low
S-P10	PRoW	E-260/017/0	Low
S-P11	PRoW	E-260/015/0	Low
S-P12	PRoW	E-260/016/0	Low
S-P13	PRoW	E-491/010/0	Low
S-P14	PRoW	E-491/006/0	Medium
S-P15	PRoW	E-491/005/0	Low
S-P16	PRoW	E-491/004/0	Low
S-P17	PRoW	E-460/023/0	Medium
S-W1	National Walking Route	King Charles III England Coast Path	High

Future Baseline

Background Traffic Growth

7.7.27 The future baseline scenarios are set out in **Application Document 6.2.1.5 Part 1 Introduction Chapter 5 EIA Approach and Methodology**.

7.7.28 In the absence of the Proposed Project, traffic flows on the surrounding highway network would be expected to increase as a result of housing and employment growth. Therefore, projected background traffic growth has been applied to the 2024 baseline traffic flows to represent conditions during the future baseline (and construction peak assessment year) of 2028. As previously mentioned, the decommissioning phase is considered to be too far into the future to be able to accurately predict traffic flows at that time.

7.7.29 Traffic growth has been calculated using NRTF growth factors, reflecting projected increases in annual vehicle mileage on roads within England and Wales. NTM adjustments have then been applied within TEMPro Version 8.1, utilising NTEM dataset v8.0 and the NRTP 2022 Core dataset to reflect local factors (Suffolk coastal) for the appropriate road types. The growth factors have been used to determine the forecast increases in baseline car driver/passenger trips during each period.

7.7.30 A summary of the growth factors is set out in Table 7.23 below.

Table 7.23 Traffic growth factors to 2028

Growth Period	Road type	Traffic growth factor				
		AM peak	PM peak	Average weekday	Average day	Saturday
2024 to 2028 (Construction)	A Road	1.03027	1.03017	1.03133	1.03158	1.03223
	Minor	1.02902	1.02892	1.03007	1.03033	1.03098
	All	**1.03578**	**1.03568**	**1.03684**	**1.03709**	**1.03775**

7.7.31 To provide consistency across the network, the growth factors for all roads (the highest factors as presented above in bold) have been applied to the 2024 baseline traffic flows to derive 2028 baseline traffic flows for the respective time periods.

7.7.32 The anticipated future baseline flows on the surrounding highway network for all assessment periods are summarised in **Application Document 6.3.2.7.D Appendix 2.7.D Baseline Traffic Movements**. The 12-hour weekday and 24-hour average daily future baseline traffic flows are provided in Table 7.24.

Table 7.24 Future baseline (2028) weekday (12 hours) and average daily (24 hours) traffic flows

Ref	Receptor Type	Description	Weekday (12 hours)		Average Day (24 hours)	
			HGVs	Total	HGVs	Total
S-RL1	Road Link	A12 (south of A1094)	737	13,177	825	14,759
S-RL2	Road Link	A12 (between A1094 & B1121 Main Rd south junction)	654	9,774	732	10,947
S-RL3	Road Link	A12 (between B1121 Main Road junctions)	608	8,718	677	9,124
S-RL4	Road Link	A12 (north of B1121 Main Road northern junction)	582	9,063	651	10,171

Ref	Receptor Type	Description	Weekday (12 hours)		Average Day (24 hours)	
			HGVs	Total	HGVs	Total
S-RL5	Road Link	B1121 Main Road (east of A12)	123	4,023	108	4,247
S-RL6	Road Link	B1121 Main Road (south of B1119 Church Street)	99	3,905	87	4,126
S-RL7	Road Link	B1119 Church Street (east of B1121 Main Road)	78	2,756	71	2,979
S-RL8	Road Link	B1121 Aldeburgh Road (between A1094 and B1121 Saxmundham Road)	30	979	27	1,080
S-RL9	Road Link	B1121 Saxmundham Road (north of Grove Road)	22	885	18	891
S-RL10	Road Link	A1094 (between A12 and B1069 Snape Road)	218	6,402	200	7,062
S-RL11	Road Link	A1094 Aldeburgh Road (between B1069 Snape Road and B1122 Leiston Road)	86	3,528	95	4,034
S-RL12	Road Link	B1069 Snape Road (between A1094 Aldeburgh Road and Aldringham Lane)	156	5,245	173	5,997
S-RL13	Road Link	B1122 Leiston Road (between A1094 Aldeburgh Road and Aldringham Lane)	126	2,581	105	2,642
S-RJ1	Road Junction	A12/A1094 Junction	792	14,421	887	16,152
S-RJ2	Road Junction	A12/B1121 (South) Junction	670	10,204	750	11,428
S-RJ3	Road Junction	A12/B1119 Junction	627	11,317	695	11,370
S-RJ4	Road Junction	A12/B1121 (North) Junction	603	9,296	674	10,433

Ref	Receptor Type	Description	Weekday (12 hours)		Average Day (24 hours)	
			HGVs	Total	HGVs	Total
S-RJ5	Road Junction	A12/B1122 Junction	692	11,497	774	12,903
S-RJ6	Road Junction	B1121 Main Road/B1121 Church Hill Junction	118	4,244	104	4,482
S-RJ7	Road Junction	B1121 Main Road/B1119 Church Hill Signalised Junction	169	8,337	149	8,817
S-RJ8	Road Junction	B1121 Saxmundham Road/Grove Road/Mill Road Junction	25	1,022	20	1,028
S-RJ9	Road Junction	A1094 Aldeburgh Road/B1121 Aldeburgh Road Junction	242	7,210	222	7,953
S-RJ10	Road Junction	A1094 Aldeburgh Road/B1069 Snape Road Junction	234	8,600	260	9,832
S-RJ11	Road Junction	A1094/B1122 Leiston Road/Church Farm Road Roundabout	135	5,385	150	6,157
S-RJ12	Road Junction	B1122 Aldeburgh Road/B1353 Aldringham Lane Junction	172	5,719	144	5,875
S-RJ13	Road Junction	B1069 Leiston Road/B1353 Aldringham Lane Junction	152	4,966	135	5,139
S-RJ14	Road Junction	A1094/Sternfield Road/Church Road Junction	304	8,533	278	9,410

Future Network Changes

7.7.33 During the construction phase, several improvements may have been implemented across the surrounding highway network within or in close proximity to the Suffolk Onshore Scheme as a result of other highway schemes and committed developments. These include the following:

- A12 Bypass (a new single carriageway section of the A12 to help facilitate HGV transport during the construction and operational phases of Sizewell C Nuclear Power Station as well as for public use);
- Yoxford Roundabout (a replacement roundabout linking the A12 and B1122 at Yoxford, 100 m north of the existing A12/ B1122 junction). This will facilitate HGV construction and operational traffic associated with Sizewell C;
- Sizewell Link Road and associated junctions (part of a single carriageway bypass road to facilitate movement of HGV construction and operation traffic associated with Sizewell C and the public post-construction, to prevent congestion on the B1122); and
- Junction improvements along the route of the A12, associated with the development of the East Anglia ONE North and East Anglia TWO offshore windfarms.

7.7.34 Construction traffic associated with Sizewell C, East Anglia ONE North Offshore Windfarm and East Anglia Two Offshore Windfarm has been assessed as part of **Application Document 6.2.2.13 Part 2 Suffolk Chapter 13 Suffolk Onshore Scheme Inter-Project Cumulative Effects**. In terms of operation, the highway improvements identified above would increase the capacity of the highway network to accommodate construction traffic associated with the Suffolk Onshore Scheme. Nonetheless, for the purposes of **Application Document 6.2.2.13 Part 2 Suffolk Chapter 13 Suffolk Onshore Scheme Inter-Project Cumulative Effects** it has been assumed that none of these improvements would be in place for robustness.

7.7.35 There are not expected to be any further changes to the surrounding highway network, as a result of other projects or schemes, within or in close proximity to the Suffolk Onshore Scheme that require consideration.

Cumulative Developments

7.7.36 Cumulative schemes have been considered and assessed within **Application Document 6.2.2.13 Part 2 Suffolk Chapter 13 Suffolk Onshore Scheme Inter-Project Cumulative Effects** based on **Application Document 6.4.2.13.1 Suffolk Onshore Scheme Short List Developments**, which includes more than 25 developments. These have been considered cumulatively, and have not been included as part of the future baseline.

7.8 Proposed Project Design and Embedded Mitigation

7.8.1 The Proposed Project has been designed, as far as possible, to follow the mitigation hierarchy in order to, in the first instance, avoid or reduce traffic and transport impacts and effects through the process of design development, and then by embedding measures into the design of the Proposed Project.

7.8.2 As set out in **Application Document 6.2.1.5 Part 1 Introduction Chapter 5 EIA Approach and Methodology**, mitigation measures typically fall into one of three categories: embedded measures; control and management measures; and mitigation measures. Embedded, and control and management measures are set out below. Additional mitigation measures (where necessary) are discussed in Section 7.10.

Embedded Measures

7.8.3 Embedded measures have been integral in reducing, and where possible avoiding, the traffic and transport effects of the Proposed Project. Measures that have been incorporated are:

- Sensitive routing and siting of infrastructure and temporary works including to minimise the requirement to close/divert PRoW (see **Application Document 6.3.1.4.A Appendix 1.4.A Crossings Schedules** for further details);
- Relevant embedded measures set out within **Application Document 7.5.3.2 CEMP Appendix B Register of Environmental Actions and Commitments (REAC)**;
- Utilising trenchless methods at landfall (including underneath the Suffolk Coast Path, King Charles III England Coast Path, PRoW E-103/006/0 and Thorpe Road) to minimise potential impacts on the highway and walking/cycling routes; and
- Potential carriageway widening works, vegetation clearance and street furniture removal at the locations identified within **Application Document 7.5.1.1 – Outline CTMTP – Suffolk** to accommodate construction vehicles (including Abnormal Indivisible Loads).

Control and Management Measures

7.8.4 Measures relevant to the control and management of impacts during construction have been included within **Application Document 7.5.3.1 CEMP Appendix A Outline Code of Construction Practice**. The following measures (details of which sit in the above referenced document) have been taken into account in assessing the traffic and transport effects of the Proposed Project:

- GG02 - A CEMP, Landscape and Ecological Management Plan (LEMP) and Construction Traffic Management and Travel Plan (CTMTP) will be produced and submitted to the relevant authority for approval prior to construction of the relevant stage of the Proposed Project to which it relates. The plan produced will be substantially in accordance with the outline versions submitted as part of the application for development consent. In accordance Requirement 6 of Schedule 3 of the draft DCO, the contractor will need to comply with the approved plans (including any amendments to the plans subsequently approved).
- GG11 - Appropriate site layout and housekeeping measures will be implemented by the contractor(s) at all construction sites. This will include but not be limited to the following measures which are relevant to traffic:
  - managing staff/vehicles entering or leaving site, especially at the beginning and end of the working day; and
  - managing potential off-site contractor and visitor parking.
- GG12 - Vehicles will be correctly maintained and operated in accordance with manufacturer's recommendations and in a responsible manner. All plant and vehicles will be required to switch off their engines when not in use and when it is safe to do so. In addition, plant and vehicles will conform to relevant applicable standards for the vehicle type.
- TT01 - The Outline CTMTPs identify measures to reduce route and journey mileage to and from and around site, and prevent nuisance to the residents, businesses and the wider community caused by parking, vehicle movements and access restrictions.

They also provide suitable control for the means of access and egress to the public highway and set out measures for the maintenance and upkeep of the public highway. The plans also identify access for emergency vehicles. They also set out measures to reduce safety risks through construction vehicle and driver quality standards and measures to manage abnormal loads.

- TT02 - The contractor(s) will implement a monitoring and reporting system to check compliance with the measures set out within the Outline CTMTPs. This will include the need for a Global Positioning System (GPS) tracking system to be fitted to Heavy Goods Vehicles to check for compliance with authorised construction routes. The contractor(s) will also be expected to monitor the number of construction vehicles between the site and the strategic road network. Deviations from the authorised routes or changes to traffic levels that are higher than the CTMTP assumptions will require discussion with the relevant highways authorities to determine whether additional mitigation measures are needed.
- TT03 - All designated Public Rights of Way (PRoWs) will be identified, and any potential temporary and/or permanent diversions applied for/detailed in the DCO. All designated PRoWs crossing the working area will be managed with access only closed for short periods while construction activities occur. Any required diversions will be clearly marked at both ends with signage explaining the diversion, the duration of the diversion (for temporary diversions) and a contact number for any concerns. This is outlined in the Outline Public Rights of Way Management Plans.

7.8.5 Section 7 of **Application Document 7.5.1.1 – Outline CTMTP – Suffolk** includes construction traffic management measures that will be implemented in support of the Proposed Project, to avoid any adverse impacts on the surrounding networks during the construction phase.

7.8.6 It should be noted that the Proposed Project is not anticipated to have any traffic and transport impacts on Sundays/Bank Holidays with the restrictions identified in **Application Document 7.5.1.1 – Outline CTMTP – Suffolk**, which includes limiting HGV activity to a maximum of 30 HGVs per day on Sundays and public holidays.

7.8.7 Section 5 of **Application Document 7.5.9.1 – Outline PRoWMP – Suffolk** includes measures that will be implemented in support of the Proposed Project, to avoid any adverse impacts on the surrounding PRoW network during all phases of the Proposed Project.

7.9 Assessment of Impacts and Likely Significant Effects

7.9.1 The assessment of the effects of the Proposed Project on traffic and transport receptors described in this section considers the embedded and control and management measures described in Section 7.8.

Proposed Access and Vehicle Movements

Site Accesses

7.9.2 The Suffolk Onshore Scheme will be predominantly accessed via the following three access points during the construction phase (as shown on **Application Document 6.4.2.7.2 HGV Routing Plan**):

- **B1069 Eastern Side (S-BM03)**: Access to the area to the east of the B1069, including for cable installation, building the Joint Bay shed, cable jointing and joint bays. To be used throughout the construction programme, peak activity at this access is expected to occur in 2028.
- **B1069 Western Side (S-BM04)**: Access to the area to the west of the B1069, including for access works, utility crossings, haul road and compound installation, access to Friston substation (for installation), cable jointing, testing, demobilisation and reinstatement. To be used throughout the construction programme, peak activity at this access is expected to occur in 2027.
- **B1121 Main Road (S-BM09)**: Access to Saxmundham Converter Station for preparation works, haul road and compound installation, bridge and converter station installation, demobilisation and reinstatement. To be used throughout the construction programme, peak activity at this access is expected to occur in 2027.

7.9.3 A low proportion of construction vehicles (circa 3% in total) is expected across the remaining access points which comprise S-BM01 and S-BM02 (B1122 Leiston Road), S-BM11 (B1121 Saxmundham Road), S-BM10 (A1094 Aldeburgh Road), S-BM12 (B1119 Church Street) and S-BM13 (Thorpe Road). The accesses on Grove Road (S-BM05 and S-BM06) will be used as a vehicle crossover only and no vehicles will therefore turn to/from Grove Road to use these access points. As previously identified, S-BM08 (B1121 Main Road, northern option no longer forms parts of the proposals.

7.9.4 All of the above access points have been included as part of the assessment by assigning construction vehicle trips to each access (and the associated parts of the highway network) in accordance with the programme of works for each access.

7.9.5 Further details of the above access arrangements are set out within **Application Document 7.5.1.1 – Outline CTMTP – Suffolk**. Further details relating to permanent access arrangements (i.e. during the operational phase) are set out within **Application Document 6.3.2.7.A Appendix 2.7.A Transport Assessment Note**.

Construction vehicle routes

7.9.6 The primary construction vehicle routes to/from the Proposed Project will be via the A12 to the respective access points including the B1121 Main Road for access S-BM09 and the A1094 and B1069 Snape Road for accesses S-BM03 and S-BM04. Additional routes include the B1119 (S-BM12), B1121 Aldeburgh Road and B1121 Saxmundham Road (S-BM11), A1094 Aldeburgh Road (S-BM10), B1122 Leiston Road (S-BM01 and S-BM02) and Thorpe Road (for S-BM13), although these will experience less construction vehicle activity than the primary routes outlined above. No construction vehicles will be expected to use Grove Road. An HGV routing plan is held in **Application Document 6.4.2.7.2 HGV Routing Plan**.

7.9.7 In terms of abnormal loads, the following route is envisaged to be used which has been considered as part of the assessment of Hazardous/Large Loads:

- Transformer Abnormal Indivisible Loads (AILs): To arrive from the A12, via the B1122 and the B1069 Snape Road to the north of (and for) S-BM03. In terms of routing to Saxmundham Converter Station, vehicles will arrive via the A12 and the B1121 Main Road to the south of (and avoiding) the settlement of Saxmundham for S-BM09. The exact transformer AIL routing will be finalised following further discussion with SCC Highways, following a further review of access constraints and the completion of additional assessments where necessary (see **Application**

Document 7.5.1.1 Outline CTMTP – Suffolk for further details). The proposed routing for AILs is considered to be both reasonable and robust for the purposes of the assessment within this chapter.

- Cable Drum Abnormal Loads: As above. In addition, vehicles will arrive from the A12, then proceed along the A1094 before joining the B1069 for S-BM03, as well as leading to Aldringham Lane and the B1122 further to the east for S-BM01 and S-BM02.

7.9.8 An abnormal load routing plan is held in **Application Document 6.4.2.7.3 Abnormal Load Routing Plan**. It will be necessary to close these roads for the duration of these manoeuvres. This would require a Temporary Traffic Regulation Order/Notice from the Highway Authority or would be undertaken under powers sought in the DCO with respect to highways and street works. Further details are provided within **Application Document 7.5.1.1 – Outline CTMTP – Suffolk**.

7.9.9 A number of secondary construction access routes will also be used by construction vehicles, although these will be limited to LGVs where possible. These routes are illustrated on **Application Document 6.4.1.4.7 Suffolk Onshore Scheme Traffic Routes during Construction and Operation**.

Construction programme, working hours, and assessment parameters

7.9.10 The following assumptions have been adopted to provide a robust assessment of the Proposed Project:

- The shortest expected construction programme for the main construction phase will be 55 months (excluding the removal of construction compounds and reinstatement at the end of the programme). By adopting this duration this provides a robust approach in terms of monthly (and therefore daily) construction vehicle trips.
- The core construction working hours will be Monday to Friday (7am-7pm), Saturday (7am-5pm) and when required, Sunday and Bank Holiday (7am-5pm) in order to provide added flexibility to the programme (albeit with considerably fewer construction vehicle movements than weekday/Saturday working – see below).
- To provide a robust weekday assessment, rather than adopting 6am-7am for staff arrivals and 7pm-8pm for staff departures, construction worker travel patterns have been based on the 'shoulder' peaks to the traditional network peak hours. Therefore, staff arrivals have been assumed to take place between 7am-8am and staff departures have been assumed to take place between 6pm-7pm (Monday to Friday).
- During weekdays, HGV movements have been distributed across a 10-hour window, arriving and departing between 8am-6pm. For robustness, a higher proportion of HGV movements have been allocated to the start of the day (e.g. 23% between 8am-10am, compared to 13% between 4pm-6pm) based on the existing profile of HGV movements on the A12 (from DfT data), rather than adopting a flat profile. However, HGV movements will, in practice, be limited as far as possible so as not to travel during the traditional peak hours of 8am-9am and 5pm-6pm through the measures set out within **Application Document 7.5.1.1 – Outline CTMTP – Suffolk**.
- During the weekday, Light Goods Vehicle (LGV) movements have been distributed across a 12-hour window between 7am-7pm based on flat profile.

- A weekday assessment (Monday to Friday) has been carried out to provide a robust assessment of the peak construction phase based on the above, including both the shoulder and traditional network peaks.
- A Saturday assessment (lunchtime peak, 12pm-1pm) has also been carried out to provide a robust assessment of the peak construction phase, with the following assumptions:
  - HGVs distributed across an 8-hour window between 8am-4pm (with a similarly weighted profile towards the earlier part of the day and around 12% HGVs travelling between 12pm-1pm); and
  - LGVs distributed across a 10-hour window between 7am-5pm.

7.9.11 It should be noted that the Proposed Project is not anticipated to have any traffic and transport impacts on Sundays/Bank Holidays with the restrictions identified in **Application Document 7.5.1.1 – Outline CTMTP – Suffolk** which includes limitations on both work-type and HGV activity. It is expected that LGV and staff movements on Sundays and Bank Holidays will be at a maximum of 50% of the level of activity to be experienced on weekdays and Saturdays. HGV activity will also be restricted to a maximum of 30 HGVs per day on Sundays and public holidays. The assessment of the Saturday lunchtime peak (12pm-1pm) is therefore considered to offer a robust assessment of the weekend period when higher levels of construction vehicle movements are expected and so an additional assessment of Sundays/Bank Holidays is not considered to be required on this basis.

Forecast trip attraction

Introduction

7.9.12 This section sets out the forecast trip attraction for the Proposed Project based on the busiest day of the construction programme overall (across all accesses), as well as individual peaks for each part of the network based on their associated access points. Whilst 2028 represents the peak year of construction for the Suffolk Onshore Scheme based on total annual forecast construction traffic movements and the busiest day of the programme across all accesses combined, the daily peak for each access point (and therefore part of the network) varies between 2026, 2027, and 2028. Nonetheless, the highest construction traffic flows identified for each part of the network (and for each time period) have been adopted and assessed against the 2028 future baseline traffic flows.

7.9.13 The forecast peak construction vehicle trip attraction has been identified below for the following parts of the network and associated access points:

- B1121 Main Road (S-BM09 and S-BM12);
- B1069 Snape Road (S-BM03 and S-BM04);
- A1094 Aldeburgh Road east of B1069 Snape Road (S-BM01, S-BM02, S-BM10 and S-BM13);
- A12 North (All Accesses); and
- A12 South (All Accesses).

7.9.14 The peak for the A1094 between the A12 and the B1069 Snape Road is the same as that identified for the B1069 Snape Road, as trips associated with the remaining accesses to the east (via the A1094) are expected to take place at an earlier point in the programme.

7.9.15 Fewer than 30 peak daily construction vehicles are expected along the B1121 Aldeburgh Road and B1121 Saxmundham Road as a result of S-BM11 and trips associated with this part of the network (limited to access to existing OHL towers) have not therefore been presented below. As identified previously, S-BM08 does not form part of the proposals and the accesses on Grove Road (S-BM05 and S-BM06) will be used as a vehicle crossover only (with trips to/from the S-BM04 to the east and S-BM09 to the west).

7.9.16 There is expected to be a daily peak of 327 construction workers associated with the Suffolk Onshore Scheme (which is a maximum daily figure). All construction workers will travel to/from the Site at the start and end of the working day. An average vehicle occupancy factor of 1.5 construction workers per vehicle has been adopted for the site-based construction staff, which is considered to be reasonable, yet robust, given that all staff have been assumed to travel by vehicle (rather than other modes) and that a formal Car Share Scheme will be implemented to match potential car sharers.

7.9.17 Further details of construction traffic flows are provided below based on a weekday profile. The equivalent trip generation tables (as presented below) for the Saturday scenario are provided in **Application Document 6.3.2.7.F Appendix 2.7.F Saturday Trip Generation Tables**. Further details of vehicle trips associated with each individual access point are shown on the traffic flow diagrams provided in **Application Document 6.3.2.7.G Appendix 2.7.G Traffic Flow Diagrams**.

Overall daily peak

7.9.18 Table 7.25 below shows the daily peak in terms of total construction vehicle movements (and staff movements) across all accesses (combined) on the busiest day for the Suffolk Onshore Scheme, based on a weekday profile. The daily peak is expected to occur on a single day, with lower construction vehicle movements across the remainder of the programme.

Table 7.25 Forecast peak daily total construction vehicle movements (all accesses, weekday profile, 2028)

Time	Staff		LGVs		HGVs		Total vehicles		
	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Total
07:00-08:00	218	0	3	2	0	0	221	2	223
08:00-09:00	0	0	3	3	8	8	11	11	22
09:00-10:00	0	0	3	3	8	8	11	11	22
10:00-11:00	0	0	2	3	8	8	10	11	21
11:00-12:00	0	0	3	2	7	7	10	9	19
12:00-13:00	0	0	3	3	7	7	10	10	20
13:00-14:00	0	0	3	3	7	7	10	10	20

Time	Staff		LGVs		HGVs		Total vehicles		
	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Total
14:00-15:00	0	0	2	3	7	7	9	10	19
15:00-16:00	0	0	3	2	7	7	10	9	19
16:00-17:00	0	0	3	3	5	5	8	8	16
17:00-18:00	0	0	3	3	4	4	7	7	14
18:00-19:00	0	218	2	3	0	0	2	221	223
Total	**218**	**218**	**33**	**33**	**68**	**68**	**319**	**319**	**638**

7.9.19 As shown in Table 7.25 there will be a daily peak of 319 vehicles (638 movements) including 218 staff vehicles (based on the peak of 327 construction workers), 33 LGVs and 68 HGVs associated with the Suffolk Onshore Scheme. Of these, a total of 147 vehicles are expected to use the B1069 western access (S-BM04), with 111 vehicles using the B1121 Main Road access (S-BM09) and 61 vehicles using the B1069 eastern access (S-BM03) based on the proposed construction works, compound locations and construction traffic forecasts.

7.9.20 Based on the construction programme, the daily peak in terms of total HGV movements across all accesses (combined) differs from the above and is shown in Table 7.26 below based on a weekday profile. This is expected to occur on a single day in 2027.

Table 7.26 Forecast peak daily total HGV movements (all accesses, weekday profile, 2027)

Time	Staff		LGVs		HGVs		Total vehicles		
	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Total
07:00-08:00	72	0	3	2	0	0	75	2	77
08:00-09:00	0	0	3	3	20	20	23	23	46
09:00-10:00	0	0	2	3	20	20	22	23	45
10:00-11:00	0	0	3	2	19	19	22	21	43
11:00-12:00	0	0	3	3	19	19	22	22	44
12:00-13:00	0	0	2	3	19	19	21	22	43
13:00-14:00	0	0	3	2	19	19	22	21	43
14:00-15:00	0	0	3	3	18	18	21	21	42
15:00-16:00	0	0	2	3	17	17	19	20	39
16:00-17:00	0	0	3	2	12	12	15	14	29
17:00-18:00	0	0	3	3	10	10	13	13	26
18:00-19:00	0	72	2	3	0	0	2	75	77
Total	**72**	**72**	**32**	**32**	**173**	**173**	**277**	**277**	**554**

7.9.21 As shown in Table 7.26 there will be a daily peak of 173 HGVs (346 movements) associated with the Suffolk Onshore Scheme. Of these, a total of 82 HGVs are expected to use the B1121 Main Road access (S-BM09), with 65 HGVs using the B1069 western access (S-BM04), 25 HGVs using the B1069 eastern access (S-BM03) and one HGV using S-BM12.

7.9.22 As previously outlined, individual peaks for different access points and parts of the network are expected to occur on different days across the construction programme and these have been considered below to provide a robust assessment of the proposals.

B1121 Main Road (S-BM09 and S-BM12)

7.9.23 Based on the construction programme, the daily construction vehicle peak in terms of total vehicles along the B1121 Main Road and associated with accesses S-BM09 and S-BM12 is expected to take place in 2027. This is shown in Table 7.27 below based on a weekday profile and incorporates the peak in terms of HGV movements which is also expected to occur in 2027.

Table 7.27 B1121 Main Road – Forecast peak daily total construction vehicle movements incorporating peak HGVs (S-BM09 and S-BM12, weekday profile, 2027)

Time	Staff		LGVs		HGVs		Total vehicles		
	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Total
07:00-08:00	63	0	1	0	0	0	64	0	64
08:00-09:00	0	0	0	1	10	10	10	11	21
09:00-10:00	0	0	0	0	10	10	10	10	20
10:00-11:00	0	0	1	0	10	10	11	10	21
11:00-12:00	0	0	0	1	10	10	10	11	21
12:00-13:00	0	0	0	0	9	9	9	9	18
13:00-14:00	0	0	1	0	10	10	11	10	21
14:00-15:00	0	0	0	1	9	9	9	10	19
15:00-16:00	0	0	0	0	9	9	9	9	18
16:00-17:00	0	0	1	0	6	6	7	6	13
17:00-18:00	0	0	0	1	5	5	5	6	11
18:00-19:00	0	63	0	0	0	0	0	63	63
Total	**63**	**63**	**4**	**4**	**88**	**88**	**155**	**155**	**310**

7.9.24 The daily peak in terms of total staff movements along the B1121 Main Road differs from the above and is expected to take place in 2028. This is shown in Table 7.28 below based on a weekday profile.

Table 7.28 B1121 Main Road – Forecast peak daily staff movements (S-BM09 and S-BM12, weekday profile, 2028)

Time	Staff		LGVs		HGVs		Total vehicles		
	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Total
07:00-08:00	53	0	5	4	0	0	58	4	62
08:00-09:00	0	0	5	5	4	4	9	9	18
09:00-10:00	0	0	5	5	4	4	9	9	18
10:00-11:00	0	0	5	5	4	4	9	9	18
11:00-12:00	0	0	4	5	4	4	8	9	17
12:00-13:00	0	0	5	4	4	4	9	8	17
13:00-14:00	0	0	5	5	4	4	9	9	18
14:00-15:00	0	0	5	5	3	3	8	8	16
15:00-16:00	0	0	5	5	3	3	8	8	16
16:00-17:00	0	0	4	5	3	3	7	8	15
17:00-18:00	0	0	5	4	2	2	7	6	13
18:00-19:00	0	53	4	5	0	0	4	58	62
Total	**53**	**53**	**57**	**57**	**35**	**35**	**145**	**145**	**290**

B1069 Snape Road (S-BM03 and S-BM04)

7.9.25 Based on the construction programme, the daily construction vehicle peak in terms of total vehicles along the B1069 Snape Road and associated with accesses S-BM03 and S-BM04 is expected to take place in 2028. This is shown in Table 7.29 below based on a weekday profile and incorporates the peak in terms of staff vehicle movements which is also expected to occur in 2028. The peak for the A1094 between the A12 and the B1069 Snape Road is the same as that identified for the B1069 Snape Road, as trips associated with the remaining accesses to the east (via the A1094) are expected to take place at an earlier point in the programme.

Table 7.29 B1069 Snape Road – Forecast peak daily total construction vehicle movements incorporating peak staff vehicles (S-BM03 and S-BM04, weekday profile, 2027)

Time	Staff		LGVs		HGVs		Total vehicles		
	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Total
07:00-08:00	31	0	6	5	0	0	37	5	42
08:00-09:00	0	0	6	6	6	6	12	12	24
09:00-10:00	0	0	6	6	6	6	12	12	24

Time	Staff		LGVs		HGVs		Total vehicles		
	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Total
10:00-11:00	0	0	5	6	6	6	11	12	23
11:00-12:00	0	0	6	5	6	6	12	11	23
12:00-13:00	0	0	5	6	6	6	11	12	23
13:00-14:00	0	0	6	5	6	6	12	11	23
14:00-15:00	0	0	5	6	6	6	11	12	23
15:00-16:00	0	0	6	5	5	5	11	10	21
16:00-17:00	0	0	5	6	4	4	9	10	19
17:00-18:00	0	0	6	5	3	3	9	8	17
18:00-19:00	0	31	5	6	0	0	5	37	42
Total	**31**	**31**	**67**	**67**	**54**	**54**	**152**	**152**	**304**

7.9.26 The daily peak in terms of total HGV movements along the B1069 Snape Road differs from the above and is expected to take place in 2027. This is shown in Table 7.30 below based on a weekday profile.

Table 7.30 B1069 Snape Road – Forecast peak daily HGV movements (S-BM04, weekday profile, 2027)

Time	Staff		LGVs		HGVs		Total vehicles		
	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Total
07:00-08:00	7	0	2	1	0	0	9	1	10
08:00-09:00	0	0	1	2	10	10	11	12	23
09:00-10:00	0	0	1	1	9	9	10	10	20
10:00-11:00	0	0	2	1	9	9	11	10	21
11:00-12:00	0	0	1	2	9	9	10	11	21
12:00-13:00	0	0	1	1	9	9	10	10	20
13:00-14:00	0	0	2	1	9	9	11	10	21
14:00-15:00	0	0	1	2	8	8	9	10	19
15:00-16:00	0	0	1	1	8	8	9	9	18
16:00-17:00	0	0	2	1	6	6	8	7	15
17:00-18:00	0	0	1	2	5	5	6	7	13
18:00-19:00	0	7	1	1	0	0	1	8	9
Total	**7**	**7**	**16**	**16**	**82**	**82**	**105**	**105**	**210**

A1094 Aldeburgh Road east of B1069 Snape Road (S-BM01, S-BM02, S-BM10 and S-BM13)

7.9.27 Based on the construction programme, the daily construction vehicle peak in terms of total vehicles along the A1094 Aldeburgh Road to the east of the B1069 Snape Road and associated with accesses S-BM01, S-BM02, S-BM10 and S-BM13 is expected to take place in 2026. This is shown in Table 7.31 below based on a weekday profile and represents the peak in terms of both staff vehicle and HGV movements.

Table 7.31 A1094 Aldeburgh Road east of B1069 Snape Road – Forecast peak daily total construction vehicle movements (S-BM01, S-BM02, S-BM10 and S-BM13, weekday profile, 2026)

Time	Staff		LGVs		HGVs		Total vehicles		
	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Total
07:00-08:00	36	0	3	2	0	0	39	2	41
08:00-09:00	0	0	2	3	6	6	8	9	17
09:00-10:00	0	0	2	2	5	5	7	7	14
10:00-11:00	0	0	2	2	5	5	7	7	14
11:00-12:00	0	0	2	2	5	5	7	7	14
12:00-13:00	0	0	2	2	5	5	7	7	14
13:00-14:00	0	0	2	2	5	5	7	7	14
14:00-15:00	0	0	2	2	5	5	7	7	14
15:00-16:00	0	0	2	2	5	5	7	7	14
16:00-17:00	0	0	2	2	4	4	6	6	12
17:00-18:00	0	0	2	2	3	3	5	5	10
18:00-19:00	0	36	2	2	0	0	2	38	40
Total	**36**	**36**	**25**	**25**	**48**	**48**	**109**	**109**	**218**

A12 (All accesses)

7.9.28 The trips on the A12 have been identified by combining those for the A1094 between the A12 and the B1121 Aldeburgh Road (for accesses S-BM01, S-BM02, S-BM03, S-BM04, S-BM10, S-BM11 and S-BM13) and the B1121 Main Road (for accesses S-BM09 and S-BM12) to capture all access points. As the peaks for these parts of the network occur at different times in the programme, this results in a daily peak of 364 vehicles including 178 HGVs which slightly exceeds the overall daily peak presented Table 7.25 (319 vehicles) and overall daily HGVs presented in Table 7.26 (173 HGVs). This therefore provides a robust assessment of the A12.

A12 North

7.9.29 The daily construction vehicle peak in terms of total vehicles along the A12 to the north of the study area has been calculated based on 50% construction vehicles travelling to/from the north (further details on trip distribution are provided further below). This shown in Table 7.32 below based on a weekday profile and incorporates the peak in terms of HGV movements.

Table 7.32 A12 North – Forecast peak daily total construction vehicle movements incorporating peak HGV movements (weekday profile)

Time	Staff		LGVs		HGVs		Total vehicles		
	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Total
07:00-08:00	72	0	2	2	0	0	74	2	76
08:00-09:00	0	0	2	2	10	10	12	12	24
09:00-10:00	0	0	2	2	10	10	12	12	24
10:00-11:00	0	0	2	2	10	10	12	12	24
11:00-12:00	0	0	2	2	10	10	12	12	24
12:00-13:00	0	0	2	2	10	10	12	12	24
13:00-14:00	0	0	2	1	10	10	12	11	23
14:00-15:00	0	0	1	2	9	9	10	11	21
15:00-16:00	0	0	2	1	9	9	11	10	21
16:00-17:00	0	0	1	2	6	6	7	8	15
17:00-18:00	0	0	2	1	5	5	7	6	13
18:00-19:00	0	72	1	2	0	0	1	74	75
Total	**72**	**72**	**21**	**21**	**89**	**89**	**182**	**182**	**364**

7.9.30 The daily peak incorporating peak staff vehicle movements along the A12 to the north of the study area is shown in Table 7.33 below based on a weekday profile.

Table 7.33 A12 North – Forecast peak daily total construction vehicle movements incorporating peak staff vehicle movements (weekday profile)

Time	Staff		LGVs		HGVs		Total vehicles		
	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Total
07:00-08:00	119	0	2	2	0	0	121	2	123
08:00-09:00	0	0	2	2	5	5	7	7	14
09:00-10:00	0	0	2	2	5	5	7	7	14
10:00-11:00	0	0	2	2	5	5	7	7	14

Time	Staff		LGVs		HGVs		Total vehicles		
	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Total
11:00-12:00	0	0	2	2	5	5	7	7	14
12:00-13:00	0	0	2	2	4	5	6	7	13
13:00-14:00	0	0	2	1	5	4	7	5	12
14:00-15:00	0	0	1	2	4	4	5	6	11
15:00-16:00	0	0	2	1	4	4	6	5	11
16:00-17:00	0	0	1	2	3	3	4	5	9
17:00-18:00	0	0	2	1	2	2	4	3	7
18:00-19:00	0	119	1	2	0	0	1	121	122
Total	**119**	**119**	**21**	**21**	**42**	**42**	**182**	**182**	**364**

A12 South

7.9.31 The daily construction vehicle peak in terms of total vehicles along the A12 to the south of the study area has been calculated based on 63% staff vehicles and LGVs travelling to/from the south and 85% HGVs travelling to/from the south (further details on trip distribution are provided further below). This shown in Table 7.34 below based on a weekday profile and incorporates the peak in terms of HGV movements.

Table 7.34 A12 South – Forecast peak daily total construction vehicle movements incorporating peak HGV movements (weekday profile)

Time	Staff		LGVs		HGVs		Total vehicles		
	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Total
07:00-08:00	92	0	3	2	0	0	95	2	97
08:00-09:00	0	0	2	3	18	18	20	21	41
09:00-10:00	0	0	2	2	17	17	19	19	38
10:00-11:00	0	0	2	2	17	17	19	19	38
11:00-12:00	0	0	2	2	17	17	19	19	38
12:00-13:00	0	0	3	2	16	16	19	18	37
13:00-14:00	0	0	2	3	16	16	18	19	37
14:00-15:00	0	0	2	2	16	16	18	18	36
15:00-16:00	0	0	2	2	15	15	17	17	34
16:00-17:00	0	0	2	2	10	10	12	12	24
17:00-18:00	0	0	2	2	9	9	11	11	22
18:00-19:00	0	92	2	2	0	0	2	94	96

Time	Staff		LGVs		HGVs		Total vehicles		
	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Total
Total	**92**	**92**	**26**	**26**	**151**	**151**	**269**	**269**	**538**

7.9.32 The peak staff vehicle movements along the A12 to the south of the study area differs from the above and is shown in Table 7.35 below based on a weekday profile.

Table 7.35 A12 South – Forecast peak daily total construction vehicle movements incorporating peak staff vehicle movements (weekday profile)

Time	Staff		LGVs		HGVs		Total vehicles		
	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Total
07:00-08:00	151	0	3	2	0	0	154	2	156
08:00-09:00	0	0	2	3	9	9	11	12	23
09:00-10:00	0	0	2	2	8	8	10	10	20
10:00-11:00	0	0	2	2	8	8	10	10	20
11:00-12:00	0	0	2	2	8	8	10	10	20
12:00-13:00	0	0	3	2	8	8	11	10	21
13:00-14:00	0	0	2	3	8	8	10	11	21
14:00-15:00	0	0	2	2	7	7	9	9	18
15:00-16:00	0	0	2	2	7	7	9	9	18
16:00-17:00	0	0	2	2	5	5	7	7	14
17:00-18:00	0	0	2	2	4	4	6	6	12
18:00-19:00	0	151	2	2	0	0	2	153	155
Total	**151**	**151**	**26**	**26**	**72**	**72**	**249**	**249**	**498**

Traffic Flow Diagrams

7.9.33 The traffic flows within **Application Document 6.3.2.7.G Appendix 2.7.G Traffic Flow Diagrams** include daily HGV peaks and daily staff peaks at certain access points (where these differ as identified further above), so that the highest traffic flows can be identified across the network for each period, to inform the assessment work. Based on the trip profiles presented previously, daily HGV peaks tend to result in higher vehicle numbers between 8am-9am and 5pm-6pm (weekday), and 12pm-1pm (Saturday), whereas daily staff peaks result in higher vehicle numbers between 7am-8am and 6pm-7pm (weekday). The 12-hour weekday assessment considers the overall daily peak in terms of total construction vehicles and reflects peak HGV movements to provide a robust assessment of daily HGVs.

Construction Vehicle Profile and Peak Duration

7.9.34 As previously identified, the assessment work within this chapter has been based on the busiest day of the construction programme (in terms of total construction vehicles) whilst also considering daily (localised) peaks at the access points. It is expected that construction works will be carried out over a five-year period (circa 60 months) and Plate 7.1 below shows the forecast levels of total construction vehicle movements (arrivals + departures) across the construction programme, which includes demobilisation works at the very end of the programme including the removal of construction compounds, equipment and fencing.

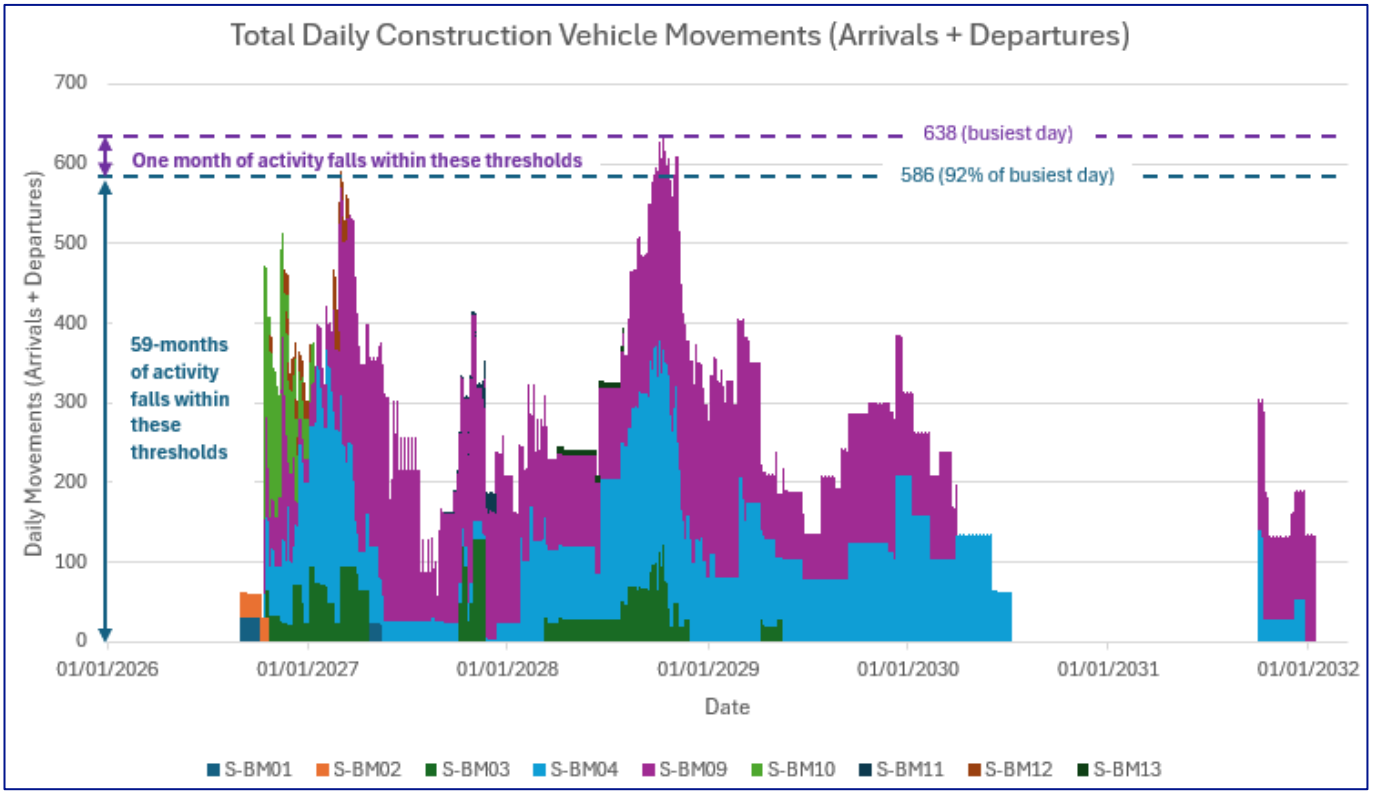

Plate 7.1 Construction vehicle profile

7.9.35 The above shows that there will be a daily peak of 319 vehicles (638 movements) on the single busiest day of the construction programme, which has previously been identified in Table 7.25. Throughout the majority of the programme (59 of the 60 months) there will be no more than 293 vehicles (586 movements) which represents 92% of the level of activity experienced on the busiest day. This reduced level of activity has been reviewed to inform the assessment work when a Moderate or Minor effect could be attributed based on the matrix (see Table 7.13) due to:

- A large magnitude of change and a low or medium level of sensitivity;
- A medium magnitude of change and a medium level of sensitivity; and
- A small magnitude of change and a very high level of sensitivity.

7.9.36 The above acknowledges the duration of the impact, namely that peak construction levels (above 293 daily construction vehicles) would only be experienced for one month of the programme. Should a lower magnitude of impact be experienced for the remainder of the programme (59 months) then this has been taken into account.

Summary

7.9.37 The development-related traffic flows have been robustly assessed by considering all access points and the highest construction vehicle numbers across the network based on these access points. Further details of the traffic flows across the network are presented within **Application Document 6.3.2.7.G Appendix 2.7.G Traffic Flow Diagrams**.

Forecast trip distribution

7.9.38 The majority of construction vehicles would be expected to ultimately travel to/from the A12, in order to access the B1121 Main Road for S-BM09 and S-BM12, or the A1094 Aldeburgh Road for the remainder of the access points. The forecast trip distribution in terms of trips entering/exiting the study area based on their expected points of origin when arriving to the Proposed Project (and conversely points of destination when departing) is as follows:

- To provide a robust assessment of the A12 south, it has been assumed that 63% staff/LGVs would travel to/from the south and 85% HGVs would travel to/from the south (in this instance it has been assumed that 37% staff/LGVs and 15% HGVs would travel to/from the A12 to the north, to avoid double-counting); and
- To provide a robust assessment of the A12 north, it has been assumed that 50% staff/LGVs would travel to/from the north and 50% HGVs would travel to/from the north (in this instance it has been assumed that 50% construction vehicles would travel to/from the A12 to the south, to avoid double-counting).

7.9.39 The staff/LGV trip distribution for the A12 has been informed by 2021 Census data (TS060 – Industry dataset) (Office for National Statistics, 2021) to identify the number of existing residents living within a 60-minute catchment of the site who also work in the construction industry and could theoretically be employed by the Proposed Project. In view of the COVID-19 pandemic, this dataset has only been used to identify the districts where construction workers live rather than estimating travel patterns. A simple gravity model has been developed to inform the trip distribution based on their proximity to the Proposed Project. Further details of the methodology and calculations are held in **Application Document 6.3.2.7.E Appendix 2.7.E Construction Worker Trip Distribution**. The distribution shows that 63% staff would be expected to travel to/from the A12 to the south and 37% staff would be expected to travel to/from the A12 to the north. This distribution provides a robust assessment of the A12 to the south.

7.9.40 The HGV trip distribution for the A12 has been informed by the HGV distribution adopted for Sizewell C, where 85% HGVs were assumed to travel to/from the A12 to the south and 15% HGVs were assumed to travel to/from the A12 to the north. This distribution provides a robust assessment of the A12 to the south.

7.9.41 To provide a robust assessment of the A12 to the north, rather than adopting distributions of 37% staff/LGV trips and 15% HGV trips, it has been assumed that 50% construction vehicles would use the A12 to the north.

7.9.42 The construction vehicle trips have been distributed across the local highway network based on the most logical route between the A12 and each access point as identified further above. The adopted distribution of construction vehicle trips across the highway network is illustrated on the traffic flow diagrams held in **Application Document 6.3.2.7.G Appendix 2.7.G Traffic Flow Diagrams**.

Preliminary highway impact assessment

7.9.43 A preliminary highway impact assessment has been carried out to identify the forecast increases in traffic levels on the surrounding highway network (road link and road junction receptors) as a result of construction traffic during the peak construction phase (adopting the highest construction vehicle flows for each access and part of the network). This has been informed by the forecast trip generation and distribution presented above and has been used to identify robust percentage increases in terms of HGVs and total vehicles to inform the assessments set out later within this section.

7.9.44 The preliminary highway impact is set out in **Application Document 6.3.2.7.H Appendix 2.7.H Preliminary Highway Impact Assessment**, which includes all road link and road junction receptors during the development 'shoulder' peak hours (7am-8am and 6pm-7pm), network peak hours (8am-9am and 5pm-6pm), the weekday 12-hour period (7am-7pm), average daily 24-hour period and Saturday lunchtime period (12pm-1pm).

Construction Phase

Severance

7.9.45 The assessment of Severance in relation to the Proposed Project has been based on the road link receptors, road junction receptors, PRoW receptors and national/regional walking and cycling route receptors identified in Section 7.6 (see also **Application Document 6.4.2.7.6 Road Link and Road Junction Receptors** and **Application Document 6.3.2.7.C Appendix 2.7.C Receptor Sensitivity Levels**).

7.9.46 Details of magnitude of impact with respect to Severance are set out within **Application Document 6.3.2.7.I Appendix 2.7.I Magnitude of Change**, based on the information presented in Section 7.4.

7.9.47 The assessment of Severance is summarised in Table 7.36 below, with further details held in **Application Document 6.3.2.7.J Appendix 2.7.J Traffic and Transport Assessments**.

Table 7.36 Assessment of Severance

Receptor			Likely Significant Effect	
Ref	**Description**	**Sensitivity**	**Magnitude**	**Significance**
S-RL1	A12 (south of A1094)	Low	Medium	Minor
S-RL2	A12 (between A1094 & B1121 Main Rd south junction)	Negligible	Small	Negligible
S-RL3	A12 (between B1121 Main Road junctions)	Negligible	Small	Negligible
S-RL4	A12 (north of B1121 Main Road northern junction)	Low	Small	Negligible

Receptor			Likely Significant Effect	
Ref	Description	Sensitivity	Magnitude	Significance
S-RL5	B1121 Main Road (east of A12)	Low	Medium	Minor
S-RL6	B1121 Main Road (south of B1119 Church Street)	Medium	Negligible	Negligible
S-RL7	B1119 Church Street (east of B1121 Main Road)	Medium	Negligible	Negligible
S-RL8	B1121 Aldeburgh Road (between A1094 and B1121 Saxmundham Road)	Medium	Negligible	Negligible
S-RL9	B1121 Saxmundham Road (north of Grove Road)	High	Negligible	Negligible
S-RL10	A1094 (between A12 and B1069 Snape Road)	Medium	Medium	Minor*
S-RL11	A1094 Aldeburgh Road (between B1069 Snape Road and B1122 Leiston Road)	Medium	Small	Minor
S-RL12	B1069 Snape Road (between A1094 Aldeburgh Road and Aldringham Lane)	Low	Medium	Minor
S-RL13	B1122 Leiston Road (between A1094 Aldeburgh Road and Aldringham Lane)	High	Negligible	Negligible
S-RJ1	A12/A1094 Junction	Negligible	Medium	Negligible
S-RJ2	A12/B1121 (South) Junction	Low	Small	Negligible
S-RJ3	A12/B1119 Junction	Negligible	Small	Negligible
S-RJ4	A12/B1121 (North) Junction	Negligible	Small	Negligible
S-RJ5	A12/B1122 Junction	Low	Small	Negligible
S-RJ6	B1121 Main Road/B1121 Church Hill Junction	Medium	Medium	Minor*
S-RJ7	B1121 Main Road/B1119 Church Hill Signalised Junction	High	Negligible	Negligible
S-RJ8	B1121 Saxmundham Road/Grove Road/Mill Road Junction	High	Negligible	Negligible

Receptor			Likely Significant Effect	
Ref	Description	Sensitivity	Magnitude	Significance
S-RJ9	A1094 Aldeburgh Road/B1121 Aldeburgh Road Junction	Negligible	Small	Negligible
S-RJ10	A1094 Aldeburgh Road/B1069 Snape Road Junction	Negligible	Small	Negligible
S-RJ11	A1094/B1122 Leiston Road/Church Farm Road Roundabout	High	Negligible	Negligible
S-RJ12	B1122 Aldeburgh Road/B1353 Aldringham Lane Junction	Medium	Negligible	Negligible
S-RJ13	B1069 Leiston Road/B1353 Aldringham Lane Junction	Low	Negligible	Negligible
S-RJ14	A1094/Sternfield Road/Church Road Junction	Low	Small	Negligible
S-P1	PRoW E-103/006/0	Negligible	Negligible	Negligible
S-P2	PRoW E-103/016/0	Low	Small	Negligible
S-P3	PRoW E-260/013/A	Low	Medium	Minor
S-P4	PRoW E-260/012/A	Low	Small	Negligible
S-P5	PRoW E-354/002/0	Medium	Medium	Minor
S-P6	PRoW E-354/001/0	Low	Small	Negligible
S-P7	PRoW E-354/018/0	Negligible	Small	Negligible
S-P8	PRoW E-354/007/A	Negligible	Small	Negligible
S-P9	PRoW E-354/006/0	Low	Large	Minor
S-P10	PRoW E-260/017/0	Low	Medium	Minor
S-P11	PRoW E-260/015/0	Negligible	Small	Negligible
S-P12	PRoW E-260/016/0	Medium	Small	Minor
S-P13	PRoW E-491/010/0	Medium	Small	Minor
S-P14	PRoW E-491/006/0	Negligible	Large	Minor
S-P15	PRoW E-491/005/0	Negligible	Large	Minor
S-P16	PRoW E-491/004/0	Low	Small	Negligible
S-P17	PRoW E-460/023/0	Low	Medium	Minor

Receptor			Likely Significant Effect	
Ref	**Description**	**Sensitivity**	**Magnitude**	**Significance**
S-W1	King Charles III England Coast Path	Medium	Negligible	Negligible
S-W2	Suffolk Coast Path	Medium	Negligible	Negligible
S-W3	Sandlings Walk	Medium	Medium	Minor
S-C1	Regional Cycle Route 42	Medium	Medium	Minor*

*Minor selected instead of Moderate to consider duration of effect (see below)

7.9.48 The following considerations have been taken into account in the decision to class the effect as Minor rather than Moderate for the following receptors, in keeping with Table 7.13 (note, the magnitude of impact remains the same for robustness):

- S-RL10 and S-C1 (where this uses the A1094): A small magnitude of impact would be expected based on construction traffic levels along the A1094 (between A12 and B1069 Snape Road) for at least 59 months of the circa 60-month construction programme (all time periods). Therefore, the medium magnitude of impact (based on peak construction traffic during the busiest day) would only be experienced for a duration of up to one month, with a small magnitude for the remainder of the programme.
- S-RJ6: A small magnitude of impact would be expected at the B1121 Main Road/B1121 Church Hill junction based on construction traffic levels for at least 59 months of the circa 60-month construction programme (all time periods). Therefore, the medium magnitude of impact (based on peak construction traffic during the busiest day) would only be experienced for a duration of up to one month, with a small magnitude for the remainder of the programme.

7.9.49 The following considerations have been taken into account when making the decision to class the effect as Minor rather than Moderate for the following walking and cycling route receptors (including PRoW) in keeping with Table 7.13 (note, the magnitude of impact remains the same for robustness):

- S-P5 and S-W3: The temporary diversion of PRoW E-354/002/0 (and Sandlings Walk which shares the same route at this location) will separate users from the proposed construction works and construction traffic (except for at a single managed haul road crossing point). A medium magnitude of impact has been assigned given that the temporary diversion will be in place throughout the construction phase. Nonetheless, the diverted route will run parallel with the section to be temporarily closed (less than 50m increase in journey length expected) and the measures set out within the **Application Document 7.5.9.1 Outline PRoWMP – Suffolk** are designed to reduce the impact of this diversion on users of PRoW E-354/002/0 (and therefore Sandlings Walk).
- S-P9: The permanent diversion of PRoW E-354/006/0 is required to avoid Friston Substation, Overhead Line connections and the HVDC cable route. A large magnitude of impact has been assigned given that a permanent diversion will be in place with an additional journey length of more than 400m. Nonetheless, the measures set out within the **Application Document 7.5.9.1 Outline PRoWMP – Suffolk** are designed to reduce the impact of this diversion on users of PRoW E-354/006/0. For example, the diversion will provide a connection with PRoW E-

354/007/A to improve the connectivity between routes and to allow PRoW users to use alternative routes if desired.

7.9.50 As shown above, the likely impact of the Proposed Project on Severance for all receptors within the study area is considered to be not significant based on the sensitivity levels and magnitudes of impact identified for these receptors.

Pedestrian Delay

7.9.51 The assessment of Pedestrian Delay in relation to the Proposed Project has been based on the road link receptors, road junction receptors, PRoW receptors and national/regional walking and cycling route receptors identified in Section 7.6 (see also **Application Document 6.4.2.7.6 Road Link and Road Junction Receptors** and **Application Document 6.3.2.7.C Appendix 2.7.C Receptor Sensitivity Levels**).

7.9.52 Details of magnitude of impact with respect to Pedestrian Delay are set out within **Application Document 6.3.2.7.I Appendix 2.7.I Magnitude of Change**, based on the information presented in Section 7.4.

7.9.53 The assessment of Pedestrian Delay is summarised in Table 7.37 below, with further details held in **Application Document 6.3.2.7.J Appendix 2.7.J Traffic and Transport Assessments**.

Table 7.37 Assessment of Pedestrian Delay

Receptor			Likely Significant Effect	
Ref	**Description**	**Sensitivity**	**Magnitude**	**Significance**
S-RL1	A12 (south of A1094)	Low	Medium	Minor
S-RL2	A12 (between A1094 & B1121 Main Rd south junction)	Negligible	Small	Negligible
S-RL3	A12 (between B1121 Main Road junctions)	Negligible	Small	Negligible
S-RL4	A12 (north of B1121 Main Road northern junction)	Low	Small	Negligible
S-RL5	B1121 Main Road (east of A12)	Low	Medium	Minor
S-RL6	B1121 Main Road (south of B1119 Church Street)	Medium	Negligible	Negligible
S-RL7	B1119 Church Street (east of B1121 Main Road)	Medium	Negligible	Negligible
S-RL8	B1121 Aldeburgh Road (between A1094 and B1121 Saxmundham Road)	Medium	Negligible	Negligible

Receptor			Likely Significant Effect	
Ref	Description	Sensitivity	Magnitude	Significance
S-RL9	B1121 Saxmundham Road (north of Grove Road)	High	Negligible	Negligible
S-RL10	A1094 (between A12 and B1069 Snape Road)	Medium	Medium	Minor*
S-RL11	A1094 Aldeburgh Road (between B1069 Snape Road and B1122 Leiston Road)	Medium	Small	Minor
S-RL12	B1069 Snape Road (between A1094 Aldeburgh Road and Aldringham Lane)	Low	Medium	Minor
S-RL13	B1122 Leiston Road (between A1094 Aldeburgh Road and Aldringham Lane)	High	Negligible	Negligible
S-RJ1	A12/A1094 Junction	Negligible	Medium	Negligible
S-RJ2	A12/B1121 (South) Junction	Low	Small	Negligible
S-RJ3	A12/B1119 Junction	Negligible	Small	Negligible
S-RJ4	A12/B1121 (North) Junction	Negligible	Small	Negligible
S-RJ5	A12/B1122 Junction	Low	Small	Negligible
S-RJ6	B1121 Main Road/B1121 Church Hill Junction	Medium	Medium	Minor*
S-RJ7	B1121 Main Road/B1119 Church Hill Signalised Junction	High	Negligible	Negligible
S-RJ8	B1121 Saxmundham Road/Grove Road/Mill Road Junction	High	Negligible	Negligible
S-RJ9	A1094 Aldeburgh Road/B1121 Aldeburgh Road Junction	Negligible	Small	Negligible
S-RJ10	A1094 Aldeburgh Road/B1069 Snape Road Junction	Negligible	Small	Negligible
S-RJ11	A1094/B1122 Leiston Road/Church Farm Road Roundabout	High	Negligible	Negligible

Receptor			Likely Significant Effect	
Ref	Description	Sensitivity	Magnitude	Significance
S-RJ12	B1122 Aldeburgh Road/B1353 Aldringham Lane Junction	Medium	Negligible	Negligible
S-RJ13	B1069 Leiston Road/B1353 Aldringham Lane Junction	Low	Negligible	Negligible
S-RJ14	A1094/Sternfield Road/Church Road Junction	Low	Small	Negligible
S-P1	PRoW E-103/006/0	Negligible	Negligible	Negligible
S-P2	PRoW E-103/016/0	Low	Small	Negligible
S-P3	PRoW E-260/013/A	Low	Medium	Minor
S-P4	PRoW E-260/012/A	Low	Small	Negligible
S-P5	PRoW E-354/002/0	Medium	Medium	Minor
S-P6	PRoW E-354/001/0	Low	Small	Negligible
S-P7	PRoW E-354/018/0	Negligible	Small	Negligible
S-P8	PRoW E-354/007/A	Negligible	Small	Negligible
S-P9	PRoW E-354/006/0	Low	Large	Minor
S-P10	PRoW E-260/017/0	Low	Medium	Minor
S-P11	PRoW E-260/015/0	Negligible	Small	Negligible
S-P12	PRoW E-260/016/0	Medium	Small	Minor
S-P13	PRoW E-491/010/0	Medium	Small	Minor
S-P14	PRoW E-491/006/0	Negligible	Large	Minor
S-P15	PRoW E-491/005/0	Negligible	Large	Minor
S-P16	PRoW E-491/004/0	Low	Small	Negligible
S-P17	PRoW E-460/023/0	Low	Medium	Minor
S-W1	King Charles III England Coast Path	Medium	Negligible	Negligible
S-W2	Suffolk Coast Path	Medium	Negligible	Negligible
S-W3	Sandlings Walk	Medium	Medium	Minor
S-C1	Regional Cycle Route 42	Medium	Medium	Minor*

*Minor selected instead of Moderate to consider duration of effect (see below)

7.9.54 The following considerations have been taken into account in the decision to class the effect as Minor rather than Moderate for the following receptors, in keeping with Table 7.13 (note, the magnitude of impact remains the same for robustness):

- S-RL10 and S-C1 (where this uses the A1094): A small magnitude of impact would be expected based on construction traffic levels along the A1094 (between A12 and B1069 Snape Road) for at least 59 months of the circa 60-month construction programme (all time periods). Therefore, the medium magnitude of impact (based on peak construction traffic during the busiest day) would only be experienced for a duration of up to one month, with a small magnitude for the remainder of the programme.
- S-RJ6: A small magnitude of impact would be expected at the B1121 Main Road/B1121 Church Hill junction based on construction traffic levels for at least 59 months of the circa 60-month construction programme (all time periods). Therefore, the medium magnitude of impact (based on peak construction traffic during the busiest day) would only be experienced for a duration of up to one month, with a small magnitude for the remainder of the programme.

7.9.55 The following considerations have taken into account in the decision to class the effect as Minor rather than Moderate for the following walking and cycling route receptors (including PRoW) in keeping with Table 7.13 (note, the magnitude of impact remains the same for robustness):

- S-P5 and S-W3: The temporary diversion of PRoW E-354/002/0 (and Sandlings Walk which shares the same route at this location) will separate users from the proposed construction works and construction traffic (except for at a single managed haul road crossing point). A medium magnitude of impact has been assigned given that the temporary diversion will be in place throughout the construction phase. Nonetheless, the diverted route will run parallel with the section to be temporarily closed (less than 50 m increase in journey length expected) and the measures set out within the **Application Document 7.5.9.1 Outline PRoWMP – Suffolk** are designed to reduce the impact of this diversion on users of PRoW E-354/002/0 (and therefore Sandlings Walk).
- S-P9: The permanent diversion of PRoW E-354/006/0 is required to avoid Friston Substation, Overhead Line connections and the HVDC cable route. A large magnitude of impact has been assigned given that a permanent diversion will be in place with an additional journey length of more than 400 m. Nonetheless, the measures set out within the **Application Document 7.5.9.1 Outline PRoWMP – Suffolk** are designed to reduce the impact of this diversion on users of PRoW E-354/006/0. For example, the diversion will provide a connection with PRoW E-354/007/A to improve the connectivity between routes and to allow PRoW users to use alternative routes if desired.

7.9.56 As shown above, the likely impact of the Proposed Project on Pedestrian Delay for all receptors within the study area is considered to be not significant based on the sensitivity levels and magnitudes of impact identified for these receptors.

Non-Motorised User Amenity

7.9.57 The assessment of Non-Motorised User Amenity in relation to the Proposed Project has been based on the road link receptors, road junction receptors, PRoW receptors and national/regional walking and cycling route receptors identified in Section 7.6 (see also

Application Document 6.4.2.7.6 Road Link and Road Junction Receptors and **Application Document 6.3.2.7.C Appendix 2.7.C Receptor Sensitivity Levels**).

7.9.58 Details of magnitude of impact with respect to Non-Motorised User Amenity are set out within **Application Document 6.3.2.7.I Appendix 2.7.I Magnitude of Change**, based on the information presented in Section 7.4.

7.9.59 The assessment of Non-Motorised User Amenity is summarised in Table 7.38 below, with further details held in **Application Document 6.3.2.7.J Appendix 2.7.J Traffic and Transport Assessments**.

Table 7.38 Assessment of Non-Motorised User Amenity

Receptor			Likely Significant Effect	
Ref	**Description**	**Sensitivity**	**Magnitude**	**Significance**
S-RL1	A12 (south of A1094)	Low	Negligible	Negligible
S-RL2	A12 (between A1094 & B1121 Main Rd south junction)	Negligible	Negligible	Negligible
S-RL3	A12 (between B1121 Main Road junctions)	Negligible	Negligible	Negligible
S-RL4	A12 (north of B1121 Main Road northern junction)	Low	Negligible	Negligible
S-RL5	B1121 Main Road (east of A12)	Low	Negligible	Negligible
S-RL6	B1121 Main Road (south of B1119 Church Street)	Medium	Negligible	Negligible
S-RL7	B1119 Church Street (east of B1121 Main Road)	Medium	Negligible	Negligible
S-RL8	B1121 Aldeburgh Road (between A1094 and B1121 Saxmundham Road)	Medium	Negligible	Negligible
S-RL9	B1121 Saxmundham Road (north of Grove Road)	High	Negligible	Negligible
S-RL10	A1094 (between A12 and B1069 Snape Road)	Medium	Negligible	Negligible
S-RL11	A1094 Aldeburgh Road (between B1069 Snape Road and B1122 Leiston Road)	Medium	Negligible	Negligible
S-RL12	B1069 Snape Road (between A1094 Aldeburgh Road and Aldringham Lane)	Low	Small	Negligible

Receptor			Likely Significant Effect	
Ref	Description	Sensitivity	Magnitude	Significance
S-RL13	B1122 Leiston Road (between A1094 Aldeburgh Road and Aldringham Lane)	High	Negligible	Negligible
S-RJ1	A12/A1094 Junction	Negligible	Negligible	Negligible
S-RJ2	A12/B1121 (South) Junction	Low	Negligible	Negligible
S-RJ3	A12/B1119 Junction	Negligible	Negligible	Negligible
S-RJ4	A12/B1121 (North) Junction	Negligible	Negligible	Negligible
S-RJ5	A12/B1122 Junction	Low	Negligible	Negligible
S-RJ6	B1121 Main Road/B1121 Church Hill Junction	Medium	Negligible	Negligible
S-RJ7	B1121 Main Road/B1119 Church Hill Signalised Junction	High	Negligible	Negligible
S-RJ8	B1121 Saxmundham Road/Grove Road/Mill Road Junction	High	Negligible	Negligible
S-RJ9	A1094 Aldeburgh Road/B1121 Aldeburgh Road Junction	Negligible	Negligible	Negligible
S-RJ10	A1094 Aldeburgh Road/B1069 Snape Road Junction	Negligible	Negligible	Negligible
S-RJ11	A1094/B1122 Leiston Road/Church Farm Road Roundabout	High	Negligible	Negligible
S-RJ12	B1122 Aldeburgh Road/B1353 Aldringham Lane Junction	Medium	Negligible	Negligible
S-RJ13	B1069 Leiston Road/B1353 Aldringham Lane Junction	Low	Negligible	Negligible
S-RJ14	A1094/Sternfield Road/Church Road Junction	Low	Negligible	Negligible
S-P1	PRoW E-103/006/0	Negligible	Negligible	Negligible
S-P2	PRoW E-103/016/0	Low	Small	Negligible
S-P3	PRoW E-260/013/A	Low	Small	Negligible
S-P4	PRoW E-260/012/A	Low	Small	Negligible

Receptor			Likely Significant Effect	
Ref	Description	Sensitivity	Magnitude	Significance
S-P5	PRoW E-354/002/0	Medium	Small	Minor
S-P6	PRoW E-354/001/0	Low	Negligible	Negligible
S-P7	PRoW E-354/018/0	Negligible	Negligible	Negligible
S-P8	PRoW E-354/007/A	Negligible	Small	Negligible
S-P9	PRoW E-354/006/0	Low	Negligible	Negligible
S-P10	PRoW E-260/017/0	Low	Small	Negligible
S-P11	PRoW E-260/015/0	Negligible	Small	Negligible
S-P12	PRoW E-260/016/0	Medium	Small	Minor
S-P13	PRoW E-491/010/0	Medium	Small	Minor
S-P14	PRoW E-491/006/0	Negligible	Small	Negligible
S-P15	PRoW E-491/005/0	Negligible	Small	Negligible
S-P16	PRoW E-491/004/0	Low	Negligible	Negligible
S-P17	PRoW E-460/023/0	Low	Negligible	Negligible
S-W1	King Charles III England Coast Path	Medium	Negligible	Negligible
S-W2	Suffolk Coast Path	Medium	Negligible	Negligible
S-W3	Sandlings Walk	Medium	Small	Minor
S-C1	Regional Cycle Route 42	Medium	Negligible	Negligible

7.9.60 As shown above, the likely impact of the Proposed Project on Non-Motorised User Amenity for all receptors within the study area is considered to be not significant based on the sensitivity levels and small/negligible magnitudes of impact identified for these receptors.

Fear and Intimidation

7.9.61 The assessment of Fear and Intimidation in relation to the Proposed Project has been based on the road link receptors, road junction receptors, PRoW receptors and national/regional walking and cycling route receptors identified in Section 7.6 (see also **Application Document 6.4.2.7.6 Road Link and Road Junction Receptors** and **Application Document 6.3.2.7.C Appendix 2.7.C Receptor Sensitivity Levels**).

7.9.62 Details of magnitude of impact with respect to Fear and Intimidation are set out within **Application Document 6.3.2.7.I Appendix 2.7.I Magnitude of Change**, based on the information presented in Section 7.4.

7.9.63 The assessment of Fear and Intimidation is summarised in Table 7.39 below, with further details held in **Application Document 6.3.2.7.J Appendix 2.7.J Traffic and Transport Assessments**.

Table 7.39 Assessment of Fear and Intimidation

Receptor			Likely Significant Effect	
Ref	**Description**	**Sensitivity**	**Magnitude**	**Significance**
S-RL1	A12 (south of A1094)	Low	Medium	Minor
S-RL2	A12 (between A1094 & B1121 Main Rd south junction)	Negligible	Negligible	Negligible
S-RL3	A12 (between B1121 Main Road junctions)	Negligible	Negligible	Negligible
S-RL4	A12 (north of B1121 Main Road northern junction)	Low	Negligible	Negligible
S-RL5	B1121 Main Road (east of A12)	Low	Negligible	Negligible
S-RL6	B1121 Main Road (south of B1119 Church Street)	Medium	Negligible	Negligible
S-RL7	B1119 Church Street (east of B1121 Main Road)	Medium	Negligible	Negligible
S-RL8	B1121 Aldeburgh Road (between A1094 and B1121 Saxmundham Road)	Medium	Negligible	Negligible
S-RL9	B1121 Saxmundham Road (north of Grove Road)	High	Negligible	Negligible
S-RL10	A1094 (between A12 and B1069 Snape Road)	Medium	Negligible	Negligible
S-RL11	A1094 Aldeburgh Road (between B1069 Snape Road and B1122 Leiston Road)	Medium	Negligible	Negligible
S-RL12	B1069 Snape Road (between A1094 Aldeburgh Road and Aldringham Lane)	Low	Negligible	Negligible
S-RL13	B1122 Leiston Road (between A1094 Aldeburgh Road and Aldringham Lane)	High	Negligible	Negligible
S-RJ1	A12/A1094 Junction	Negligible	Negligible	Negligible
S-RJ2	A12/B1121 (South) Junction	Low	Negligible	Negligible

Receptor			Likely Significant Effect	
Ref	Description	Sensitivity	Magnitude	Significance
S-RJ3	A12/B1119 Junction	Negligible	Negligible	Negligible
S-RJ4	A12/B1121 (North) Junction	Negligible	Negligible	Negligible
S-RJ5	A12/B1122 Junction	Low	Negligible	Negligible
S-RJ6	B1121 Main Road/B1121 Church Hill Junction	Medium	Negligible	Negligible
S-RJ7	B1121 Main Road/B1119 Church Hill Signalised Junction	High	Negligible	Negligible
S-RJ8	B1121 Saxmundham Road/Grove Road/Mill Road Junction	High	Negligible	Negligible
S-RJ9	A1094 Aldeburgh Road/B1121 Aldeburgh Road Junction	Negligible	Negligible	Negligible
S-RJ10	A1094 Aldeburgh Road/B1069 Snape Road Junction	Negligible	Negligible	Negligible
S-RJ11	A1094/B1122 Leiston Road/Church Farm Road Roundabout	High	Negligible	Negligible
S-RJ12	B1122 Aldeburgh Road/B1353 Aldringham Lane Junction	Medium	Negligible	Negligible
S-RJ13	B1069 Leiston Road/B1353 Aldringham Lane Junction	Low	Negligible	Negligible
S-RJ14	A1094/Sternfield Road/Church Road Junction	Low	Negligible	Negligible
S-P1	PRoW E-103/006/0	Negligible	Negligible	Negligible
S-P2	PRoW E-103/016/0	Low	Small	Negligible
S-P3	PRoW E-260/013/A	Low	Small	Negligible
S-P4	PRoW E-260/012/A	Low	Small	Negligible
S-P5	PRoW E-354/002/0	Medium	Small	Minor
S-P6	PRoW E-354/001/0	Low	Negligible	Negligible
S-P7	PRoW E-354/018/0	Negligible	Negligible	Negligible
S-P8	PRoW E-354/007/A	Negligible	Small	Negligible

Receptor			Likely Significant Effect	
Ref	Description	Sensitivity	Magnitude	Significance
S-P9	PRoW E-354/006/0	Low	Negligible	Negligible
S-P10	PRoW E-260/017/0	Low	Small	Negligible
S-P11	PRoW E-260/015/0	Negligible	Small	Negligible
S-P12	PRoW E-260/016/0	Medium	Small	Minor
S-P13	PRoW E-491/010/0	Medium	Small	Minor
S-P14	PRoW E-491/006/0	Negligible	Small	Negligible
S-P15	PRoW E-491/005/0	Negligible	Small	Negligible
S-P16	PRoW E-491/004/0	Low	Negligible	Negligible
S-P17	PRoW E-460/023/0	Low	Negligible	Negligible
S-W1	King Charles III England Coast Path	Medium	Negligible	Negligible
S-W2	Suffolk Coast Path	Medium	Negligible	Negligible
S-W3	Sandlings Walk	Medium	Small	Minor
S-C1	Regional Cycle Route 42	Medium	Negligible	Negligible

7.9.64 As shown above, the likely impact of the Proposed Project on Fear and Intimidation for all receptors within the study area is considered to be not significant based on the sensitivity levels and magnitudes of impact identified for these receptors.

Driver Delay

7.9.65 The assessment of Driver Delay in relation to the Proposed Project has been based on the road link receptors and road junction receptors identified in Section 7.6 (see also **Application Document 6.4.2.7.6 Road Link and Road Junction Receptors** and **Application Document 6.3.2.7.C Appendix 2.7.C Receptor Sensitivity Levels**).

7.9.66 Details of magnitude of impact with respect to Driver Delay are set out within **Application Document 6.3.2.7.I Appendix 2.7.I Magnitude of Change**, based on the information presented in Section 7.4.

7.9.67 The assessment of Driver Delay is summarised in Table 7.40 below, with further details held in **Application Document 6.3.2.7.J Appendix 2.7.J Traffic and Transport Assessments**.

Table 7.40 Assessment of Driver Delay

Receptor			Likely Significant Effect	
Ref	**Description**	**Sensitivity**	**Magnitude**	**Significance**
S-RL1	A12 (south of A1094)	Low	Negligible	Negligible
S-RL2	A12 (between A1094 & B1121 Main Rd south junction)	Negligible	Negligible	Negligible
S-RL3	A12 (between B1121 Main Road junctions)	Negligible	Negligible	Negligible
S-RL4	A12 (north of B1121 Main Road northern junction)	Negligible	Negligible	Negligible
S-RL5	B1121 Main Road (east of A12)	Low	Small	Negligible
S-RL6	B1121 Main Road (south of B1119 Church Street)	Medium	Negligible	Negligible
S-RL7	B1119 Church Street (east of B1121 Main Road)	High	Negligible	Negligible
S-RL8	B1121 Aldeburgh Road (between A1094 and B1121 Saxmundham Road)	Negligible	Negligible	Negligible
S-RL9	B1121 Saxmundham Road (north of Grove Road)	Negligible	Negligible	Negligible
S-RL10	A1094 (between A12 and B1069 Snape Road)	Medium	Small	Minor
S-RL11	A1094 Aldeburgh Road (between B1069 Snape Road and B1122 Leiston Road)	Negligible	Negligible	Negligible
S-RL12	B1069 Snape Road (between A1094 Aldeburgh Road and Aldringham Lane)	Medium	Small	Minor
S-RL13	B1122 Leiston Road (between A1094 Aldeburgh Road and Aldringham Lane)	Negligible	Negligible	Negligible
S-RJ1	A12/A1094 Junction	Medium	Negligible	Negligible
S-RJ2	A12/B1121 (South) Junction	Low	Small	Negligible
S-RJ3	A12/B1119 Junction	Medium	Negligible	Negligible
S-RJ4	A12/B1121 (North) Junction	Low	Negligible	Negligible

Receptor			Likely Significant Effect	
Ref	Description	Sensitivity	Magnitude	Significance
S-RJ5	A12/B1122 Junction	Medium	Negligible	Negligible
S-RJ6	B1121 Main Road/B1121 Church Hill Junction	Negligible	Small	Negligible
S-RJ7	B1121 Main Road/B1119 Church Hill Signalised Junction	High	Negligible	Negligible
S-RJ8	B1121 Saxmundham Road/Grove Road/Mill Road Junction	Negligible	Negligible	Negligible
S-RJ9	A1094 Aldeburgh Road/B1121 Aldeburgh Road Junction	Negligible	Small	Negligible
S-RJ10	A1094 Aldeburgh Road/B1069 Snape Road Junction	Medium	Small	Minor
S-RJ11	A1094/B1122 Leiston Road/Church Farm Road Roundabout	Negligible	Negligible	Negligible
S-RJ12	B1122 Aldeburgh Road/B1353 Aldringham Lane Junction	Medium	Negligible	Negligible
S-RJ13	B1069 Leiston Road/B1353 Aldringham Lane Junction	Low	Negligible	Negligible
S-RJ14	A1094/Sternfield Road/Church Road Junction	High	Negligible	Negligible

7.9.68 As shown above, the likely impact of the Proposed Project on Driver Delay for all receptors within the study area is considered to be not significant based on the sensitivity levels and small/negligible magnitudes of impact identified for these receptors.

Road Safety

7.9.69 The assessment of Road Safety in relation to the Proposed Project has been based on the road link receptors and road junction receptors identified in Section 7.6 (see also **Application Document 6.4.2.7.6 Road Link and Road Junction Receptors** and **Application Document 6.3.2.7.C Appendix 2.7.C Receptor Sensitivity Levels**).

7.9.70 Details of magnitude of impact with respect to Road Safety are set out within **Application Document 6.3.2.7.I Appendix 2.7.I Magnitude of Change**, based on the information presented in Section 7.4.

7.9.71 The assessment of Road Safety is summarised in Table 7.41 below, with further details held in **Application Document 6.3.2.7.J Appendix 2.7.J Traffic and Transport Assessments**.

Table 7.41 Assessment of Road Safety

Receptor			Likely Significant Effect	
Ref	**Description**	**Sensitivity**	**Magnitude**	**Significance**
S-RL1	A12 (south of A1094)	High	Small	Minor
S-RL2	A12 (between A1094 & B1121 Main Rd south junction)	Negligible	Negligible	Negligible
S-RL3	A12 (between B1121 Main Road junctions)	Medium	Negligible	Negligible
S-RL4	A12 (north of B1121 Main Road northern junction)	High	Negligible	Negligible
S-RL5	B1121 Main Road (east of A12)	Negligible	Small	Negligible
S-RL6	B1121 Main Road (south of B1119 Church Street)	Negligible	Negligible	Negligible
S-RL7	B1119 Church Street (east of B1121 Main Road)	High	Negligible	Negligible
S-RL8	B1121 Aldeburgh Road (between A1094 and B1121 Saxmundham Road)	Negligible	Negligible	Negligible
S-RL9	B1121 Saxmundham Road (north of Grove Road)	Negligible	Negligible	Negligible
S-RL10	A1094 (between A12 and B1069 Snape Road)	Low	Small	Negligible
S-RL11	A1094 Aldeburgh Road (between B1069 Snape Road and B1122 Leiston Road)	High	Negligible	Negligible
S-RL12	B1069 Snape Road (between A1094 Aldeburgh Road and Aldringham Lane)	Low	Small	Negligible
S-RL13	B1122 Leiston Road (between A1094 Aldeburgh Road and Aldringham Lane)	High	Negligible	Negligible
S-RJ1	A12/A1094 Junction	High	Small	Minor
S-RJ2	A12/B1121 (South) Junction	Negligible	Medium	Negligible

Receptor			Likely Significant Effect	
Ref	Description	Sensitivity	Magnitude	Significance
S-RJ3	A12/B1119 Junction	High	Negligible	Negligible
S-RJ4	A12/B1121 (North) Junction	Negligible	Negligible	Negligible
S-RJ5	A12/B1122 Junction	Low	Negligible	Negligible
S-RJ6	B1121 Main Road/B1121 Church Hill Junction	Negligible	Small	Negligible
S-RJ7	B1121 Main Road/B1119 Church Hill Signalised Junction	Negligible	Negligible	Negligible
S-RJ8	B1121 Saxmundham Road/Grove Road/Mill Road Junction	Negligible	Negligible	Negligible
S-RJ9	A1094 Aldeburgh Road/B1121 Aldeburgh Road Junction	Negligible	Small	Negligible
S-RJ10	A1094 Aldeburgh Road/B1069 Snape Road Junction	Negligible	Small	Negligible
S-RJ11	A1094/B1122 Leiston Road/Church Farm Road Roundabout	Low	Negligible	Negligible
S-RJ12	B1122 Aldeburgh Road/B1353 Aldringham Lane Junction	Negligible	Negligible	Negligible
S-RJ13	B1069 Leiston Road/B1353 Aldringham Lane Junction	Negligible	Negligible	Negligible
S-RJ14	A1094/Sternfield Road/Church Road Junction	Low	Small	Negligible

7.9.72 As shown above, the likely impact of the Proposed Project on Road Safety for all receptors within the study area is considered to be not significant based on the sensitivity levels and magnitudes of impact identified for these receptors.

Hazardous/Large Loads

7.9.73 The assessment of Hazardous/Large Loads in relation to the Proposed Project has been based on the road link receptors and road junction receptors identified in Section 7.6 (see also **Application Document 6.4.2.7.6 Road Link and Road Junction Receptors** and **Application Document 6.3.2.7.C Appendix 2.7.C Receptor Sensitivity Levels**).

7.9.74 Details of magnitude of impact with respect to Hazardous/Large Loads are set out within **Application Document 6.3.2.7.I Appendix 2.7.I Magnitude of Change**, based on the information presented in Section 7.4.

7.9.75 The assessment of Hazardous/Large Loads is summarised in Table 7.42 below, with further details held in **Application Document 6.3.2.7.J Appendix 2.7.J Traffic and Transport Assessments**.

Table 7.42 Assessment of Hazardous/Large Loads

Receptor			Likely Significant Effect	
Ref	**Description**	**Sensitivity**	**Magnitude**	**Significance**
S-RL1	A12 (south of A1094)	Negligible	Small	Negligible
S-RL2	A12 (between A1094 & B1121 Main Rd south junction)	Negligible	Small	Negligible
S-RL3	A12 (between B1121 Main Road junctions)	Negligible	Small	Negligible
S-RL4	A12 (north of B1121 Main Road northern junction)	Low	Small	Negligible
S-RL5	B1121 Main Road (east of A12)	Negligible	Small	Negligible
S-RL6	B1121 Main Road (south of B1119 Church Street)	Negligible	Negligible	Negligible
S-RL7	B1119 Church Street (east of B1121 Main Road)	Negligible	Negligible	Negligible
S-RL8	B1121 Aldeburgh Road (between A1094 and B1121 Saxmundham Road)	Negligible	Negligible	Negligible
S-RL9	B1121 Saxmundham Road (north of Grove Road)	Negligible	Negligible	Negligible
S-RL10	A1094 (between A12 and B1069 Snape Road)	Negligible	Small	Negligible
S-RL11	A1094 Aldeburgh Road (between B1069 Snape Road and B1122 Leiston Road)	Negligible	Negligible	Negligible
S-RL12	B1069 Snape Road (between A1094 Aldeburgh Road and Aldringham Lane)	Negligible	Small	Negligible

Receptor			Likely Significant Effect	
Ref	Description	Sensitivity	Magnitude	Significance
S-RL13	B1122 Leiston Road (between A1094 Aldeburgh Road and Aldringham Lane)	Negligible	Small	Negligible
S-RJ1	A12/A1094 Junction	Negligible	Small	Negligible
S-RJ2	A12/B1121 (South) Junction	Negligible	Small	Negligible
S-RJ3	A12/B1119 Junction	Low	Small	Negligible
S-RJ4	A12/B1121 (North) Junction	Negligible	Small	Negligible
S-RJ5	A12/B1122 Junction	Negligible	Small	Negligible
S-RJ6	B1121 Main Road/B1121 Church Hill Junction	Negligible	Small	Negligible
S-RJ7	B1121 Main Road/B1119 Church Hill Signalised Junction	Negligible	Negligible	Negligible
S-RJ8	B1121 Saxmundham Road/Grove Road/Mill Road Junction	Negligible	Negligible	Negligible
S-RJ9	A1094 Aldeburgh Road/B1121 Aldeburgh Road Junction	Negligible	Small	Negligible
S-RJ10	A1094 Aldeburgh Road/B1069 Snape Road Junction	Negligible	Small	Negligible
S-RJ11	A1094/B1122 Leiston Road/Church Farm Road Roundabout	Negligible	Negligible	Negligible
S-RJ12	B1122 Aldeburgh Road/B1353 Aldringham Lane Junction	Negligible	Small	Negligible
S-RJ13	B1069 Leiston Road/B1353 Aldringham Lane Junction	Negligible	Small	Negligible
S-RJ14	A1094/Sternfield Road/Church Road Junction	Negligible	Small	Negligible

7.9.76 As shown above, the likely impact of the Proposed Project on Hazardous/Large Loads for all receptors within the study area is considered to be not significant based on the sensitivity levels and small/negligible magnitudes of impact identified for these receptors.

PRoW Diversions and Closures

7.9.77 The assessment of PRoW Diversions and Closures in relation to the Proposed Project has been based on the PRoW receptors identified in Section 7.6, as well as the King Charles III England Coast Path (see also **Application Document 6.3.2.7.C Appendix 2.7.C Receptor Sensitivity Levels**).

7.9.78 Details of magnitude of impact with respect to PRoW Diversions and Closures are set out within **Application Document 6.3.2.7.I Appendix 2.7.I Magnitude of Change**, based on the information presented in Section 7.4.

7.9.79 The assessment of PRoW Diversions and Closures is summarised in Table 7.43 below, with further details held in **Application Document 6.3.2.7.J Appendix 2.7.J Traffic and Transport Assessments**.

Table 7.43 Assessment of PRoW Diversions and Closures

Receptor			Likely Significant Effect	
Ref	**Description**	**Sensitivity**	**Magnitude**	**Significance**
S-P1	PRoW E-103/006/0	Low	Negligible	Negligible
S-P2	PRoW E-103/016/0	Medium	Small	Minor
S-P3	PRoW E-260/013/A	Low	Medium	Minor
S-P4	PRoW E-260/012/A	Low	Small	Negligible
S-P5	PRoW E-354/002/0	Medium	Medium	Minor
S-P6	PRoW E-354/001/0	Low	Small	Negligible
S-P7	PRoW E-354/018/0	Negligible	Small	Negligible
S-P8	PRoW E-354/007/A	Low	Small	Negligible
S-P9	PRoW E-354/006/0	Low	Large	Minor
S-P10	PRoW E-260/017/0	Low	Medium	Minor
S-P11	PRoW E-260/015/0	Low	Small	Negligible
S-P12	PRoW E-260/016/0	Low	Small	Negligible
S-P13	PRoW E-491/010/0	Low	Small	Negligible
S-P14	PRoW E-491/006/0	Medium	Large	Minor
S-P15	PRoW E-491/005/0	Low	Large	Minor
S-P16	PRoW E-491/004/0	Low	Small	Negligible
S-P17	PRoW E-460/023/0	Medium	Medium	Minor
S-W1	King Charles III England Coast Path	High	Negligible	Negligible

7.9.80 The following considerations have taken into account in the decision to class the effect as Minor rather than Moderate for the following receptors, in keeping with Table 7.13 (note, the magnitude of impact remains the same for robustness):

- S-P5: The temporary diversion of PRoW E-354/002/0 will separate users from the proposed construction works and construction traffic (except for at a single managed haul road crossing point). A medium magnitude of impact has been assigned given that the temporary diversion will be in place throughout the construction phase. Nonetheless, the diverted route will run parallel with the section to be temporarily closed (less than 50m increase in journey length expected) and the measures set out within the **Application Document 7.5.9.1 Outline PRoWMP – Suffolk** are designed to reduce the impact of this diversion on users of PRoW E-354/002/0.
- S-P9: The permanent diversion of PRoW E-354/006/0 is required to avoid Friston Substation, Overhead Line connections and the HVDC cable route. A large magnitude of impact has been assigned given that a permanent diversion will be in place with an additional journey length of more than 400 m. Nonetheless, the measures set out within the **Application Document 7.5.9.1 Outline PRoWMP – Suffolk** are designed to reduce the impact of this diversion on users of PRoW E-354/006/0. For example, the diversion will provide a connection with PRoW E-354/007/A to improve the connectivity between routes and to allow PRoW users to use alternative routes if desired.
- S-P14: The temporary diversion of PRoW E-491/006/0 is required to avoid a construction compound. A large magnitude of impact has been assigned given that the temporary diversion will be in place throughout the construction programme with an additional journey length of more than 400 m. Nonetheless, the measures set out within the **Application Document 7.5.9.1 Outline PRoWMP – Suffolk** are designed to reduce the impact of this diversion on users of PRoW E-491/006/0. For example, the diversion will provide a connection with the proposed permanent diversion of PRoW E-491/005/0 to improve the connectivity between routes and to allow PRoW users to use alternative routes if desired.
- S-P15: The permanent diversion of PRoW E-491/005/0 is required to avoid Saxmundham Converter Station. A large magnitude of impact has been assigned given that a permanent diversion will be in place with an additional journey length of more than 400 m. Nonetheless, the measures set out within the **Application Document 7.5.9.1 Outline PRoWMP – Suffolk** are designed to reduce the impact of this diversion on users of PRoW E- E-491/005/0. For example, the diversion will provide a connection with PRoW E-491/006/0 to improve the connectivity between routes and to allow PRoW users to use alternative routes if desired.
- S-P17: The temporary diversion of PRoW E-460/023/0 will separate PRoW users from proposed construction traffic along an initial mobilisation access. A medium magnitude of impact has been assigned given that the temporary diversion will be in place for circa five months. Nonetheless, the diverted route will run parallel with the section to be temporarily closed (less than 50 m increase in journey length expected) and the measures set out within the **Application Document 7.5.9.1 Outline PRoWMP – Suffolk** are designed to reduce the impact of this diversion on users of PRoW E-460/023/0.

7.9.81 As shown above, the likely impact of the Proposed Project on PRoW Diversions and Closures for all receptors within the study area is considered to be not significant based on the sensitivity levels and magnitudes of impact identified for these receptors.

Operation and Maintenance Phase

7.9.82 During the operational and maintenance phase, the Suffolk Onshore Scheme will be manned by two operatives across the site (associated with the operation of the proposed Saxmundham Converter Station and Friston Substation), resulting in up to four daily car/LGV trips. There will also be additional infrequent trips associated with monthly or annual maintenance/inspections or repairs when required. Staff vehicles and those used for maintenance are primarily expected to be pickup trucks and vans, with HGVs accessing the site only rarely for the replacement of equipment. Therefore, due to the low level of trips likely to be generated, it has been agreed to scope out operational phase transport effects from the EIA (see Section 7.3). The proposed permanent routes which will be used during the operational and maintenance phase are shown on **Application Document 6.4.1.4.7 Suffolk Onshore Scheme Traffic Routes during Construction and Operation**. Further details relating to the operational and maintenance phase are set out within **Application Document 6.2.1.4 Part 1 Introduction Chapter 4 Description of the Proposed Project**.

7.9.83 The Proposed Project is expected to result in the permanent diversion of PRoW E-354/006/0 (S-P9) and PRoW E-491/005/0 (S-P15) and further details relating to these are set out within **Application Document 7.5.9.1 Outline PRoWMP – Suffolk**.

Decommissioning Phase

7.9.84 In the event that the Proposed Project is decommissioned, there are expected to be fewer HGV, LGV and worker arrivals and departures associated with the decommissioning phase of the Suffolk Onshore Scheme than during the construction phase. It is therefore considered reasonable to assume that the impacts of the decommissioning phase will be the same as, or not greater than, the construction phase. Therefore, and given that the exact timing of this scenario is unknown, the assessment of the construction phase has been adopted to determine the anticipated impact of the Suffolk Onshore Scheme during its decommissioning phase. This is considered to be a robust approach given that traffic movements during the decommissioning phase will be no greater than during construction.

7.10 Additional Mitigation

7.10.1 Additional topic and site-specific mitigation measures that have been applied to mitigate or offset any likely significant effects are included in **Application Document 7.5.3.2 CEMP Appendix B Register of Environmental Actions and Commitments (REAC)**.

7.10.2 No further mitigation measures are considered to be necessary for traffic and transport receptors in addition to the embedded measures and control and management measures set out in Section 7.8.

7.11 Residual Effects and Conclusions

7.11.1 As described above, no additional mitigation measures are necessary to avoid or reduce likely significant effects on traffic and transport receptors, therefore residual effects are as discussed in Section 7.9.

7.11.2 No likely significant effects have been identified as a result of the Proposed Project on transport and access during any phase with the proposed mitigation in place, as all effects have either been categorised as minor adverse or negligible.

7.12 Sensitivity Testing

7.12.1 Under the terms of the DCO, construction could commence in any year up to five years from the granting of the DCO which is assumed to be 2026. The peak period of construction in terms of total annual forecast construction traffic movements for the Suffolk Onshore Scheme is expected to occur in 2028 (based on works commencing in 2026), although daily access peaks for alternative years have also been considered where necessary. This chapter assesses the highest construction traffic flows for each part of the network against 2028 future baseline traffic flows.

7.12.2 Should there be a delay in the Proposed Project (e.g. if the works were to commence up to five years later), then future baseline traffic flows would be expected to be higher during the peak construction phase (e.g. 2033), reducing proportional traffic increases as a result of the Proposed Project (upon which the majority of the assessments have been based). Therefore, whilst total traffic flows may be higher this would be attributed to background traffic growth rather than the Proposed Project. The effects reported above for the Proposed Project are therefore considered to be both valid and robust in the instance that the works were to commence at a later date.

7.13 References

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National Grid plc
National Grid House,
Warwick Technology Park,
Gallows Hill, Warwick.
CV34 6DA United Kingdom

Registered in England and Wales
No. 4031152
nationalgrid.com