

# EAST PARK ENERGY

East Park Energy

EN010141

**Environmental Statement Volume 1 – Main Report** 

Chapter 9: Traffic and Transport

Document Reference: EN010141/DR/6.1

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009: Regulation 5(2)(a)

## **EAST PARK ENERGY**

Planning Act 2008

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

# **Environmental Statement Volume 1 – Main Report**

# **Chapter 9: Traffic and Transport**

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#### 9.0 TRAFFIC AND TRANSPORT

#### 9.1 Introduction

- 9.1.1 This chapter of the Environmental Statement (ES) presents the findings of an assessment of the likely significant highways and transport-related environmental effects as a result of the Scheme.
- 9.1.2 Detailed highways and transport operational analysis work, including the identification of development trip generation, a review of highway safety, the site accessibility, and the likely maximum trip generation during the construction period have been considered in a formal Transport Assessment (TA), which is provided as ES Vol 2 Appendix 9-1: Transport Assessment [EN010141/DR/6.2].
- 9.1.3 This chapter is supported by the following appendices in **ES Volume 2** [EN010141/DR/6.2]:
  - ES Vol 2 Appendix 9-1: Transport Assessment [EN010141/DR/6.2];
     and
  - ES Vol 2 Appendix 9-2: Traffic Flow Diagrams [EN010141/DR/6.2].

#### **Statement of Competence**

9.1.4 The author of this assessment has 19 years' experience in the field of transport planning with a master's degree in Transport Planning. During this time, they have written and contributed to numerous ES report chapters for the assessment of the environmental impacts of traffic and transport, including for large-scale renewable energy developments.



#### 9.2 Legislation, Policy and Guidance

#### Legislation

- 9.2.1 There is no specific legislation relevant to this assessment of impacts on traffic and transport, although on a general basis the assessment has been undertaken in accordance with the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017.
- 9.2.2 Transportation of large components requiring the use of Abnormal Indivisible Load (AIL) vehicles will be managed in accordance with the Road Vehicles (Authorisation of Special Types) (General) Order 2003.

### **Policy**

#### **National Policy**

- 9.2.3 The following National Policy Statements set out national planning policies in relation to nationally significant solar photovoltaic generation developments:
  - Overarching National Policy Statement (NPS) for Energy (EN-1)<sup>1</sup>; and
  - NPS for Renewable Energy Infrastructure (EN-3)<sup>2</sup>.
- 9.2.4 Although it is relevant to the Scheme, there are no specific policies within the NPS for Electricity Networks Infrastructure (EN-5)<sup>3</sup> which relate to traffic and transport impacts.
- 9.2.5 The policies of the National Planning Policy Framework (NPPF)<sup>4</sup> and guidance set out within the National Planning Policy Guidance for Travel Plans, Transport Assessment and Statements (2014)<sup>5</sup> are also important and relevant considerations.
- 9.2.6 Relevant sections of these policies in relation to ground conditions are set out in Table 9.1:



**Table 9.1: Summary of National Planning Policy** 

Document	Policy / Paragraph Reference	Summary of Policy / Paragraph	Where addressed in the ES?
NPS EN-1	Para 5.11.30	Public Rights of way, National Trails, and other rights of access to land are important recreational facilities for example for walkers, cyclists and horse riders. The Secretary of State should expect applicants to take appropriate mitigation measures to address adverse effects on coastal access, National Trails, other rights of way and open access land and, where appropriate, to consider what opportunities there may be to improve or create new access. In considering revisions to an existing right of way, consideration should be given to the use, character, attractiveness, and convenience of the right of way	The outline Public Right of Way Management Plan [EN010141/DR/7.8] sets out the proposed public right of way (PRoW) management and mitigation measures to avoid adverse effects.
	Para 5.14.1	The transport of materials, goods and personnel to and from a development during all project phases can have a variety of impacts on the surrounding transport infrastructure and potentially on connecting transport networks, for example through increased congestion. Impacts may include economic, social and environmental effects.	An assessment of heavy goods vehicles (HGVs) including AlL and construction staff travel is contained within ES Vol 1 Chapter 9: Traffic and Transport [EN010141/DR/6.1] Section 9.8, and ES Vol 2 Appendix 9-1: Transport Assessment [EN010141/APP/6.2], Section 6.6.
	Paragraph 5.14.2	Environmental impacts may result particularly from trips generated on roads which may increase noise and air pollution as well as greenhouse gas emissions.	A full review of the environmental impacts associated with road traffic is covered within ES Vol 1 Chapter 9: Traffic and Transport [EN010141/APP/6.1] section 9.6.



Document	Policy / Paragraph Reference	Summary of Policy / Paragraph	Where addressed in the ES?
	Paragraph 5.14.3	Disturbance caused by traffic and abnormal loads generated during the construction phase will depend on the scale and type of the proposal.	The outline Construction Traffic Management Plan (oCTMP) [EN010141/DR/7.4] and ES Vol 2 Appendix 9-1: Transport Assessment [EN010141/APP/6.2] outline the measures proposed to mitigate the transport impacts. A requirement of the draft DCO [EN010141/DR/3.1] secures that these measures are developed in detail and complied with. A requirement of the draft DCO is that the oCTMP is developed into a full CTMP, which will be approved by the Local Planning Authority (LPA), in consultation with the relevant Local Highway Authorities (LHA), the implementation of which will be secured by the DCO once granted.
	Paragraph 5.14.4	The consideration and mitigation of transport impacts is an essential part of Government's wider policy objectives for sustainable development.	The outline CTMP [EN010141/DR/7.4] Sections 5.0, 6.0 and 7.0 and ES Vol 2 Appendix 9- 1: Transport Assessment [EN010141/DR/6.2] Section 7.0 set out the measures proposed to mitigate the transport impacts. A requirement of the draft DCO [EN010141/DR/3.1] secures that these measures are developed in detail and complied with.
	Paragraph 5.14.5	Identifies the requirement for the ES to be supported by a transport appraisal to be produced in accordance with Department for Transport (DfT) guidance.	ES Vol 2 Appendix 9-1: Transport Assessment [EN010141/DR/6.2] has been produced as part of the ES. This forms an appraisal of transport in line with DfT guidance.



Document	Policy / Paragraph Reference	Summary of Policy / Paragraph	Where addressed in the ES?
	Paragraph 5.14.6	National Highways and Highways Authorities are statutory consultees on Nationally Significant Infrastructure Project (NSIP) applications including energy infrastructure where it is expected to affect the strategic road network and/or have an impact on the local road network. Applicants should consult with National Highways and Highways Authorities as appropriate on the assessment and mitigation to inform the application to be submitted.	Details of consultation with National Highways and both Cambridgeshire County Council (CCC) and Bedford Borough Council (BBC) as the LHAs are contained within ES Vol 1 Chapter 9: Traffic and Transport [EN010141/DR/6.1] Section 9.3.
	Paragraph 5.14.7	The applicant should prepare a travel plan including demand management and monitoring measures to mitigate transport 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	Given the rural location it is acknowledged that there are limitations on staff travelling to the Order limits by walking, cycling and public transport. The oCTMP [EN010141/DR/7.4] Section 4.5 outlining the measures proposed to mitigate the transport impacts of construction staff travel with regard to sustainable travel considerations. Full details of the measures to encourage sustainable travel will be set out within a Construction Staff Travel Plan, which would form part of the final CTMP. A requirement of the draft DCO [EN010141/DR/3.1] secures that these measures are developed in detail and complied with.
	Paragraph 5.14.8	The assessment should also consider any possible disruption to services and	The proposed vehicle access arrangements, routing and abnormal load requirements are set out within the octmp



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		infrastructure (such as road, rail and airports).	[EN010141/DR/7.4] Section 5.0. An assessment of possible disruption to road infrastructure is included within ES Vol 1 Chapter 9: Traffic and Transport [EN010141/DR/6.1] Section 9.8.
	Paragraph 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.	It is proposed that new permissive paths will be constructed, to enhance connectivity between the existing PRoW routes within the Order Limits, as shown on ES Vol 3 Figure 2-1 Illustrative Environmental Masterplan [EN010141/DR/6.3]. Some localised, temporary PRoW diversions are expected to be required during the construction phase, as described within the outline Public Right of Way Management Plan [EN010141/DR/7.8] Section 6.0.
	Paragraph 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	ES Vol 2 Appendix 9-1: Transport Assessment [EN010141/DR/6.2] Section 7.0 and the oCTMP [EN010141/DR/7.4] Sections 5.0, 6.0 and 7.0 set out the measures proposed to mitigate the transport impacts. A requirement of the draft DCO [EN010141/APP/3.1] secures that these measures are developed in detail and complied with. A further requirement of the draft DCO is that the oCTMP is developed into a full CTMP, which will be approved by the LPA, in consultation with the



Document	Policy / Paragraph Reference	Summary of Policy / Paragraph	Where addressed in the ES?
		retime travel outside of the known peak times     reroute to use parts of the network that are less busy	relevant LHAs, the implementation of which will be secured by the DCO once granted.
	Paragraph 5.14.13	Regard should always be given to the needs of freight at all stages in the construction and operation of the development including the need to provide appropriate facilities for HGV drivers as appropriate.	Details included within the oCTMP [EN010141/DR/7.4] Section 6.0 include plans to provide information packs and site inductions to all contractors/drivers.
	Paragraph 5.14.14	Identifies that where there is likely to be substantial HGV traffic, requirements to control the movement and parking of HGVs and avoid abnormal disruption during the construction phase may be attached to a consent.	The HGV management measures, including details of timing restrictions, parking and traffic marshalling arrangements, are included within the oCTMP [EN010141/APP/7.4] Section 5.0.
	Paragraph 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.	The oCTMP [EN010141/DR/7.4] Section 4.5 outlines the measures proposed to mitigate the transport impacts of construction staff travel with regard to sustainable travel considerations. Full details of the measures to encourage sustainable travel will be set out within a Construction Staff Travel Plan, which would form part of the final CTMP. A requirement of the draft DCO [EN010141/APP/3.1] secures that these measures are developed in detail and complied with.
	Paragraph 5.14.20	Sets out that development consent should not be withheld provided the applicant is willing to enter	ES Vol 2 Appendix 9-1: Transport Assessment [EN010141/DR/6.2] Section 7.0 and the outline



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		into planning obligations or requirements to adequately mitigate any transport impacts identified.	CTMP [EN010141/DR/7.4] Sections 5.0, 6.0 and 7.0 outline the measures proposed to mitigate the transport impacts. A requirement of the draft DCO [EN010141/APP/3.1] secures that these measures are developed in detail and complied with.
	Paragraph 5.14.21	Identifies that the Secretary of State should only consider refusing development on highways grounds if there would be an unacceptable impact on highway safety, residual cumulative impacts on the road network would be severe, or it does not show how consideration has been given to the provision of adequate active public or shared transport access and provision.	Section 9.8 of ES Vol 1 Chapter 9: Traffic and Transport [EN010141/DR/6.1] considers the impact of the Scheme during construction, operation and decommissioning phases. Section 9.11 of ES Vol 1 Chapter 9: Traffic and Transport [EN010141/DR/6.1] considers the transport related cumulative impacts. Sections 9.7 and 9.9 of ES Vol 1 Chapter 9: Traffic and Transport [EN010141/DR/6.1] Section 7.0 and the oCTMP [EN010141/DR/7.4] Section 5.0, 6.0 and 7.0 set out measures and controls for mitigation of transport impacts.
NPS EN-3	Paragraph 2.10.35	Applicants will need to consider the suitability of the access routes to the proposed site for both the construction and operation of the solar farm with the former likely to raise more issues.	ES Vol 2 Appendix 9-1: Transport Assessment [EN010141/DR/6.2] Section 4.5 sets out the access strategy for the Scheme during both the construction and operational phases.
	Paragraph 2.10.44	Applicants should consider and maximise opportunities to facilitate enhancements to the public rights of way and the inclusion, through	Mitigation measures relating to management of impacts on the PRoW network during the construction phase are



Document	Policy / Paragraph Reference	Summary of Policy / Paragraph	Where addressed in the ES?
		site layout and design of access, of new opportunities for the public to access and cross proposed solar development sites (whether via the adoption of new public rights of way or the creation of permissive paths), taking into account, where appropriate, the views of landowners.	described within the outline PRoW Management Plan [EN010141/DR/7.8] Section 6.0. It is proposed that new permissive paths will be constructed, to enhance connectivity between the existing PRoW routes within the Order Limits, as shown on ES Vol 3 Figure 2-1 Illustrative Environmental Masterplan [EN010141/DR/6.3].
	Paragraph 2.10.45	Applicants should set out detail on how public rights of way would be managed to ensure they are safe to use in an outline Public Rights of Way Management Plan.	The outline PRoW Management Plan [EN010141/DR/7.8] Section 6.0 provides a summary of PRoW mitigation measures to avoid adverse effects.
	Paragraph 2.10.123	Applicants should assess the various potential routes to the site for delivery of materials and components where the source of the materials is known at the time of the application and select the route that is the most appropriate.	The oCTMP [EN010141/DR/7.4] Section 5.0 outlines the proposed restrictions on HGV routes and timings respectively, to reduce the Scheme impact on the highway network. A requirement of the draft DCO [EN010141/APP/3.1] secures that these measures are developed in detail and complied with. A further requirement of the draft DCO is that the oCTMP is developed into a full CTMP, which will be approved by the LPA, in consultation with the relevant LHAs, the implementation of which will be secured by the DCO once granted.
	Paragraph 2.10.124	Where the exact location of the source of construction materials, such as crushed	The approach to the distribution of vehicles and the assessment of the



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		stone or concrete is not be known at the time of the application applicants should assess the worst- case impact of additional vehicles on the likely potential routes.	highway impact is set out within ES Vol 2 Appendix 9-1: Transport Assessment [EN010141/DR/6.2] Section 5.8. The outline CTMP [EN010141/DR/7.4] Section 5.0, 6.0 and 7.0 details the proposed mitigation and management measures.
	Paragraph 2.10.125	Applicants should ensure all sections of roads and bridges on the proposed delivery route can accommodate the weight and volume of the loads and width of vehicles. Although unlikely, where modifications to roads and/or bridges are required, these should be identified, and potential effects addressed in the ES.	Section 9.6 of ES Vol 1 Chapter 9: Traffic and Transport [EN010141/DR/6.1] outlines existing restrictions on HGV routes. An AIL Route Access Study, appended to the oCTMP [EN010141/DR/7.4], has also been prepared to appraise the suitability of the proposed access route for AILs.
	Paragraph 2.10.139	In some cases, the local highway authority may request that the Secretary of State impose controls on the number of vehicle movements to and from the solar farm site in a specified period during its construction and, possibly, on the routeing of such movements particularly by heavy vehicles.	The oCTMP [EN010141/DR/7.4] Section 5.0 outlines the proposed restrictions on HGV routes and timings, to reduce the Scheme impact on the highway network.
	Paragraph 2.10.140	Where the Secretary of State agrees that this is necessary, requirements could be imposed on development consent.	Sections 9.7 and 9.9 of ES Vol 1 Chapter 9: Traffic and Transport [EN010141/DR/6.1] describe the proposed mitigation measures and the oCTMP [EN010141/DR/7.4] sets out measures and controls for mitigation of transport impacts to be secured by



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			the DCO. A requirement of the draft DCO [EN010141/APP/3.1] secures that these measures are developed in detail and complied with. A further requirement of the draft DCO is that the oCTMP is developed into a full CTMP, which will be approved by the LPA, in consultation with the relevant LHAs, the implementation of which will be secured by the DCO once granted.
	Paragraph 2.10.141	Where cumulative effects on the local road network or residential amenity are predicted from multiple solar farm developments, it may be appropriate for applicants for various projects to work together to ensure that the number of abnormal loads and deliveries are minimised, and the timings of deliveries are managed and coordinated to ensure that disruption to residents and other highway users is reasonably minimised.	No significant cumulative effects relating to transport and access have been identified, as set out in Section 9.11 of ES Vol 1 Chapter 9: Traffic and Transport [EN010141/DR/6.1].
	Paragraph 2.10.142	It may also be appropriate for the highway authority to set limits for, and coordinate these deliveries through, active management of the delivery schedules through the abnormal load approval process	The oCTMP [EN010141/DR/7.4] Section 5.0 outlines the proposed restrictions on HGV routes and timings, to reduce the Scheme impact on the highway network. A requirement of the draft DCO [EN010141/APP/3.1] secures that these measures are developed in detail and complied with. A further requirement of the draft DCO is that the oCTMP is developed into a full CTMP, which will be approved by the LPA, in



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			consultation with the relevant LHAs, the implementation of which will be secured by the DCO once granted.
Paragraph 2.10.143		Once consent for a scheme has been granted, applicants should liaise with the relevant local highway authority (or other coordinating body) regarding the start of construction and the broad timing of deliveries. Applicants may need to agree a planning obligation to secure appropriate measures, including restoration of roads and verges.	The oCTMP [EN010141/DR/7.4] Section 5.0, 6.0 and 7.0 details the proposed mitigation and management measures. A requirement of the draft DCO [EN010141/APP/3.1] secures that these measures are developed in detail and complied with. A further requirement of the draft DCO is that the oCTMP is developed into a full CTMP, which will be approved by the LPA, in consultation with the relevant LHAs, the implementation of which will be secured by the DCO once granted.
	Paragraph 2.10.144	Further it may be appropriate for any non-permanent highway improvements carried out for the development (such as temporary road widening) to be made available for use by other subsequent solar farm developments.	No significant cumulative effects relating to transport and access have been identified, as set out in section 9.11 of ES Vol 1 Chapter 9: Traffic and Transport [EN010141/DR/6.1].
	Paragraph 2.10.161	Once solar farms are in operation, traffic movements to and from the site are generally very light, in some instances as little as a few visits each month by a light commercial vehicle or car. Should there be a need to replace machine components, this may generate heavier commercial vehicle	Section 9.8 of ES Vol 1 Chapter 9: Traffic and Transport [EN010141/DR/6.1] includes consideration of operational impact.



Document	Policy / Paragraph Reference	Summary of Policy / Paragraph	Where addressed in the ES?
		movements, but these are likely to be infrequent.	
NPPF	Paragraph 109	Transport issues should be considered from the earliest stages of planmaking and development proposals, so that: a. the potential impacts of development on transport networks can be addressed; b. opportunities from existing or proposed transport infrastructure, and changing transport technology and usage, are realised – for example in relation to the scale, location or density of development that can be accommodated; c. opportunities to promote walking, cycling and public transport use are identified and pursued; d. the environmental impacts of traffic and transport infrastructure can be identified, assessed and taken into account – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains; and e. patterns of movement, streets, parking and other transport considerations are integral to the design of schemes, and contribute to making high quality places.	ES Vol 2 Appendix 9-1: Transport Assessment [EN010141/DR/6.2] has been submitted with consultation with CCC and BBC as the LHAs, and National Highways. The latest guidance on Transport Assessments has been applied.
	Paragraph 110	The planning system should actively manage patterns of growth in support of these objectives. Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a	Given the rural location it is acknowledged that there are limitations on staff travelling to the Order limits by walking, cycling and public transport. Section 4.5 of the oCTMP [EN010141/DR/7.4] outlines the measures



Document	Policy / Paragraph Reference	Summary of Policy / Paragraph	Where addressed in the ES?
		genuine choice of transport modes. This can help to reduce congestion and emissions and improve air quality and public health. However, opportunities to maximise sustainable transport solutions will vary between urban and rural areas, and this should be taken into account in both plan-making and decision-making.	proposed to mitigate the transport impacts of construction staff travel with regard to sustainable travel considerations A requirement of the draft DCO [EN010141/DR/3.1] secures that these measures are developed in detail and complied with. A further requirement of the draft DCO is that the oCTMP is developed into a full CTMP, which will be approved by the LPA, in consultation with the relevant LHAs, the implementation of which will be secured by the DCO once granted.
	Para 116	Sets out that development should only be prevented or refused on highway grounds if there would be an unacceptable impact on highway safety, or if the residual impact on the road network would be severe.	Section 9.10 of ES Vol 1 Chapter 9: Traffic and Transport [EN010141/DR/6.1] identifies that the residual effect of the Scheme would not be significant in EIA terms. An oCTMP [EN010141/DR/7.4] document has been submitted outlining the measures proposed to mitigate the transport impacts. A requirement of the draft DCO EN010141/DR/3.1] secures that these measures are developed in detail and complied with. A further requirement of the draft DCO is that the oCTMP is developed into a full CTMP, which will be approved by the LPA, in consultation with the relevant LHAs, the



Document	Policy / Paragraph Reference	Summary of Policy / Paragraph	Where addressed in the ES?
			implementation of which will be secured by the DCO once granted.
	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 transport statement or transport assessment so that the likely impacts of the proposal can be assessed.	ES Vol 1 Chapter 9: Traffic and Transport [EN010141/DR/6.1] Section 9.8 and ES Vol 2 Appendix 9-1: Transport Assessment [EN010141/DR/6.2] Section 6.0 considers the impact of the Scheme during construction, operation and decommissioning phases. Section 4.5 of the oCTMP [EN010141/DR/7.4] outlines the measures proposed to mitigate the transport impacts of construction staff travel with regard to sustainable travel considerations. Full details of the measures to encourage sustainable travel will be set out within a Construction Staff Travel Plan, which would form part of the final CTMP. A requirement of the draft DCO [EN010141/APP/3.1] secures that these measures are developed in
National Planning Policy Guidance for Travel Plans, Transport Assessme nt and Statement s (2014)	Paragraph 14	The need for, scale, scope and level of detail required of a Transport Assessment or Statement should be established as early in the development management process as possible as this may therefore positively influence the overall nature or the detailed design of the development. Key issues to consider at the start of preparing a Transport Assessment or Statement may include: •	ES Vol 2 Appendix 9-1: Transport Assessment [EN010141/DR/6.2] has been submitted following consultation with the relevant LHAs and National Highways. The latest guidance on Transport Assessments has been applied.



Document	Policy / Paragraph Reference	Summary of Policy / Paragraph	Where addressed in the ES?
		the planning context of the development proposal; • appropriate study parameters (i.e. area, scope and duration of study); • assessment of public transport capacity, walking/cycling capacity and road network capacity; • road trip generation and trip distribution methodologies and/or assumptions about the development proposal; • measures to promote sustainable travel; • safety implications of development; and • mitigation measures (where applicable) — including scope and implementation strategy.	

#### **Local Policy**

- 9.2.7 The Scheme lies within the administrative boundaries of BBC and Huntingdonshire District Council (HDC), with HDC being a two-tier authority with CCC. Planning policy of relevance to the assessment includes:
  - Bedford Borough Local Plan 2030<sup>6</sup>;
  - Bedford Allocations and Designations Local Plan<sup>7</sup>;
  - Huntingdonshire Local Plan to 2036<sup>8</sup>; and
  - Great Staughton Neighbourhood Plan 2021 to 20369.
- 9.2.8 The local planning policies from the above documents of specific relevance with regard to the assessment of Traffic and Transport impacts are summarised in Table 9.2.



**Table 9.2: Summary of Local Planning Policy** 

Document	Policy / Paragraph Reference	Summary of Policy / Paragraph	Where addressed in the ES?
Bedford Borough Local Plan 2030	Policy 31	Sets out that development proposals should not have any significant adverse impact on access to the public highway, with consideration of highway capacity, parking provision, accessibility by non-car modes, and the suitability of access arrangements.  Developers will be required to implement or contribute towards measures to mitigate adverse impacts.	Section 9.10 of ES Vol 1 Chapter 9: Traffic and Transport [EN010141/DR/6.1] identifies that the residual impact of the Scheme would not be severe. An oCTMP [EN010141/DR/7.4] document has been submitted outlining the measures proposed to mitigate the transport impacts. A requirement of the draft DCO EN010141/DR/3.1] secures that these measures are developed in detail and complied with.
	Policy 53	Sets out that new development will be required to take be located and designed to provide convenient access to local services by foot, cycle and public transport.	Given the rural location it is acknowledged that there are limitations on staff travelling to the Order limits by walking, cycling and public transport. An oCTMP [EN010141/DR/7.4] document has been submitted outlining the measures proposed to mitigate the transport impacts. A requirement of the draft DCO EN010141/DR/3.1] secures that these measures are developed in detail and complied with.
	Policy 57	Identifies that developments involving the provision of renewable energy will be supported, subject to the acceptability of their wider impacts, including the impacts on traffic and access.	Section 9.8 of ES Vol 1 Chapter 9: Traffic and Transport [EN010141/DR/6.1] considers the impact of the Scheme during construction, operation and decommissioning phases. Section 9.11 of



Document	Policy / Paragraph Reference	Summary of Policy / Paragraph	Where addressed in the ES?
			ES Vol 1 Chapter 9: Traffic and Transport [EN010141/DR/6.1] considers the transport related cumulative impacts. Sections 9.7 and 9.9 of ES Vol 1 Chapter 9: Traffic and Transport [EN010141/DR/6.1] and the outline CTMP [EN010141/DR/7.4] set out measures and controls for mitigation of transport impacts.
	Policy 88	Requires that the social and environmental impact of traffic from development proposals has been considered, including with regard to the impact of freight movements on the local highway network, and the impact of safety in terms of site access arrangements and general road safety.	The oCTMP [EN010141/DR/7.4] outlines the proposed restrictions on HGV routes and timings, to reduce the Scheme impact on the highway network. ES Vol 2 Appendix 9-1: Transport Assessment [EN010141/DR/6.2] Section 4.5 sets out the access strategy for the Scheme during both the construction and operational phases.
	Policy 91	Sets out the criteria applicable to new development proposals in relation to access to the countryside via the public rights of way network and requires development to safeguard public rights of way.	The outline PRoW Management Plan [EN010141/DR/7.8] Section 6.0 provides a summary of PRoW mitigation measures to avoid adverse effects.
Bedford Allocations and Designations Local Plan 2013	Policy AD36	Requires the protection, enhancement and promotion of pedestrian routes and facilities.	The outline PRoW Management Plan [EN010141/DR/7.8] Section 6.0 provides a summary of mitigation measures to avoid adverse effects on pedestrian routes and facilities.



Document	Policy / Paragraph Reference	Summary of Policy / Paragraph	Where addressed in the ES?
	Policy AD39	Requires the protection, enhancement and promotion of cycle routes and facilities.	The outline PRoW Management Plan [EN010141/DR/7.8] Section 6.0 provides a summary of mitigation measures to avoid adverse effects to cycle routes and facilities.
Huntingdonshire Local Plan to 2036	Policy LP 16	Sets out that new development proposals will be supported where it is demonstrated that its likely transport impacts have been assessed, and appropriate mitigation measures will be delivered, in accordance with National Planning Practice Guidance.  Also states that where a proposal would affect an existing public right of way or other formal nonmotorised users' route, this route should be protected or enhanced within the proposed development.	Section 9.10 of ES Vol 1 Chapter 9: Traffic and Transport [EN010141/DR/6.1] identifies that the residual effect of the Scheme would not be significant in EIA terms. An oCTMP [EN010141/DR/7.4] document has been submitted outlining the measures proposed to mitigate the transport impacts. A requirement of the draft DCO EN010141/DR/3.1] secures that these measures are developed in detail and complied with.
	Policy LP 17	Requires development to provide appropriate space for vehicle movements, facilitate accessibility for service and emergency vehicles, and incorporate adequate parking for vehicles and cyclists.	The oCTMP [EN010141/DR/7.4] Section 4.4 outlines the proposed arrangements for visitor and contractor parking. ES Vol 2 Appendix 9-1: Transport Assessment [EN010141/DR/6.2] Section 4.7 demonstrates that the Site can be safely and satisfactorily accessed by all vehicles, including service and emergency vehicles.
Great Staughton Neighbourhood	Policy GSNP 17	States that development proposals will be assessed for their impact on road safety and should	ES Vol 2 Appendix 9-1: Transport Assessment [EN010141/DR/6.2] Section 4.5 sets out the



Document	Policy / Paragraph Reference	Summary of Policy / Paragraph	Where addressed in the ES?
Plan 2021 to 2036		ensure a satisfactory provision of off-street parking. The policy wording also sets out that where proposals are likely to unacceptably impact adversely on road safety including the safety hotspots identified within Great Staughton, they will be expected to mitigate their impact by providing or contributing towards road safety measures.	access strategy for the Scheme, which identifies that no construction traffic will pass through the centre of Great Staughton.

#### Guidance

- 9.2.9 The Institute of Environmental Management and Assessment (IEMA) Guidelines for the Environmental Assessment of Traffic and Movement (2023)<sup>10</sup> provides guidance on examining the environmental impacts of developments in terms of traffic and transportation and has been used to outline the scope of the assessment.
- 9.2.10 In 2014, the Department for Communities and Local Government (DCLG) launched a website containing national planning practice guidance <sup>11</sup>. The website contains guidance on a range of planning topics such as design, Local Plans, Neighbourhood Plans and Travel Plans / Transport Assessments. The section on 'Travel Plans, transport assessments and statements in decision-taking' provides advice on when Travel Plans, Transport Assessments and Transport Statements are required, and what they should contain.
- 9.2.11 The Cambridgeshire County Council document '*Transport Assessment Requirements*' (January 2024)<sup>12</sup> sets out guidance on what information should be provided within a Transport Assessment, and the criteria by which development proposals will be appraised by the LHA with regard to traffic and transport impacts.



9.2.12 Any mitigation measures that may be required will be designed in accordance with the relevant sections of the Design Manual for Roads and Bridges (DMRB)<sup>13</sup> and Manual for Streets (MfS)<sup>14</sup>, as appropriate.



# 9.3 Consultation and Engagement

# **Scoping**

- 9.3.1 Scoping of this traffic and transport assessment was undertaken as part of a wider EIA scoping exercise, the findings of which were recorded in ES Vol 2 Appendix 4-1: EIA Scoping Report [EN010141/DR/6.2] that was submitted in October 2023.
- 9.3.2 A Scoping Opinion was received in December 2023 as presented in ES Vol 2 Appendix 4-2: EIA Scoping Opinion [EN010141/DR/6.2]. The feedback received from PINS and stakeholders within the Scoping Opinion has been reviewed and the points relating to this chapter are summarised in Table 9.3 below.

Table 9.3: Scoping responses with respect to traffic and transport

Consultee	Summary of Comments	Response
PINS	Paragraph 14.2.5 of the Scoping Report states that the traffic impacts on the A1 have not been considered as part of the assessment on the basis that the trip generation from the site to this route will be low. No evidence has been provided to confirm how trafficked the A1 is in this location. Moreover, additional information is required regarding which phase this is relevant to, as there could be significant effects in the construction and decommissioning phases.	An appraisal of the potential increase in traffic flow on the A1 has been included within Section 9.8 of this ES chapter.
	The Inspectorate considers that this matter should be subject to further assessment in the ES, or supporting evidence should be provided demonstrating the absence of LSE and agreement with the relevant consultation bodies.	
	The Applicant proposes to scope out transport effects during the operational phase on the basis that anticipated traffic would be minimal. The traffic levels expected to be generated are based on the assumption that 10 to 16 permanent staff would be on-site at any one time using four-	An appraisal of the forecast trip generation during the operational phase has been included within Section 9.8 of this ES chapter.



Consultee	Summary of Comments	Response
	wheel drive vehicles or vans. HGV access to the site is described as being rare and associated with the repair and replacement of on-site infrastructure.	
	The Inspectorate has considered the characteristics of the operational phase of the Proposed Development and based on the low levels of anticipated traffic generation is content that this matter can be scoped out of further assessment. The ES description of the operational phase of the Proposed Development should clearly set out the operational vehicle types and numbers to justify this position.	
	The Applicant proposes to scope out a standalone assessment for the decommissioning phase of the Proposed Development. Decommissioning is anticipated to be similar in duration and nature to the construction phase and impacts are expected to be similar to the construction phase.	An outline Decommissioning Environmental Management Plan (oDEMP) [EN010141/DR/7.6] has been prepared.
	The Scoping Report states that the vehicle movements required during decommissioning are not known at this stage and that a DEMP will be prepared in due course. The Inspectorate is content that a standalone assessment for the decommissioning phase is not required at this stage provided that an oDEMP is submitted with the application.	
	The Scoping Report states that there are no nearby road features which suggest that the transfer of material poses a risk beyond what would be expected on the general highway network.  The Inspectorate has considered the	An oCTMP [EN010141/DR/7.4] has been prepared to accompany the DCO submission, which sets out the proposed
	characteristics of the Proposed Development and considers that this matter may be scoped out of further assessment, however the ES should explain the measures employed to ensure safe vehicular transport of components, such as panels and batteries, to and from the site.	measures to ensure safe vehicular transport of materials to the Site.
	The Scoping Report states that the Institute of Environmental Management and Assessment (IEMA) Guidelines for the	The assessment set out within this ES chapter has been undertaken



Consultee	Summary of Comments	Response
	Environmental Assessment of Traffic and Movement (1993) has been used to determine the scope of the assessment. This guidance has now been superseded by the Environmental Assessment of Traffic and Movement guidance from IEMA, which was published in 2023 and should be referred to in the ES.	with reference to the most recently published 2023 IEMA guidance document.
	A PRoW Management Plan is proposed to be submitted with the DCO as there are numerous PRoWs in proximity to the site. The PRoW Management plan should be informed by surveys of the PRoWs affected to ensure that the baseline usage of the PRoWs has been accounted for. A figure of the PRoW locations should also be provided, and the ES should assess impacts to PRoW receptors where significant effects are likely to occur.	PRoW usage surveys to be undertaken where required to inform preparation of PRoW Management Plan.  The PRoW network is illustrated in the Street Works, Rights of Way and Access Plan [EN010141/DR/2.4].  An appraisal of the impacts to PRoW receptors where significant effects are likely to occur has been included within Section 9.8 of this ES chapter.
	The Scoping Report states that an increase of fewer than 30 trips regardless of proportional increase is a negligible impact. This is stated to be derived from professional judgement and experience. Any use of professional judgement to assess effects should be fully justified within the ES.	The impacts of traffic associated with the Scheme have been fully appraised across the whole study area within this ES chapter, with the effects determined based on the identified percentage impact on each link in line with the IEMA guidelines.
	The TA is described in the Scoping Report as included "estimated trip generation including a description of the methodology used to describe forecast development trips". The Applicant should state and explain which modelling software they will be using such as the newly updated Department for Transport (DfT) TEMPRO model, and how the inputted traffic movements have been predicted. The relationship between the TA outcomes and	The methodology used to forecast baseline traffic flows and development trip generation is set out within Section 9.8 of this ES chapter. This was discussed and agreed with the LHA following Statutory Consultation.



Consultee	Summary of Comments	Response
	the ES should be made clear, with a suggestion to agree parameters with the Local Highway Authority.	
Bedford Borough Council	It is noted that the required access route to the indicative East Park substation and BESS facility, located in Site C (Fig. 3-2b), potentially requiring access for large, industrial vehicles, is not noted in the Scoping Report. Similarly, the location of the storage and maintenance buildings is not noted. The impact, and mitigation, of vehicle movement to these facilities will need to be addressed in the ES.	The access route to all parcels of the Site is described in detail in ES Vol 1 Chapter 2: The Scheme [EN010141/DR/6.1] and within Section 9.7 of this ES Chapter.
Cambridgeshire County Council	<ul> <li>The Transport Assessment should give details of the following:</li> <li>A profile of the likely (2 way) traffic associated with the construction phase over the 24-month construction period and decommissioning periods.</li> <li>This should be further broken down into vehicle classifications with particular emphasis of the type of HGVs that will be used and any 'abnormal' or oversized vehicle movements.</li> <li>The proposed routing of vehicles to and from the Strategic Road Network with pinch points such as congested links and or junctions being identified. It is noted that baseline surveys have been undertaken in 2022 which is acceptable.</li> <li>The applicant should refer to Cambridgeshire County Council's 'Transport Assessment Requirements' which sets out the trigger points for further link or junction analysis to be undertaken. It should not be assumed that these are the same as those used for EIA purposes.</li> </ul>	A detailed breakdown of the construction phase and the vehicle types required has been included within this ES chapter.  A TA has also been prepared to accompany the DCO application, which has due regard to CCC's TA guidance (ES Vol 2 Appendix 9-1 [EN010141/DR/6.2]).  The approach to the distribution of vehicles and the assessment of the highway impact is set out within ES Vol 2 Appendix 9-1: Transport Assessment [EN010141/DR/6.2] Section 5.8.
	Non-Motorised User and Road Safety Audits must be carried out where the proposal could result in increases conflict between vehicles and Non-Motorised Users and where the nature of the highway infrastructure changes such there may be	The outline PRoW Management Plan [EN010141/DR/7.8] provides a summary of PRoW mitigation measures to avoid adverse effects.



Consultee	Summary of Comments	Response
	consequential Road Safety issues across all user groups.	
	There is likely to be a requirement for enhanced NMU infrastructure to mitigate the impact of the large volumes of Heavy Goods Vehicles associated with construction and decommissioning phases. The applicant should ensure that the DCO boundary is sufficient to accommodate any infrastructure works required to mitigate these impacts.	The Order Limits cover all land expected to be required for construction, operation and maintenance, and decommissioning of the Scheme. This includes land required to accommodate any infrastructure works required.
	With reference to Section 14.8 of the EIA Scoping document, it is not acceptable to scope out the decommissioning phase therefore this must be included in both the Transport Assessment and EIA at this stage.	Section 9.8 of this ES chapter considers the impact of the Scheme during construction, operation and decommissioning phases.
	Site access junctions should be designed to ensure visibility in accordance with the Design Manual for Roads and Bridges (DMRB) for the posted speed limit or actual speeds of vehicles derived from speed surveys.	Comments noted and have been taken into account within the ES.
	Tracking of access junctions should be undertaken to ensure that two of the largest vehicles likely to use the access can pass clear of the public highway.	
	Moor Road is considered to be of inadequate width to cater for construction vehicles. Mitigation measures will be required for the use of this route by construction / decommissioning vehicles.	
	We note that indicative internal site access tracks/haul roads span between sites C and D. The preferred option is to have both parcels constructed using only the two proposed construction accesses directly served from the B645 and utilise the on-site tracks / haul roads, directly crossing Moor Road, and thus removing the need to use the public highway along Moor Road from the B645 to the site entrances.	



Consultee	Summary of Comments	Response
National Highways	The scoping note states that there is so few trips relating to the A1 that it is not considered to be a particular traffic impact issue. Given the nature of the proposed scheme this is understandable but National Highways request the number of trips is shown on routes on the SRN going to and from site for staff and site workers and while as operational traffic.	Comments noted and have been taken into account within the ES.
	It is clear construction traffic will be the most impact. National Highways needs to understand the methodology used to derive the construction traffic and which routes they will use. We will want to see the peak flows (not average) on the key routes. We will also want to see the abnormal load routing and number of trip information. A CTMP will be required to be reviewed by National Highways.	Comments noted and have been taken into account within the ES. An oCTMP [EN010141/DR/7.4] has been prepared. National Highways will be consulted with regard to suitable AIL routing to Site.

- 9.3.3 Subsequently, a Transport Scoping Meeting was held with officers from Cambridgeshire County Council, Bedford Borough Council and Huntingdonshire District Council on 11<sup>th</sup> March 2024.
- 9.3.4 Specific matters raised at this meeting included the following:
  - The need to ensure that adequate visibility splays were provided at all access junctions, including the existing access north-west of Site C and the temporary crossing points on Duloe Road and Bushmead Road on the grid connection route;
  - Ensure that junctions were designed to accommodate the largest vehicles, to facilitate two-way movement so vehicles were not 'hovering' on the highway waiting to turn in, to avoid over-run of verges, and to avoid mud being carried onto the highway; and
  - The stated preference was for construction traffic to avoid the use of Moor Road, with connection between Sites C and D to be achieved through the use of temporary access tracks.



9.3.5 The proposed Site access strategy, described in Section 9.7 of this ES Chapter, identifies that access to the Site during the construction phase will avoid the use of Moor Road. Junction visibility splays and swept path assessments are included within ES Vol 2 Appendix 9-1: Transport Assessment [EN010141/DR/6.2].

#### **Statutory Consultation**

9.3.6 Statutory consultation on the project took place between September 2024 and October 2024. This included consultation on the Preliminary Environmental Information Report (PEIR). The feedback received from statutory consultees is summarised within Table 9.4.

Table 9.4: PEIR responses with respect to traffic and transport

Consultee	Summary of Comments	Response
National Highways	National Highways would like a meeting to discuss the proposals and the impacts on the SRN. Issues of potential concern to National Highways relate to impacts on the SRN during construction and can be summarised as follows:  1. Number of HGVs using the A1 access 2. Cumulative impacts and committed developments 3. Proposals for Eaton Socon Substation and impact on the A1 4. Information on Abnormal Loads	A follow-up meeting was held with National Highways on 28 <sup>th</sup> May 2025 to discuss the issues raised.  The impact of HGVs on the A1 is considered in section 9.8 of this ES chapter.  Cumulative impacts are assessed within section 9.11 of this ES chapter.
	National Highways also requests that junction capacity assessments are undertaken at any Strategic Road Network junctions that experience an increase of more than 30 vehicles in a peak hour. To avoid abortive work, the number of peak hour trips expected at each junction should be agreed with National Highways prior to undertaking the junction capacity assessments.	The forecast trip generation and distribution of vehicles is set out within ES Vol 2 Appendix 9-1: Transport Assessment [EN010141/DR/6.2]. This identifies that the Scheme is forecast to generation fewer than 30 vehicle movements during peak hours.



Consultee	Summary of Comments	Response
Cambridgeshire County Council / Bedford Borough Council	It is noted no details have been provided regarding the geometric layouts of the proposed accesses to the public highway. Cambridgeshire County Council would ask this is provided.	Detailed design of site access would be undertaken subsequent DCO approval.
	As part of the DCO the Local Highway authority will seek protective provisions. This is to include condition surveys prior to construction phase commencing, to assess any related damage to the approach roads in Cambridgeshire and an agreement to remediate any damage caused by the development subsequently. Restoration of temporary access points to predevelopment condition are to be agreed with and authorised by the Local Highway Authority.	An outline CTMP [EN010141/DR/7.4] document has been submitted outlining the measures proposed to mitigate the transport impacts. A requirement of the draft DCO EN010141/DR/3.1] secures that these measures are developed in detail and complied with.
	Access SA16: Given the amount of access movements, consideration should be given to the signalisation of this main access through peak hours of operation which may require a temporary traffic regulation order to reduce the speed limit locally, on the approaches to the signals.  Full details will be required for simultaneous two-way tracking of the largest vehicles likely to be used.  Can the promoter confirm the level of use for this access at the operational phase and any changes to the access between construction and operational.  After comparison with highway boundary records, the visibility splays shown appear to fall outside the highway extent.	It is noted that a small portion of the required visibility to the northwest at this access falls outside of the adopted highway boundary. However, the required visibility splays are achievable within the public highway or in land under the Applicant's control, with no recourse for third-party land.  A swept path analysis of the proposed access junction has been undertaken as part of ES Vol 2 Appendix 9-1: Transport Assessment [EN010141/DR/6.2].  Consideration of traffic management measures is included within the outline CTMP [EN010141/DR/7.4].
	Accesses SA14 and SA15: Observed vehicle speeds are indicated at 41.4 mph 85%ile speeds. As this is above	The site accesses will be situated within a section of Moor Road



Consultee	Summary of Comments	Response
	the MfS threshold of 37mph this would require to be derived from DMRB not MfS criterion. Correct splays need to be 109m not the indicated 69m. Cambridgeshire County Council asks the available splays to be increased in these locations and to supply locations of speed surveys and data. The visibility splay shown for Access SA14 appears to extend outside of the highway. It is shown cutting into a hedge feature. Hedges are not considered to form part of the highway and would typically be a boundary feature. There is evidence to suggest the hedge feature in this location is not the boundary, as it is situated at the rear of a ditch that runs along Moor Road. The highway only extends to the top of the carriageway-side slope into the ditch and therefore the proposed visibility line extends outside the highway.	featuring several sharp bends. As such, it is likely that vehicle speeds in the vicinity of the accesses will be significantly lower than the observed speeds used in the visibility calculations.  Accesses SA14 and SA15 would also only be used during the construction and decommissioning phases. Use of these accesses would therefore be relatively infrequent. It is therefore considered that interpolating from MfS visibility distances in this case is appropriate. The required visibility splays are achievable within the public highway or in land under the Applicant's control, with no recourse for third-party land.  Consideration of traffic management measures to control vehicle speeds in the vicinity of these accesses is included within the outline CTMP [EN010141/DR/7.4].
	Access SA13: Access is indicated within document PIER Fig 2-5however there are no details of traffic movements associated with this access. The promoter should be invited to clarify why it is necessary to use this element of public highway. Mitigation measured are needed on Moor Road to accommodate construction traffic. Details of traffic movements associated with this access should be provided during and after construction, Visibility splays do not appear to have been supplied for this access point. Proposals for	Visibility splays for this access have been considered within ES Vol 2 Appendix 9-1: Transport Assessment [EN010141/DR/6.2].  This access would only be used during the operational phase. Access would be generally by maintenance staff in a large van or 4x4, and



Consultee	Summary of Comments	Response
	this access point to be clarified. Applicant to note that there are physical features in this location that might cause the legal extent of the highway to be questioned.	would be relatively infrequent, commensurate with the existing use of the access by agricultural traffic. The requirement for HGVs to travel along Moor Road to this access would be highly infrequent.
	Access SA12: It is noted that no traffic is indicated to be going into or coming from Great Staughton. Could we ask the promoter to confirm this is the case. Following the inclusion of access SA12 as a construction route into and from sites A and B it requires the use of both Great Staughton Road from the Zantra access to the West and Spring Hill Road. Details of the visibility splays at the junction of Spring Hill Road should be provided and the details of the geometry of this junction along with tracking to ensure it is suitable for two-way simultaneous movements of the largest vehicles likely to use this junction. Tracking should also be supplied from the Zantra access (SA12) to the accesses SA10 and SA11 on Spring Hill for largest vehicles likely to use this road simultaneously to ensure it is suitable. Similar to Moor Road the promoter should be invited to clarify why it is necessary to use this element of public highway (Great Staughton Road/Spring Hill?) When the access to SA 11 could be routed similarly internally removing any issues with construction and staff vehicles using the public highway? It is noted that the access track/ cable route adjoins site C, South of the Zantra access. I can see no benefit in using the public highway when a further access track adjacent the route of the cable would remove many issues.	It is acknowledged that the use of an internal haul route connecting directly to access SA11 would be preferable to routing construction traffic via Great Staughton Road via access SA12. However, access SA12 will remain part of the proposed access strategy for the DCO submission, subject to ongoing discussion with the landowner regarding the internal haul route in this location.  A swept path analysis of the proposed access junction has been undertaken as part of ES Vol 2 Appendix 9-1: Transport Assessment [EN010141/DR/6.2].
	Accesses SA10 and SA11: Visibility splays should be checked against highway records to ensure required visibility is achievable within public highway.	Visibility splays have been assessed against adopted highway boundary data. The required visibility splays are achievable within



Consultee	Summary of Comments	Response
		the public highway or in land under the Applicant's control, with no recourse for third-party land.
	ATC have been undertaken on straight sections of roads only. The only information this will give is the number of vehicles using that part of the road daily. No junction counts have been undertaken. Typically, capacity issues relating to highway in this area happen at junctions, and therefore junction counts will better inform proposals.	Automatic Traffic Count (ATC) data was obtained in order to calculate Annual Average Daily Traffic (AADT) and Annual Average Weekly Traffic (AAWT) traffic flows, which are required in order to assess environmental impacts. Section 5.5 of ES Vol 2 Appendix 9-1: Transport Assessment [EN010141/DR/6.2] identifies that the Scheme would not generate more than 30 two-way movements during peak hours, which is the threshold at which junction assessments are required as identified in Cambridgeshire County Council's Transport Assessment Requirements.
	The use of Crash Map is not acceptable as it does not contain the most up to date data. Accident data must be obtained from Cambridgeshire County Council. This data will also highlight any cluster sites.	Comment noted. Current accident data has been obtained from Cambridgeshire County Council.
	The promoter should check with Huntingdonshire District Council regarding any committed development.	Comment noted. Details of committed developments to be considered have been discussed and agreed with Huntingdonshire District Council.



Consultee	Summary of Comments	Response
	HGVs movements should seek to avoid driving through Great Staughton, instead utilising haul roads.	Comment noted. Proposed construction access route has been designed so that no HGV movements will pass through Great Staughton.
	Trip generation has been calculated by using the promoters experience, however there is a lack of evidence provided to support this.  We invite the promoter to provide further evidence of their estimated construction traffic.	Detail of the forecast breakdown of construction traffic movements across the construction programme is included in ES Vol 2 Appendix 9-1: Transport Assessment [EN010141/DR/6.2].
	The promoter's assumptions are based on HGVs not entering the site during the network AM/PM peaks. Therefore, this would need to be secured through a Requirement for a Construction Traffic Management Plan to be approved by the Local Highway Authorities.	The oCTMP [EN010141/DR/7.4] outlines the proposed restrictions on HGV routes and timings, to reduce the Scheme impact on the highway network. A requirement of the draft DCO EN010141/DR/3.1] secures that these measures are developed in detail and complied with.
	In addition to the HGV movements the promoter is suggesting an additional 854 staff visiting the site per day. The promoter has assumed staff would car share and is stating a worst-case scenario of 854 two-way staff movements per day. Again, these assumptions have not been evidenced or data provided to support them. If there are 854 staff and all drive, then there will be 1708 two-way vehicle movements per day. Whilst this is unlikely, no justification has been provided on how many staff will car share.	The oCTMP [EN010141/DR/7.4] document has been submitted outlining the measures proposed to mitigate the transport impacts. A requirement of the draft DCO [EN010141/DR/3.1] secures that these measures are developed in detail and complied with.
	A percentage impact assessment does not show how the network or junctions are currently operating. Cambridgeshire County	A percentage impact appraisal is required in order to assess



Consultee	Summary of Comments	Response
	Council would seek further discussion with the promoter as to how this can be shown. Note Cambridgeshire County Council's Transport Assessment Requirements requires all junctions which experience more than 30 new movements in either peak to be modelled.	environmental impacts, as per the IEMA guidelines. Section 5.5 of ES Vol 2 Appendix 9-1: Transport Assessment [EN010141/DR/6.2] identifies that the Scheme would not generate more than 30 two-way movements during peak hours, which is the threshold at which junction assessments are required as identified in Cambridgeshire County Council's Transport Assessment Requirements.

- 9.3.7 Subsequently, a follow-up meeting was held National Highways on 28<sup>th</sup> May 2025. This was used to present additional information to address the points raised in the statutory consultation response provided by National Highways, specifically:
  - Confirmation on the anticipated number of HGVs using the A1 access
  - Confirmation on the proposed cumulative development sites to be included in the assessment
  - Confirmation that the Scheme would not make use of the direct access from the A1 into the Eaton Socon Substation; and
  - Confirmation that the consultation process with National Highways with regard to agreeing a suitable and acceptable route to the site for abnormal loads was ongoing.



# 9.4 Assessment Methodology

## **Study Area**

- 9.4.1 The study area for the assessment of the likely significant effects of the Scheme has been identified based on the proposed route to the Site for construction traffic from the Strategic Road Network (SRN).
- 9.4.2 The proposed construction access strategy is described in ES Vol 1 Chapter 2: The Scheme [EN010141/DR/6.3]; however, in summary, it is proposed that construction traffic will approach the Site via the B645 Kimbolton Road from the SRN at the A1 at St Neots. Alongside utilising sections of the public highway, a temporary access road will be constructed to facilitate vehicle movements between different parts of the Site via a series of temporary and permanent site access junctions.
- 9.4.3 The indicative construction access routes are illustrated on ES Vol 3 Figure 2-5: Indicative Construction Access and Compounds [EN010141/DR/6.3], while the proposed site access locations are illustrated and referenced on ES Vol 3 Figure 2-4: Proposed Site Access [EN010141/DR/6.3]. A full description of each of the proposed site access junctions is included in Table 2.32 in ES Vol 1 Chapter 2: The Scheme [EN010141/DR/6.1]. In total there are 20 permanent or temporary points of access with the public highway. Each access has been identified with a specific Site Access (SA) reference number from SA01 to SA20.
- 9.4.4 The main site access during construction will be created from the B645 into East Park Site D (ref. SA16 in Table 2.32), and this will be located approximately 3.7km north-west of the A1 / B645 junction, and 1.4km southeast of a junction between the B645 and Moor Road. Once traffic is within Site there are temporary access tracks proposed to link on to East Park Site C, from which traffic will use an existing access to Great Staughton Road where vehicles will transfer west to East Park Site B and Site A.



- 9.4.5 As such, the impact from construction activities will largely be experienced on the B645 between the A1 and the main site access junction. There are also some isolated locations where the internal haul route crosses or utilises short sections of the local highway network, primarily along Great Staughton Road between an existing access north-west of Site C and Spring Hill Road. During the operational phase the impact of maintenance trips will be negligible on the highway network within this study area.
- 9.4.6 Accordingly, the extent of the local highway network with regard to potential traffic and transport impacts comprises the following road links:
  - Link 1: B645 Kimbolton Road between A1 and Hail Weston (High Street);
  - Link 2: B645 Kimbolton Road between Hail Weston (High Street) and main site access junction (SA16);
  - Link 3: Moor Road at temporary haul road crossing point (SA14 / SA15);
  - Link 4: Great Staughton Road between Zantra Business Park (SA12) and Spring Hill;
  - Link 5: Spring Hill between Great Staughton Road and temporary access junction SA11;
  - Link 6: Green End between accesses SA07 / SA08 and access SA09;
  - Link 7: Green End between accesses SA07 / SA08 and Great Staughton Road;
  - Link 8: Great Staughton Road between Green End and access SA03;
  - Link 9: Great Staughton Road between Green End and access SA06;
  - Link 10: B660 Kimbolton Road between accesses SA01 and SA02:
  - Link 11: Duloe Lane at grid connection crossing point between temporary accesses SA17 and SA18; and
  - Link 12: Bushmead Road at grid connection crossing point between temporary accesses SA19 and SA20.
- 9.4.7 The extent of the study area is illustrated in Image 3.2 within ES Vol 2
  Appendix 9-1: Transport Assessment [EN010141/DR/6.2].



9.4.8 An appraisal of the potential increase in traffic flow along the A1 has also been considered.

## **Assessment Methodology**

- 9.4.9 The methodology for assessing the impact of development-generated traffic is based on that outlined in the IEMA 'Guidelines for the Environmental Assessment of Traffic and Movement' (July 2023).
- 9.4.10 The IEMA guidelines identify the following 'rules' when considering the initial appraisal or screening of traffic-related environmental effects to determine if detailed assessment is required:
  - Rule 1: include highway links where the traffic flows would increase by more than 30% (or the number of heavy goods vehicles would increase by more than 30%); and
  - **Rule 2**: include any other specifically sensitive areas where traffic flows have increased by 10% or more.
- 9.4.11 To inform the assessment of the Scheme, traffic count surveys were undertaken at a number of locations in the vicinity of the Scheme in June 2022 and April 2024, to determine the baseline traffic conditions of the local highway network, as described in Section 9.6.
- 9.4.12 In accordance with the IEMA guidelines, the following criteria have been considered within the assessment:
  - Severance (change in traffic flows);
  - Driver and pedestrian delay;
  - Pedestrian and cyclist amenity, including fear and intimidation (change in traffic flows on routes used by pedestrians and cyclists);
  - Accidents and safety; and
  - Hazardous loads.



#### Severance

- 9.4.13 Severance is defined in the IEMA guidelines as the "perceived division that can occur within a community when it becomes separated by a major traffic artery". Severance may result from the difficulty of crossing a heavily trafficked road and can also relate to quite minor traffic flows if they impede pedestrian access to essential facilities. IEMA guidelines suggest that a 30%, 60% and 90% increase in traffic flows will result in a low, medium and high change in severance, respectively, but also that "marginal changes in traffic flows are, by themselves, unlikely to create or remove severance".
- 9.4.14 The Scheme will create temporary internal construction access tracks that will interact in places with the PRoW network. The increase in HGV movements along the local highway network also creates the potential for an increase in severance effects, and as such the effect of severance of routes has been assessed in this chapter.

### **Driver and Non-Motorised User (NMU) Delay**

- 9.4.15 Where roads affected by development are at or near capacity, the traffic associated with such development can cause or add to vehicle delays. Some roads can typically operate at or near capacity during the weekday AM or PM peak hours.
- 9.4.16 While the Scheme would only generate significant volumes of traffic for a temporary period during construction, there is potential for this to result in delay for non-development traffic at the Site access junctions where there would be additional turning movements, and at other key intersections within the study area which might be affected by increased traffic, particularly on the minor arms of junctions where the ability to find gaps in passing traffic may be reduced.
- 9.4.17 The IEMA guidelines note that "the assessment of driver delay will normally be based on the technical work reported within the Transport Assessment, which generally focuses on conditions in the network peak periods". The



guidelines also note that "these 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". A TA has been prepared as part of the application for development consent and is provided at ES Vol 2 Appendix 9-1: Transport Assessment [EN010141/DR/6.2].

- 9.4.18 An appraisal of the effects of the Scheme on Driver Delay has been undertaken, with the significance of effect with regard to driver delay identified using professional judgement, taking into account that the arrival and departure times of staff are forecast to be outside the AM and PM peak hours, as well as the general rural nature of the highway network within the study area.
- 9.4.19 An assessment is included for potential impacts causing delays to NMUs, which is generally as a result of changes in volume and the composition or speed of traffic which impacts on the ability of pedestrians to cross roads. In general terms, increases in traffic levels could potentially lead to increases in pedestrian delay.
- 9.4.20 There is limited provision for pedestrians along the majority of routes within the study area. However, the proposed construction access route does pass near to residential areas including Hail Weston, Staughton Highway and Great Staughton, which creates the potential for pedestrian, cyclist and equestrian movements along the roads within the study area. Consequently, the effects of the Scheme in terms of pedestrian delay are considered in this Chapter.

### **Pedestrian and Cyclist Amenity (including Fear and Intimidation)**

9.4.21 Pedestrian and Cycle Amenity (including Fear and Intimidation) is broadly defined within the IEMA guidelines as "the relative pleasantness of a journey and is considered to be affected by traffic flow, traffic composition and pavement width/separation from traffic".



- 9.4.22 This definition also includes pedestrian / cyclist fear and intimidation and can be considered to be a much broader category including consideration of exposure to noise and air pollution, and the overall relationship between pedestrians / cyclists and traffic.
- 9.4.23 As noted above, there are a number of residential areas in the vicinity of the Scheme as well as an extensive PRoW network and a section of the National Cycle Network (NCN) Route 12. This creates the potential for there to be a number of pedestrian, cyclist and equestrian movements in the study area. Consequently, the effects of the Scheme in terms of pedestrian and cyclist amenity, including fear and intimidation, are considered in this chapter.

### **Accidents and Safety**

- 9.4.24 The IEMA guidelines note that "the calculation of collision rates is still considered a relevant approach to scale a road safety assessment; however, it is more common for stakeholders to request a 'collision cluster' assessment to identify potential impacts at a more detailed level".
- 9.4.25 It is possible to estimate the effects of increased traffic on accidents and safety from existing accident records, national statistics, the type and quantity of traffic generated, journey lengths and the characteristics of the routes in question.
- 9.4.26 An assessment of Accidents and Safety has been undertaken by examining road traffic accident data for the most recent five-year period available. This analysis highlights if there are any existing safety issues on the local highway network, including any accident cluster sites that might be exacerbated by the Scheme. The outcome of this assessment, and the resultant effects of the Scheme in terms of accidents and safety, are considered in this chapter.

### **Hazardous Loads**

9.4.27 With respect to Hazardous and Dangerous Loads, the IEMA guidelines state that the assessment should 'include a risk of catastrophe analysis to illustrate the potential for an accident to happen and the likely effect of such an event'.



- 9.4.28 Analysis of the local highway network within the study area indicates there are no significant features, such as significant level differences immediately beyond the carriageway, which would suggest that the transfer of materials poses a particular risk beyond that which would be expected on the general highway network.
- 9.4.29 As such, consideration of the effects of the Scheme with regard to hazardous and dangerous loads has been scoped out of further detailed assessment in this Chapter, as agreed with Stakeholders at the Scoping stage. The measures to be employed to ensure safe vehicular transport of components such as panel and batteries are set out within the outline Construction Traffic Management Plan (oCTMP) [EN010141/DR/7.4]. Further details of the management of health and safety, contamination and waste management within the Site are contained within the outline Construction Environmental Management Plan (oCEMP) [EN010141/DR/7.3].

## **Assessment of Significance / Assessment Criteria**

9.4.30 The significance of effects is determined through consideration of two elements – the sensitivity of the receptor and the magnitude of the impact.

## **Receptor Sensitivity**

- 9.4.31 Paragraph 1.3 of the IEMA guidance explains that groups or locations that may be sensitive to changes in traffic conditions could include people at home, people in workplaces, sensitive groups such as children, the elderly or the disabled, sensitive locations such as hospitals, churches, schools or historical buildings, or people walking.
- 9.4.32 Sensitivity to changes in transport conditions is generally focussed on vulnerable user groups who are less able to tolerate, adapt or recover from changes. The general criteria for defining the importance of receptors, as defined within the IEMA guidelines, are set out in Table 9.5.



**Table 9.5: Receptor Sensitivity Summary (Traffic and Transport)** 

Sensitivity	Description
Very High	Schools, colleges, playgrounds, hospitals, retirement homes
High	Heavily congested junctions, residential properties very close to carriageway
Medium	Congested junctions, shops/businesses, areas of heavy pedestrian / cycling use, areas of ecological / nature conservation, residential properties close to carriageway
Low	Tourist / visitor sites, places of worship, residential areas set back from the highway with screening
Negligible	Receptors with no material sensitivity to traffic flows

- 9.4.33 The road links included within the study area are as described in paragraph 9.4.6. The link sensitivity has been based upon an average sensitivity of the whole link, with a separate assessment of high / very high sensitivity receptors where relevant. Longer links have been broken down into sensible smaller sections where appropriate.
- 9.4.34 Road links considered to be of low or medium sensitivity have been assessed against the 'Rule 1' threshold described above (>30% increase in traffic flow). Road links considered to be of high or very high sensitivity have been assessed against the 'Rule 2' threshold described above (>10% increase in traffic flow.

#### Magnitude

9.4.35 Impacts are defined as beneficial or adverse. Key factors influencing this will include the physical or geographical scale of the impact, the duration and frequency of the impact, and the reversibility of the impact. The general criteria for defining the magnitude of impact are set out in Table 9.6.



**Table 9.6: Impact Magnitude (Traffic and Transport)** 

Magnitude	Description
High	Total loss or major alteration to key elements / features of the baseline conditions such that post development character / composition of baseline condition will be fundamentally changed
Medium	Loss or alteration to one or more key elements / features of the baseline conditions such that post development character / composition of the baseline condition will be materially changed
Low	Minor shift away from baseline conditions. Changes arising from the alteration will be detectable but not material. The underlying character / composition of the baseline condition will be similar to the pre-development situation
Negligible	Very little change from baseline conditions. Change is barely distinguishable, approximating to a 'no change' situation

## Significance of Effects

- 9.4.36 The significance of the effects of the Scheme with regard to traffic and transport is determined by correlating the magnitude of the impact and the sensitivity of the receptor.
- 9.4.37 The general approach adopted for evaluating the significance of effects is outlined in Table 9.7.

**Table 9.7: Significance of Effects Matrix (Traffic and Transport)** 

Impact Magnitude	Receptor Sensitivity				
	Negligible	Low	Medium	High	Very High
High	Minor	Moderate	Moderate	Major	Major
Medium	Negligible	Minor	Moderate	Moderate	Major
Low	Negligible	Negligible	Minor	Moderate	Moderate
Negligible	Negligible	Negligible	Negligible	Minor	Minor



9.4.38 For the purpose of this assessment, effects predicted to be 'major' or 'moderate' are generally considered significant in EIA terms, whilst effects predicted to be 'minor' or 'negligible' are considered not significant in EIA terms.



## 9.5 Assumptions and Limitations

- 9.5.1 A number of assumptions are made when forecasting the traffic generation of the Scheme, both during construction and operation, for example in relation to the forecast number of construction deliveries and staff required, and the anticipated delivery schedule. However, these forecasts have been developed by the Applicant and their consultants based on and derived from experience with other developments similar in scale and nature to the Scheme. Therefore, they are considered to represent a realistic estimation of traffic generation.
- 9.5.2 No baseline data was available regarding the local pedestrian and cycle usage.

The traffic generation forecasts presented in this ES primarily relate to the construction period. For clarity, the trip generation forecasts are described in terms of one-way trips, which are journeys in a single direction, and two-way movements, which covers both the arrivals to and departures from the Site; 1 arrival trip and 1 departure trip therefore equates to 2 two-way movements.



#### 9.6 Baseline Conditions

## **Local Highway Network**

- 9.6.1 The Site is located across approximately 773 ha of land to the north-west of St Neots, with the point of connection to the National Grid at the Eaton Socon substation.
- 9.6.2 As noted above, the Site will be accessed from the SRN via the B645 Kimbolton Road. To the west of its junction with the A1, the B645 Kimbolton Road is a two-way single carriageway road subject to the national speed limit (60mph), which runs in a generally south-east / north-west alignment. Between the A1 and the south-eastern end of Hail Weston High Street the road features a carriageway width of approximately 6.5m, with a shared foot / cycleway present along the north-eastern side of the road as far as the village of Hail Weston. There is no street lighting present, and there are no properties located along this stretch of the B645. An 18-tonne weight limit is in force along Kimbolton Road (except for loading) from a point immediately due west of the A1.
- 9.6.3 In the vicinity of Hail Weston, Kimbolton Road is subject to a 50mph speed limit, and the carriageway width reduces to approximately 6m. Within Hail Weston there are a small number of properties (approximately 20-30 in total) located along the B645 to the north-east of the carriageway, although the majority of these are well set back from the road.
- 9.6.4 To the north-west of Hail Weston as far as the junction with Moor Road, the speed limit reverts to 60mph. There are fewer than 10 properties situated along this stretch of the B645.
- 9.6.5 Moor Road is a two-way single carriageway road which runs in a generally north-south alignment from a priority 'T' junction with Kimbolton Road at the northern end. The road is subject to the national speed limit (60mph) and features a carriageway width of approximately 4m, with passing places present at regular intervals. No street lighting or footways are present, and



- there are very few properties (fewer than 5) situated along Moor Row between Kimbolton Road and the proposed site access junction.
- 9.6.6 The proposed site access strategy will also require use of a short section of Great Staughton Road to the west of the village of Great Staughton, Spring Hill Road and Green End to the north of the village of Little Staughton, and the B660 Kimbolton Road to the north of Keysoe village.
- 9.6.7 Great Staughton Road is a two-way single carriageway road with a carriageway width of approximately 5.5m, subject to the national speed limit (60mph). There are fewer than 5 properties situated along the impacted sections of Great Staughton Road.
- 9.6.8 Spring Hill Road and Green End are both two-way single carriageway roads with a carriageway width of between 5m and 5.5m along the impacted sections and are both subject to the national speed limit (60mph). There are fewer than 5 properties situated along the impacted section of Green End, and none along Spring Hill Road. Spring Hill Road joins Great Staughton Road via a priority T-junction, and Green End joins Great Staughton Road via a priority crossroads junction.
- 9.6.9 The B660 Kimbolton Road is a two-way single carriageway road with a carriageway width of approximately 5.5m, subject to a 40mph speed limit in the vicinity of access SA01 but reverting to a 60mph speed limit immediately to the south of this. There are no properties situated along the impacted section of the road.
- 9.6.10 The grid connection route will cross Duloe Lane and Bushmead Road to the north-west of Eaton Socon. This will require the creation of temporary crossing points for construction traffic access.
- 9.6.11 The impacted section of Duloe Lane will comprise a length of approximately 50m. Duloe Lane at this point is a two-way single-carriageway road with a carriageway width of approximately 5m, subject to the national speed limit



(60mph). There are no properties situated along the impacted section of the road.

9.6.12 The impacted section of Bushmead Road will comprise a straight crossing, with a temporary access to be created on the northern side of the road opposite the existing Eaton Socon substation access road. Bushmead Road at this point is a two-way single-carriageway road with a carriageway width of approximately 6.5m, subject to the national speed limit (60mph). There are no properties situated along the impacted section of the road.

## **Existing Public Transport Facilities**

- 9.6.13 There are no bus stops or routes along the impacted sections of Moor Road, Green End, or Great Staughton Road.
- 9.6.14 The 150 bus service, which provides 4 buses per day between Eynesbury and Tilbrook, runs along the B645 Kimbolton Road, although there are no bus stops located along the impacted section of the road. The nearest served stops are located within the village of Hail Weston, approximately 2km southeast of the main site access, and in Great Staughton approximately 530m west of the B645 Kimbolton Road / Moor Road junction.
- 9.6.15 The 28A bus service provides 3 buses per day in the southbound direction along the B660 Kimbolton Road, as part of a circular route between Bedford and Little Staughton. There are no bus stops located along the impacted section of the road. The nearest informal stopping place is located at the B660 Kimbolton Road / Great Staughton Road junction, approximately 130m north of the proposed construction access route, although no formal bus stop infrastructure is provided.

### **Non-Motorised User Networks**

9.6.16 The Site is accessible on foot via Moor Road, Green End and the B660 Kimbolton Road. As noted above, there is generally limited footway provision



- along the key highway links within the study area, and the impacted sections of road are entirely unlit.
- 9.6.17 NCN Route 12 runs along the B645 Kimbolton Road between the A1 and Hail Weston. A shared foot/cycleway is present along the north-eastern side of the road to facilitate cycle travel along this section of the carriageway. This route also runs along Bushmead Road in the vicinity of the grid connection crossing point.
- 9.6.18 There are a number of PRoW which either cross the Order Limits or pass close to the Order Limits. These include rights of way which are suitable for equestrian use. The PRoW network within the Order Limits comprises sections of the following routes:
  - Bedford Pertenhall 2 (Footpath 2);
  - Bedford Pertenhall 10 (Footpath 10);
  - Bedford Pertenhall 11 (Footpath 11);
  - Bedford Pertenhall 17 (Footpath 17);
  - Bedford Pertenhall 18 (Footpath 18);
  - Bedford Pertenhall 26 (Bridleway 26);
  - Bedford Pertenhall 29 (Footpath 29);
  - Bedford Bolnhurst and Keysoe 13 (Footpath 13);
  - Bedford Bolnhurst and Keysoe 32 (Footpath 32);
  - Bedford Bolnhurst and Keysoe 34 (Footpath 34);
  - Bedford Bolnhurst and Keysoe 35 (Footpath 35);
  - Bedford Bolnhurst and Keysoe 36 (Footpath 36);
  - Bedford Bolnhurst and Keysoe 37 (Bridleway 37);
  - Bedford Bolnhurst and Keysoe 40 (Bridleway 40);
  - Bedford Bolnhurst and Keysoe 47 (Footpath 47);
  - Bedford Bolnhurst and Keysoe 50 (Footpath 50);
  - Bedford Bolnhurst and Keysoe 112 (Footpath 112);
  - Bedford Swineshead 15 (Footpath 15);
  - Bedford Little Staughton 1 (Footpath 1);



- Bedford Little Staughton 3 (Footpath 3);
- Bedford Little Staughton 4 (Footpath 4);
- Bedford Little Staughton 8 (Footpath 8);
- Bedford Little Staughton 10 (Footpath 10);
- Bedford Little Staughton 11 (Footpath 11);
- Bedford Little Staughton 26 (Footpath 26);
- Bedford Staploe 16 (Footpath 16);
- Cambridgeshire Great Staughton 1 (Footpath 213/1);
- Cambridgeshire Great Staughton 2 (Footpath 213/2);
- Cambridgeshire Great Staughton 23 (Footpath 213/23);
- Cambridgeshire Great Staughton 28 (Footpath 213/28);
- Cambridgeshire Hail Weston 5 (Footpath 112/5);
- Cambridgeshire Hail Weston 7 (Bridleway 112/7);
- Cambridgeshire Hail Weston 8 (Footpath 112/8);
- Bedford Staploe 4 (Footpath 4);
- Bedford Staploe 8 (Footpath 8);
- Bedford Staploe 8A (Footpath 8A); and
- Bedford Staploe 16 (Footpath 16).
- 9.6.19 The PRoW network listed above is illustrated within the **Streets, Rights of**Way and Access Plans [EN010141/DR/2.4].
- 9.6.20 It is anticipated that access to all PRoW routes will be maintained during the construction phase, with management in place to ensure that all routes can be safely used, including temporary diversion where necessary. The proposed mitigation to manage and limit the impact of the Scheme on the PRoW network is set out within the outline Public Right of Way Management Plan [EN010141/DR/7.4] and summarised in Section 9.7.



### Sources of Baseline Information

#### **Traffic Flows**

- 9.6.21 To inform the assessment of the Scheme, ATCs were undertaken at a number of locations in the vicinity of the Scheme in June 2022 and April 2024, to determine the baseline traffic conditions of the local highway network. 24-hour AADT and 12-hour AAWT flows (07:00 19:00) have been derived from the ATC data to enable the baseline traffic flows to be established at the required design years.
- 9.6.22 The location of each of the ATC surveys undertaken is shown on at Annex E of ES Vol 2 Appendix 9-1: Transport Assessment [EN010141/DR/6.2].
- 9.6.23 The baseline AADT and AAWT flows along each of the highway links identified in paragraph 9.3.7 above are summarised in Tables 9.8 and 9.9, respectively. The 2022 baseline AADT and AAWT flows are illustrated in Figures 1 and 2 in ES Vol 2 Appendix 9-2 Traffic Flow Diagrams [EN010141/DR/6.2]. The 2024 baseline AADT and AAWT flows are illustrated in Figures 3 and 4 in ES Vol 2 Appendix 9-2.

Table 9.8: Baseline Traffic Flows - 24hr AADT, Two-Way

Link ID	Link	Total Vehicles	HGVs	%HGVs
2022 Bas	seline Traffic Flows			
1	B645 Kimbolton Road between A1 and Hail Weston	7,929	109	1.4%
2	B645 Kimbolton Road between Hail Weston and main site access junction	6,742	67	1.0%
3	Moor Road at temporary crossing point	297	31	10.4%
6/7	Green End between B645 and Green End	528	11	2.1%



Link ID	Link	Total Vehicles	HGVs	%HGVs
2022 Bas	seline Traffic Flows			
8	Great Staughton Road between Green End and site access (east of The Kangaroo)	776	8	1.0%
9	Great Staughton Road between Green End and site access (west of The Kangaroo)	343	2	0.6%
10	B660 Kimbolton Road between site access junctions	994	13	1.3%
2024 Bas	seline Traffic Flows			
4	Great Staughton Road between Zantra Business Park and Spring Hill	1,320	6	0.5%
5	Spring Hill between Great Staughton Road and site access	555	4	0.7%
11	Duloe Road at grid connection crossing point	725	4	0.6%
12	Bushmead Road at grid connection crossing point	3,004	36	1.2%

Table 9.9: Baseline Traffic Flows – 12hr AAWT (07:00 – 19:00), Two-Way

Link ID	Link	Total Vehicles	HGVs	%HGVs
2022 Bas	seline Traffic Flows			
1	B645 Kimbolton Road between A1 and Hail Weston	6,283	102	1.6%
2	B645 Kimbolton Road between Hail Weston and main site access junction	5,483	70	1.3%
3	Moor Road at temporary crossing point	301	35	11.6%
6/7	Green End between B645 and Green End	500	14	2.8%



Link ID	Link	Total Vehicles	HGVs	%HGVs		
2022 Bas	2022 Baseline Traffic Flows					
8	Great Staughton Road between Green End and site access (east of The Kangaroo)	700	8	1.1%		
9	Great Staughton Road between Green End and site access (west of The Kangaroo)	311	4	1.3%		
10	B660 Kimbolton Road between site access junctions	892	15	1.7%		
2024 Bas	seline Traffic Flows					
4	Great Staughton Road between Zantra Business Park and Spring Hill	1,297	9	0.7%		
5	Spring Hill between Great Staughton Road and site access	559	4	0.7%		
11	Duloe Road at grid connection crossing point	687	7	1.0%		
12	Bushmead Road at grid connection crossing point	2,937	43	1.5%		

- 9.6.24 Baseline traffic flow data for the A1 has been obtained from the National Highways WebTRIS Traffic Data<sup>15</sup>. The most recently available average daily traffic flow data, which covers 2023, was obtained for count sites 6815/1 and 6816/1, which are located on the A1 approximately 500m north of the St Neots junction in the southbound and northbound carriageways, respectively.
- 9.6.25 This shows an annual average daily two-way flow in 2023 of 39,278 vehicles, including 5,460 HGVs. There was a two-way 12hr AAWT flow of 33,547 vehicles, including 5,013 HGVs.



## **Road Safety**

- 9.6.26 The road safety record of the local highway network within the study area has been examined for the most recent five-year period.
- 9.6.27 Personal injury accident (PIA) data has been obtained from CCC Road Safety Dashboard, for the period 1<sup>st</sup> April 2020 31<sup>st</sup> March 2025 inclusive. The full accident data is included as **Annex C** of **ES Vol 2 Appendix 9-1 Transport Assessment [EN010141/DR/6.2]**. A breakdown of the accidents by location and severity is provided in Table 9.10.

**Table 9.10: Personal Injury Accident Data** 

Link ID	History Link	Incident Severity		
	Highway Link	Slight	Serious	Fatal
1	B645 Kimbolton Road between A1 and Hail Weston	3	3	0
2	B645 Kimbolton Road between Hail Weston and main site access junction	2	1	1
3	Moor Road at temporary crossing point	0	0	0
4	Great Staughton Road between Zantra Business Park and Spring Hill	0	1	0
5	Spring Hill between Great Staughton Road and site access	0	0	0
6/7	Green End between B645 and Green End	0	0	0
8	Great Staughton Road between Green End and site access (east of The Kangaroo)	0	0	0
9	Great Staughton Road between Green End and site access (west of The Kangaroo)	0	0	0
10	B660 Kimbolton Road between site access junctions	0	0	0



Link ID	Highway Link	Incident Severity		
		Slight	Serious	Fatal
11	Duloe Road at grid connection crossing point	0	0	0
12	Bushmead Road at grid connection crossing point	0	0	0

- 9.6.28 Table 9.10 indicates a total of 11 accidents along the highway links within the study area, of which 5 resulted in serious injury, with 5 being classified as 'slight'. Regrettably, there was also one accident which resulted in fatal injury. The majority of the accidents (10no.) occurred along the B645 to the east of the proposed main site access junction (SA16). A single accident, which resulted in serious injury, occurred on Great Staughton Road approximately 430m west of the Zantra business park access junction (SA12).
- 9.6.29 In addition, a total of 4 accidents occurred on the A1 in the vicinity of the St. Neots junction. Of these, 2 resulted in slight injury, with 1 resulting in serious injury. Regrettably, there was also a single fatal accident on the northbound on-slip.
- 9.6.30 Further analysis on the nature of the accidents recorded within the study area is included in Section 3.5 of **ES Vol 2 Appendix 9-1 Transport Assessment** [EN010141/DR/6.2]. However, based on the CCC definition of accident cluster sites, there is no identified pattern of accidents and none of the accidents recorded within the study area constitutes a cluster site

#### **Future Baseline**

### **Assessment Scenarios**

9.6.31 The nature of the Scheme is such that the greatest impact is likely to occur during the construction phase, with traffic generation during the operational phase expected to be minimal. As such, the focus of transport impacts presented is on the impacts of construction traffic.



9.6.32 The construction phase is expected to last 30 months and is assumed to commence in early 2028, with completion in mid- to late 2030. The peak period for construction HGV traffic is forecast to occur in month 2, with construction staff movements peaking in month 12. As such, the peak of construction activity is forecast to occur in mid-2028, and this has therefore been taken as the future assessment year for this assessment.

### **Future Traffic Year Growth Assumptions**

- 9.6.33 By forecasting the future baseline conditions, the environmental effects caused by the traffic generated by the Scheme can be established by comparing the 'with development' situation against the 'without development' scenario in the 2028 future assessment year.
- 9.6.34 An estimate of future baseline traffic flows has been undertaken through the application of regional growth factors derived from the National Transport Model (NTM). NTM forecasts give traffic growth by region, road type and whether the area is built up or not. These forecasts are then adjusted by local TEMPro factors to reflect local traffic trends.
- 9.6.35 TEMPro 8.1 (Version 8.1, dataset 80) has been used to identify suitable growth rates to factor the 2022 and 2024 observed baseline traffic flows to a 2028 base year.
- 9.6.36 The extent of the highway network within the study area falls within four geographical areas: 'Bedford 001', 'Bedford 004', 'Huntingdonshire 020', and 'Huntingdonshire 015'. The resultant TEMPro growth factors are summarised in Table 9.11.

**Table 9.11: TEMPro Growth Factors (Average Weekday)** 

Area	Applicable Links	Growth Factor		
Alea	Applicable Links	2022-2028	2024-2028	
Bedford 001	B660 Kimbolton Road	1.0502	1.0399	
Bedford 004	Great Staughton Road, Spring Hill, Green End	1.0507	1.0401	



Avoc	Applicable Links	Growth Factor 2022-2028 2024-2028	
Area	Applicable Links		
Huntingdonshire 015	B645 west of Hail Weston, Moor Road	1.0351	1.0304
Huntingdonshire 020	B645 east of Hail Weston	1.0378	1.0316

## **Committed Developments**

- 9.6.37 Traffic flows may change slightly as a result of cumulative developments in the area. It is understood that there are a number of other proposed schemes located in the vicinity of the Scheme which are at various stages of planning. These sites may have the potential to cause cumulative traffic impacts along the highway links within the study area. These sites are as follows:
  - Land South of High Wood, Solar Farm (application ref. 22/01813/FUL);
  - Land to North and South of Bushmead Road, Solar Farm (application ref. 24/00858/MAF); and
  - Land South of Bushmead Road, Battery Energy Storage System (BESS) (application ref. 22/01828/MAF).
- 9.6.38 The implications of the cumulative impacts resulting from each of these schemes is appraised in Section 9.9.
- 9.6.39 It should also be noted that the TEMPro growth factors summarised above take into account background traffic growth associated with allocated development sites identified within the Huntingdonshire and Bedford Local Plan documents.
- 9.6.40 During the scoping discussions with the LHAs, the Applicant was not made aware of any planned highway works within the immediate study area that may impact future baseline traffic flows.
- 9.6.41 Construction is currently ongoing for the upgrade of the A428 between the Black Cat roundabout to the south of St Neots and Caxton Gibbet, near



Cambourne. This project will comprise the construction of a new section of dual carriageway to bypass the existing section of the A428 between St Neots and Cambourne. This is scheduled to be completed and open to traffic in 2027.

9.6.42 While this project is likely to have beneficial impacts on the Scheme with regard to access to the Site for AILs, it is primarily aimed at improving journey times and journey time reliability for east – west movements between Cambridge and Milton Keynes and improving local connections to the eastern side of St Neots. It is therefore unlikely to result in any significant change in traffic flow patterns across the local highway network which would comprise the construction access route to the Site.

#### **Future Year Baseline Traffic Flows**

9.6.43 The 2028 assessment year baseline traffic flows have been derived by multiplying the observed 2022 and 2024 traffic flows by the relevant TEMPro grown factor. The resultant 2028 baseline AADT and AAWT flows are illustrated in Figures 5 and 6 in ES Vol 2 Appendix 9-2: Traffic Flow Diagrams [EN010141/DR/6.2], and are summarised in Tables 9.12 and 9.13, respectively.

Table 9.12: 2028 Baseline Traffic Flows - 24hr AADT, Two-Way

Link ID	Link	Total Vehicles	HGVs	%HGVs
1	B645 Kimbolton Road between A1 and Hail Weston	8,228	113	1.4%
2	B645 Kimbolton Road between Hail Weston and main site access junction (SA16)	6,981	69	1.0%
3	Moor Road at temporary crossing point (SA14/SA15)	307	32	10.4%
4	Great Staughton Road between Zantra Business Park (SA12) and Spring Hill	1,372	6	0.4%



Link ID	Link	Total Vehicles	HGVs	%HGVs
5	Spring Hill between Great Staughton Road and Site B access (SA10)	578	4	0.7%
6	Green End between Site B Accesses SA07/SA08 and SA09	555	12	2.2%
7	Green End between B645 and Site B Accesses SA07/SA08	555	12	2.2%
8	Great Staughton Road between Green End and Site B accesses east of The Kangaroo (SA05/SA06)	815	8	1.0%
9	Great Staughton Road between Green End and Site B accesses west of The Kangaroo (SA03/SA04)	358	2	0.6%
10	B660 Kimbolton Road between Site B access (SA02) and Site A access (SA01)	1,044	14	1.3%
11	Duloe Road at grid connection crossing point	747	4	0.5%
12	Bushmead Road at grid connection crossing point	3,098	37	1.2%

Table 9.13: 2028 Baseline Traffic Flows – 12hr AAWT (07:00 – 19:00), Two-Way

Link ID	Link	Total Vehicles	HGVs	%HGVs
1	B645 Kimbolton Road between A1 and Hail Weston	6,746	106	1.6%
2	B645 Kimbolton Road between Hail Weston and main site access junction (SA16)	5,629	72	1.3%
3	Moor Road at temporary crossing point (SA14/SA15)	312	36	11.5%



Link ID	Link	Total Vehicles	HGVs	%HGVs
4	Great Staughton Road between Zantra Business Park (SA12) and Spring Hill Road	1,349	9	0.7%
5	Spring Hill Road between Great Staughton Road and Site B access (SA10)	581	4	0.7%
6	Green End between Site B Accesses SA07/SA08 and SA09	525	15	2.9%
7	Green End between B645 and Site B Accesses SA07/SA08	525	15	2.9%
8	Great Staughton Road between Green End and Site B accesses east of The Kangaroo (SA05/SA06)	735	8	1.1%
9	Great Staughton Road between Green End and Site B accesses west of The Kangaroo (SA03/SA04)	327	4	1.2%
10	B660 Kimbolton Road between Site B access (SA02) and Site A access (SA01)	937	15	1.6%
11	Duloe Road at grid connection crossing point	709	7	1.0%
12	Bushmead Road at grid connection crossing point	3,030	44	1.5%



## 9.7 Embedded Mitigation and Enhancement Measures

## **Embedded Mitigation**

#### **Construction Phase**

#### Routing

- 9.7.1 In order to minimise the environmental impact of construction traffic, the construction access strategy has been designed to avoid vehicles using the public highway as much as practicable, with particular focus on avoiding the need to pass through villages. Temporary access roads would therefore be constructed across fields to connect the various areas of the Site. The principal exception to this is the connection between Site C and Site B, which requires the use of a short section of Great Staughton Road and Spring Hill Road.
- 9.7.2 In order to avoid the need for vehicles to pass through the village of Great Staughton, all construction trips associated with Site B and Site A will route through fields between Site C and a private access track to the north-west of Site C. They would then route along Great Staughton Road between the private access track to the north-west of Site C (SA12) and the Site B access from Spring Hill Road (SA10).
- 9.7.3 Minor road widening works will be required along Spring Hill Road in order to facilitate the two-way movement of HGVs between Great Staughton Road and access SA10. The carriageway to the western side of Spring Hill Road would require widening by a maximum of 1.2m across a length of 160m. To the eastern side of the road, the carriageway would require widening by a maximum of 0.5m across a length of 50m. Minor widening within the junction bell mouth at the Great Staughton Road / Spring Hill Road junction would also be required. These works would be undertaken entirely within the existing adopted highway boundary.



- 9.7.4 Site B has a number of site access junctions which require construction traffic to use short sections of the public highway along Great Staughton Road (SA03, SA04, SA05, SA06) and Green End (SA09).
- 9.7.5 The grid connection route will require the creation of temporary crossing points for construction traffic access across Duloe Lane (SA17 and SA18) and Bushmead Road (SA19 and SA20) to the north-west of Eaton Socon.
- 9.7.6 Management of vehicle routeing to, from and around the Site will be managed through a Construction Traffic Management Plan (CTMP) as secured by a Requirement of the DCO. An **outline Construction Traffic Management Plan [EN010141/DR/7.4]** has been prepared as part of the application for development consent. A requirement of the **draft DCO [EN010141/DR/3.1]** secures that these measures are developed in detail and complied with. A further requirement of the draft DCO is that the oCTMP is developed into a full CTMP, which will be approved by the LPA, in consultation with the relevant LHAs, the implementation of which will be secured by the DCO once granted.

#### **HGVs**

- 9.7.7 To reduce the potential impact of HGV deliveries, the arrival and departure times will be managed to minimise the number of HGVs travelling to and from the Site during the highway peak hours.
- 9.7.8 In order to reduce the impact of HGV traffic on the local highway network in the vicinity of the Site, all construction traffic will be directed to the single main site access junction off the B645 (SA16), which will provide access to the main construction compound within East Park Site D. From this location, a network of temporary access roads will be constructed across fields, in order to allow HGV access to Site C, B, and A while limiting the requirement for vehicles to use the public highway as far as practicable.
- 9.7.9 As well as the main construction compound, satellite compounds would also be located across Sites A, B, and C in relation to the construction phasing of the Scheme. These would provide sufficient space to allow for HGV unloading



and manoeuvring to ensure that there would be no overspill queuing on the surrounding highway network. Furthermore, it is likely that a number of deliveries would be unloaded within the main site compound in Site D and would then be transferred on to the satellite compounds by smaller vehicles. Measures to manage the movement of deliveries around the Site are set out within the oCTMP [EN010141/DR/7.4], which is secured by a Requirement of the DCO. The indicative locations of the construction compounds are illustrated in ES Vol 3 Figure 2-5 Indicative Construction Access and Compounds [EN010141/DR/6.3].

## Abnormal Indivisible Loads (AIL)

9.7.10 The Scheme will require the delivery of certain components which would be classified as Abnormal Indivisible Loads (AILs). These would require transport to the Site to be managed subject to the Road Vehicles Authorisation of Special Types (General) Order 2003.

#### Staff Vehicles

- 9.7.11 To reduce the potential impact of vehicles associated with construction staff, all construction personnel will be encouraged to lift share with colleagues to reduce the number of vehicles travelling to and from the Site each day. Staff will also be instructed to use the strategic road network to travel to and from the main site access along the B645 from the A1(M), in order to minimise, and avoid, if possible, the incidence of construction traffic using local roads through the surrounding villages.
- 9.7.12 The main car parking area for the Scheme would be located within the main site compound in Site D. Additional car parking would also be provided within each of the construction compounds which would be situated across the other Site areas, but it is proposed that a fleet of minibuses would be provided for internal transport around the Site. As such, the majority of staff would park within Site D and would be transported to other areas of the Site from there by minibus.



- 9.7.13 During the periods of maximum construction activity, the number of staff vehicle trips could be further reduced by extending the staff minibus service to provide a collection / drop-off service, to transport staff to the main site compound from pre-arranged collection / drop-off locations, which could include nearby public transport hubs, town centres, and/or local accommodation.
- 9.7.14 Considering the start/finish times of staff, any staff vehicle movements / minibus trips on the local highway network are expected to occur outside of the traditional highway peak hours of 08:00 09:00 and 17:00 18:00. In the event that construction staff would be working over multiple shifts, the shift pattern timings would be managed to avoid the need to travel during the highway peak hours.
- 9.7.15 Further details of the proposed management and mitigation of vehicle trips associated with construction staff movements are set out within the oCTMP [EN010141/DR/7.4].

#### PRoW Network

- 9.7.16 Management of PRoWs will involve the use of mesh fencing or Heras fencing as appropriate in order to clearly demarcate and separate PRoWs from construction traffic and activities. Where necessary, banksmen would be utilised during construction where construction traffic is required to cross a PRoW.
- 9.7.17 A limited number of temporary, localised PRoW diversions will be required during the construction phase, primarily in relation to the trenching of cables across PRoW. Any diversion will be highly localised and for a limited period of time. Diversions would be in the magnitude of 1-2m buffer from the existing PRoW alignment, and only in place whilst trenches are open across the PRoW. At PRoW crossings the works would be phased to minimise the amount of time that a temporary PRoW diversion is in place. At all times, the definitive PRoW width would be retained as a minimum width for any temporary PRoW diversion.



- 9.7.18 An outline Public Rights of Way Management Plan [EN010141/DR/7.8] has been prepared as part of the application for development consent. This document sets out the principles by which PRoW will be managed during the construction and operation phases. Should the Scheme be consented, the DCO will require that a final Public Rights of Way Management Plan (PROWMP) is prepared prior to construction, in substantial accordance with this outline document.
- 9.7.19 An outline Construction Environmental Management Plan (oCEMP) [EN010141/DR/7.4] has been prepared as part of the application for development consent. This would be secured through the DCO and details management and mitigation measures and setting out the general principles to be followed in the construction of the Scheme, which would be agreed with the relevant authorities in advance of the commencement of construction. This includes measures related to the placement directional signage along the local highway network to direct Site traffic from the A1 to the main construction compound, as well as general health and safety signage on the Site perimeter to guide traffic around the Site and provide safety warning to PRoW users.

#### **Operational Phase**

9.7.20 An outline Operational Environmental Management Plan (oOEMP) [EN010141/DR/7.5] has been prepared as part of the application for development consent. This would be secured through the DCO and details management and mitigation measures and setting out the general principles to be followed in the operation of the Scheme, which would be agreed with the relevant authorities in advance of the commencement of operation. This includes measures related to the movement and storage of maintenance vehicles within the Site during the operational phase.

### **Decommissioning Phase**

9.7.21 An outline Decommissioning Environmental Management Plan (oDEMP) [EN010141/DR/7.6] has been prepared as part of the application for



development consent. This would be secured through the DCO and details management and mitigation measures and setting out the general principles to be followed in the decommissioning of the Scheme, which would be agreed with the relevant authorities in advance of the commencement of decommissioning. It is expected that the principles agreed to minimise the impact of development-related traffic during the construction phase will be reviewed and applied during decommissioning. This provides a summary of the Site access strategy and vehicular traffic requirements during the decommission phase and sets out that a Decommissioning Traffic Management Plan will be prepared as part of the final DEMP.

#### **Enhancement**

9.7.22 There are no embedded enhancement measures related to Traffic and Transport.



## 9.8 Assessment of Likely Impacts and Effects

### **Construction Phase**

- 9.8.1 The nature of the Scheme is such that the greatest impact is likely to occur during the construction phase, with this being the focus of transport effects presented in this ES.
- 9.8.2 During construction there will be temporary increases in traffic flows on the local highway network as a result of materials and contractors travelling to and from the Site. A key change from the baseline position will be the number and percentage of HGVs using local roads.
- 9.8.3 The construction period is expected to last for up to 30 months, and this is the period assumed for the purpose of this assessment. As such, all effects will be short-term and temporary.

#### **Forecast Traffic Generation**

- 9.8.4 In order to understand the scale of potential effects, an estimate of the potential level of construction traffic the Scheme could generate has been calculated based on experience of other solar farm facilities within the UK, and from information supplied by the Applicant.
- 9.8.5 The trip generation forecasts take into account the key construction-related activities to be undertaken, including for the setting up and decommissioning of site compound areas, welfare delivery/collection and servicing. A full description of the key components and work packages of the construction phase is provided within ES Vol 1 Chapter 2: The Scheme [EN010141/DR/6.1].
- 9.8.6 The number and type of deliveries that are anticipated to be generated during the 30-month construction period are summarised in Table 9.14.



**Table 9.14: Estimated Construction Traffic** 

	Work Package	Number of Loads		
	Construction of PV Solar Arrays			
Site A				
-	16.5m Artic	393		
-	30t Tipper	331		
-	Mixer Truck	0		
	Total	724		
Site B				
-	16.5m Artic	1,070		
	30t Tipper	582		
_	Mixer Truck	0		
	Total	1,652		
Site C				
-	16.5m Artic	306		
-	30t Tipper	241		
-	Mixer Truck	0		
	Total	547		
Site D				
-	16.5m Artic	271		
-	30t Tipper	225		
-	Mixer Truck	257		
	Total	753		
	Construction of BESS / S	Substation		
-	16.5m Artic	164		
-	30t Tipper	158		
-	Mixer Truck	758		
	Total	1,080		
	Grid Connection to Eaton Soc	con Substation		
-	16.5m Artic	57		
-	30t Tipper	0		
-	Mixer Truck	465		
	Total	522		
	Other Misc. Deliveries (Welfare, Fuel,	Water, Refuse) (LGVs)		
	Total	790		
	Total HGVs	5,278		
	Total LGVs	790		
ТОТ	AL (one-way deliveries)	6,068		
TOTAL (t	wo-way vehicle movements)	12,136		

9.8.7 As summarised in Table 9.14, it is anticipated that the total number of one-way delivery trips requiring access to the Scheme would be approximately 6,068 across the full 30-month construction period (12,136 two-way movements). The majority of these trips (5,278) would comprise HGV



- deliveries. The trips associated with welfare provision, fuel and waste (790) are anticipated to involve deliveries by light goods vehicle.
- 9.8.8 Construction operations would be limited to 08:00 18:00 Monday to Friday and 08:00 13:00 on Saturday, with no construction work on Sundays or Bank Holidays. Where possible, construction deliveries will be co-ordinated to avoid HGV movements during the traditional highway AM and PM peak hours (08:00 09:00 and 17:00 18:00, respectively). Measures to control the timings of HGV deliveries are set out within the **oCTMP** [EN010141/DR/7.4], which is secured by a Requirement of the DCO.
- 9.8.9 Assuming construction deliveries will occur over 5.5 days per week on average during the construction period, this would equate to an average of approximately 18 two-way movements per day (9 in and 9 out) across the construction period, inclusive of 16 two-way HGV movements (8 in and 8 out). However, the most intensive phase of activity is anticipated to relate to the delivery of aggregate for the construction of access tracks and compounds. This is likely to occur over a 12-week period between months 1 to 3 of the construction programme, peaking in month 2 at approximately 60 daily two-way HGV movements (30 in and 30 out). For the remainder of the construction programme, the level of daily HGV traffic is anticipated to be much lower.
- 9.8.10 In addition, typically 496 construction-related staff will require access to the Site per day on average across the 30-month construction period. The period of peak construction activity in terms of staff numbers would occur during the 18-month period between months 7 and 24, when there would be an average of 705 staff on site each day, with a maximum of around 854 staff per day during month 12. It is anticipated that a significant number of staff would participate in a car share thereby reducing the number of trips to the Site. Assuming an average car/van occupancy of 2, this would equate to a maximum of approximately 705 daily two-way staff trips on average between months 7 and 24, peaking at 854 daily two-way movements during month 12.



- 9.8.11 Staff car parking will be provided within the construction compounds which would be situated within each of the Site areas. As noted in Section 9.7, it is also proposed that a fleet of minibuses will be provided to transport staff to Sites A, B and C from the main car park, which will be situated in the main site compound within Site D. For the purpose of this assessment, therefore, it is assumed that all staff would car share, an average car/van occupancy of 2, as far as the main site compound. From there, it is assumed that 75% of all staff travelling to each of Sites A, B and C would be transported by 15-seater minibus, with the remainder travelling by car/van with an average occupancy of 2.
- 9.8.12 There is potential for this level of traffic to be reduced by extending the staff minibus provision to provide a collection and drop-off service to the Site from nearby public transport hubs, town centres and/or local accommodation. Details of this are set out within the oCTMP [EN010141/DR/7.4], which is secured by a Requirement of the DCO.

## **Trip Distribution**

- 9.8.13 The proposed access strategy for the Scheme would entail all construction HGVs and staff trips travelling from the A1 along the B645 as far as the main site access junction (SA16). From there, the volume of construction traffic impacting on the public highway to the west of Site D would be dependent on the construction schedule.
- 9.8.14 The distribution of construction trips across the Site has been calculated based on the indicative resourcing schedule set out within Annex B of ES Vol 2 Appendix 9- Transport Assessment [EN010141/DR/6.2], which provides an estimated breakdown of the number of staff and construction delivery trips which would be required for each element of the Site during each month of the construction period.
- 9.8.15 The distribution of construction trips also takes into account the proposed HGV routing strategy, which is described in Section 9.7 and illustrated on ES Vol 3 Figure 2-5 Indicative Construction Access and Compounds



**[EN010141/DR/6.3]**, as well as the proposed provision of an internal minibus shuttle service as described in paragraph 9.8.11, which assumes 75% of staff travelling to Sites A, B and C would be transported by 15-seater minibus.

- 9.8.16 As noted above, the proposed construction schedule indicates that the maximum number of construction deliveries by HGV will not coincide with the period of peak construction activity requiring the maximum number of staff trips. As such, the average daily construction trip generation has been calculated for three scenarios:
  - Period of Maximum HGVs (Month 2);
  - Period of Maximum Staff (Month 12); and
  - Average Across Whole Construction Period (30 months).
- 9.8.17 The total daily construction trip generation across each area of the Site for each of these scenarios is summarised in Table 9.15.
- 9.8.18 The forecast trip distributions for each of the above scenarios for are illustrated in Figures 7a, 8a and 9a in ES Vol 2 Appendix 9-2: Traffic Flow Diagrams [EN010141/DR/6.2].

Table 9.15: Forecast Daily Construction Vehicle Trip Generation (One-Way Deliveries)

	Scenario							
Area	Max HGVs		Max Staff		Average			
	HGVs	LGVs	HGVs	LGVs	HGVs	LGVs		
Site D	30	26	12	430	8	249		
Site C	4	3	2	39	1	6		
Site B	8	2	3	75	3	16		
Site A	5	1	2	37	1	7		
Grid Connection	3	0	2	5	1	0		



9.8.19 As noted above, all construction trips will arrive at the site via the main site access junction off the B645 (SA16), which connects to the main construction compound in Site D.

## **Impact of Construction Traffic**

9.8.20 Tables 9.16, 9.17 and 9.18 set out the predicted changes in vehicle / HGV movements during the 2028 assessment year, for each of the scenarios outlined above.

Table 9.16: Percentage Impact Assessment Summary (2028 Max HGVs (Month 2))

Link	Base Vehicles	Base HGVs	Development Vehicles	Development HGVs	% Impact Vehicles	% Impact HGVs			
2028 12hr AAWT Scenario – Two-Way Traffic Flows									
1	6,746	106	112	60	1.66%	57.13%			
2	5,629	72	112	60	1.99%	83.31%			
3	312	36	46	34	14.86%	94.90%			
4	1,349	9	31	25	2.32%	278.81%			
5	581	4	31	25	5.38%	626.41%			
6	525	15	3	2	0.49%	13.82%			
7	525	15	2	2	0.45%	12.71%			
8	727	8	2	1	0.22%	15.83%			
9	327	4	1	1	0.323%	14.40%			
10	937	15	11	9	1.23%	63.08%			
11	709	7	5	5	0.72%	74.91%			
12	3,030	44	5	5	0.17%	11.48%			



Link	Base Vehicles	Base HGVs	Development Vehicles	Development HGVs	% Impact Vehicles	% Impact HGVs		
2028 24hr AADT Scenario – Two-Way Traffic Flows								
1	8,228	113	112	60	1.36%	53.36%		
2	6,981	69	112	60	1.60%	87.04%		
3	307	32	46	34	15.08%	105.92%		
4	1,372	6	31	25	2.28%	401.95%		
5	578	4	31	25	5.41%	602.92%		
6	555	12	3	2	0.46%	17.58%		
7	555	12	2	2	0.43%	16.17%		
8	815	8	2	1	0.20%	15.04%		
9	358	2	1	1	0.21%	28.79%		
10	1,044	14	11	9	1.10%	68.90%		
11	747	4	5	5	0.68%	123.60%		
12	3,098	37	6	6	0.16%	13.73%		

Table 9.17: Percentage Impact Assessment Summary (2028 Max Staff (Month 12))

Link	Base Vehicles	Base HGVs	Development Vehicles	Development HGVs	% Impact Vehicles	% Impact HGVs
2028 1	2hr AAWT So	enario – T	wo-Way Traffic	Flows		
1	6,746	106	884	24	13.10%	22.72%
2	5,629	72	884	24	15.70%	33.12%
3	312	36	315	12	100.92%	33.51%



Link	Base Vehicles	Base HGVs	Development Vehicles	Development HGVs	% Impact Vehicles	% Impact HGVs
4	1,349	9	234	9	17.33%	100.03%
5	581	4	234 9		40.24%	224.75%
6	525	15	20	1	3.85%	5.29%
7	525	15	19	1	3.54%	4.86%
8	727	8	13	0	1.71%	6.06%
9	327	4	6	0	1.84%	5.51%
10	937	15	78	3	8.32%	20.12%
11	709	7	14	5	1.93%	67.56%
12	3,030	44	14	5	0.45%	10.36%
2028 2	4hr AADT Sc	enario – T	wo-Way Traffic	Flows		
1	8,228	113	884	24	10.74%	21.22%
2	6,981	69	884	24	12.66%	34.61%
3	307	32	315	12	102.41%	37.40%
4	1,372	6	234	9	17.05%	144.21%
5	578	4	234	9	40.45%	216.32%
6	555	12	20	1	3.64%	6.73%
7	555	12	19	1	3.35%	6.19%
8	815	8	13	0	1.54%	5.75%
9	358	2	6	0	1.68%	11.02%



Link	Base Vehicles	Base HGVs	Development Vehicles	Development HGVs	% Impact Vehicles	% Impact HGVs
10	1,044	14	78	3	7.47%	21.97%
11	747	4	14	5	1.83%	121.48%
12	3,098	37	14	5	0.44%	12.39%

Table 9.18: Percentage Impact Assessment Summary (2028 Average Construction Trips)

Link	Base Vehicles	Base HGVs	Development Vehicles	Development HGVs	% Impact Vehicles	% Impact HGVs			
2028 12hr AAWT Scenario – Two-Way Traffic Flows									
1	6,746	106	522	16	7.74%	15.12%			
2	5,629	72	522	16	9.27%	22.05%			
3	312	36	69	10	22.10%	27.15%			
4	1,349	9	55	8	4.06%	87.73%			
5	581	4	55	8	9.42%	197.12%			
6	525	15	5	1	0.94%	4.83%			
7	525	15	5	1	0.87%	4.44%			
8	727	8	3	0	0.42%	5.53%			
9	327	4	1	0	0.45%	5.03%			
10	937	15	16	2	1.76%	16.19%			
11	709	7	2	2	0.33%	25.56%			
12	3,030	44	2	2	0.08%	3.92%			
2028 2	4hr AADT Sc	enario – T	wo-Way Traffic	Flows					



Link	Base Vehicles	Base HGVs	Development Vehicles	Development HGVs	% Impact Vehicles	% Impact HGVs
1	8,228	113	522	16	6.34%	14.12%
2	6,981	69	522	16	7.48%	23.03%
3	307	32	69	10	22.43%	30.30%
4	1,372	6	55	8	3.99%	126.48%
5	578	4	55	8	9.47%	189.72%
6	555	12	5	1	0.89%	6.15%
7	555	12	5	1	0.82%	5.65%
8	815	8	3	0	0.38%	5.26%
9	358	2	1	0	0.41%	10.06%
10	1,044	14	16	2	1.58%	17.68%
11	747	4	2	2	0.31%	42.17%
12	3,098	37	2	2	0.08%	4.69%

# Assessment of Receptor Sensitivity, Magnitude of Impact and Significance of Effect

## Receptor Sensitivity

- 9.8.21 As stated in the Assessment of Significance / Assessment Criteria section above, the rules set out in the IEMA guidelines require further assessment where traffic flows / number of HGVs increase by more than 30% (or 10% for a sensitive area).
- 9.8.22 The local highway network within the study area is largely rural in nature, and there are relatively few properties with direct frontages onto any of the



highway links. Where there are properties which are directly accessed from the impacted sections of highway, these are generally well set back from the edge of the carriageway or otherwise screened with hedgerows.

- 9.8.23 Furthermore, the majority of the impacted links cover very short sections of road of generally less than 1km in length. In particular, the impacted sections of Spring Hill Road and the B660 Kimbolton Road comprise distances of approximately 280m and 70m, respectively. The impacted sections of Moor Road, Duloe Lane and Bushmead Road each comprise a single temporary crossing point.
- 9.8.24 As such, the sensitivity of all highway links within the study area is considered to be Low, and the assessment of impacts has therefore been appraised against the IEMA Rule 1 30% threshold for all links.

## Impact of Construction Traffic

- 9.8.25 Table 9.18 indicates that on average across the whole construction period, the magnitude of impact of construction traffic would be below the IEMA 30% threshold on all links in terms of overall traffic impact. For HGVs, the percentage increase would only exceed 30% on links 4 and 5 in the AAWT time period, and on links 4, 5 and 11 in the AADT time period. There is also forecast to be an increase in HGVs of exactly 30% on link 3 in the AADT time period.
- 9.8.26 Table 9.17 indicates that during the period of peak construction staff traffic, overall construction traffic is forecast to exceed the 30% threshold only on links 3 and 5, in both the AAWT and AADT time periods. The percentage increase would exceed 30% for HGVs on links 2, 3, 4, 5 and 11 for both the AAWT and AADT periods.
- 9.8.27 Table 9.16 indicates that during the period of peak HGV traffic, the impact of construction traffic would be below the IEMA 30% threshold on all links with regard to the increase in total vehicle numbers. The percentage increase in



HGVs is forecast to exceed the 30% threshold on links 1, 2, 3, 4, 5, 10 and 11 in this scenario, in terms of both AAWT and AADT.

9.8.28 With regard to the grid connection route, the assessment indicates that the increase in HGV traffic on link 11 (Duloe Lane) would be above the 30% threshold in all scenarios apart from the 2028 Average Construction Trips AAWT time period. However, this is a reflection of low baseline HGV flows along this links. In absolute terms, the total increase in HGVs crossing this link would be a maximum of 6 two-way movements per day. The percentage increase in total vehicle numbers on both Duloe Lane and Bushmead Road (link 12) is less than 2% in all scenarios.

## Impact on A1

- 9.8.29 As summarised in paragraph 9.6.24, baseline traffic flow data for the A1 has been obtained from the National Highways WebTRIS Traffic Data. Based on this data, the assessment indicates that if all development traffic were to arrive and depart in the same direction, this would equate to a percentage increase of approximately 4.5% in each direction during the period of maximum construction staff movements. During the period of maximum HGV traffic, there would be a maximum increase in HGVs of approximately 2.3%.
- 9.8.30 There was an average 12hr AAWT flow of 16,303 vehicles (2,478 HGVs) in the northbound direction and 17,244 vehicles (2,535 HGVs) in the southbound direction. If all development traffic were to arrive and depart in the same direction, this would equate to a percentage increase of approximately 5.3% in each direction during the period of maximum construction staff movements. During the period of maximum HGV traffic, there would be a maximum increase in HGVs of approximately 2.4%.
- 9.8.31 Although this high-level appraisal does not take into account future changes in traffic flows that may result from new developments or as a result of the A428 improvement scheme, it is clear that the magnitude of impacts of Scheme construction traffic would be within the parameters of daily traffic flow variation based on current traffic volumes on the A1. The A1 is deemed to be



of Negligible sensitivity. With reference to the significance of effects matrix at Table 9.7, it is therefore concluded that the Scheme's effect on the A1 would be of **negligible** significance in EIA terms.

## **Driver Delay**

- 9.8.32 Any significant effects of delay to other road users are typically made most apparent during the weekday peak hours when congestion may occur, As previously indicated, the majority of construction staff trips are likely to occur outside of the highway peak hours. HGV deliveries would occur throughout the working day and would generally be scheduled to avoid peak periods.
- 9.8.33 The greatest percentage impact in terms of total construction traffic is indicated to occur on link 3, Moor Road, and link 5, Spring Hill Road.
- 9.8.34 The impact on Moor Road would be at a single crossing point. Measures to control the movement of construction traffic across Moor Road are set out within the oCTMP [EN010141/DR/7.4], which is secured by a Requirement of the DCO. This identifies that the crossing point would be manned by banksmen to ensure that construction traffic only crosses Moor Road when there is an appropriate gap in traffic, to ensure there is no additional delay to traffic travelling along Moor Road. Furthermore, the magnitude of the percentage increase indicated on this link, approximately 22% in the 'Average Construction' scenario and 100% in the 'Max Staff' scenario, is reflective of a low level of baseline traffic along Moor Road, which was observed to have an average two-way flow of approximately 40 vehicles per hour, or one vehicle every 1-2 minutes, during the daytime.
- 9.8.35 Similarly, construction traffic would only impact on Spring Hill Road for a distance of less than 300m, and the percentage increases forecast on this link are again reflective of a relatively low level of baseline traffic.
- 9.8.36 In the 'Maximum HGVs' scenario the increase in HGV traffic is forecast to exceed 30% on links 1, 2, 3, 9, 10 and 11, and to significantly exceed 30% on links 4 and 5. These percentage increases are predominantly a reflection of



low baseline HGV flows along these links. In absolute terms, the total increase in HGVs along these links is low. The maximum increase in HGVs occurs on links 1 and 2 and equates to approximately 8 two-way movements per hour, or 1 HGV movement every 7-8 minutes, on average. Across the rest of the study area, there would be fewer than 1 HGV movement every 10 minutes, on average. This level of trip generation would only occur for a maximum of 3 months, with the number of HGV movements being generally lower throughout the majority of the construction period.

- 9.8.37 As such, the impact of the Scheme would not result in any appreciable effect on the operation of the assessed road links, and therefore the overall magnitude of impact on Driver Delay is considered to be Low Adverse.
- 9.8.38 As the sensitivity of all highway links within the study area is considered to be Low, with reference to the significance of effects matrix at Table 9.7 it is concluded that the effect of the Scheme on Driver Delay would be of negligible significance in EIA terms.

## Non-Motorised User Delay

- 9.8.39 NMU Delay 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 cross roads. There are a range of local factors that affect pedestrian delay and the IEMA guidelines do not set out specific thresholds for judging the significance of changes in levels of delay.
- 9.8.40 However, there are no specific pedestrian facilities, in terms of footways or crossing points, on any of the links where the overall increase in traffic is forecast to exceed the IEMA 30% threshold, and the Scheme would only impact on each link for a relatively short distance. As such, the magnitude of the impact on NMUs is considered to be Low Adverse.
- 9.8.41 As the sensitivity of all highway links within the study area is considered to be Low, with reference to the significance of effects matrix at Table 9.7 it is



concluded that the effect of the Scheme on NMU Delay would be of **negligible** significance in EIA terms.

#### Severance

- 9.8.42 The IEMA guidelines indicate that severance effects have historically been considered as being 'slight', 'moderate' and 'substantial' with changes in traffic flows of 30%, 60% and 90% respectively.
- 9.8.43 However, the guidelines also state that "caution needs to be observed when applying these thresholds as very low baseline flows are unlikely to experience severance impacts even with high percentage changes in traffic".
- 9.8.44 As described above, across the majority of the study area the high percentage impacts forecasted are generally a result of low baseline flows. The increase in traffic flow would only exceed 30% on links 3 and 5 in the 'Maximum Staff' scenario. This level of trip generation would only occur for a maximum of 3 months, with the number of staff on site being generally lower. As noted above, the impact at link 3 would be at a single crossing point, with link 5 being less than 300m in length.
- 9.8.45 As such, the proposed traffic increase brought about by the Scheme could not, by itself, cause severance. No other changes to the local highway network that could represent a physical barrier are proposed and therefore the overall magnitude of impact on Severance is considered to be Low Adverse.
- 9.8.46 As the sensitivity of all highway links within the study area is considered to be Low, with reference to the significance of effects matrix at Table 9.7 it is concluded that the effect of the Scheme on Severance would be of **negligible** significance in EIA terms.



## Non-Motorised User Amenity (Including Fear and Intimidation)

- 9.8.47 The IEMA guidance suggests that "a tentative threshold for judging the significance of the effects of traffic on pedestrian and cycle amenity would be where the traffic flow is halved or doubled".
- 9.8.48 The Scheme only results in a doubling of total vehicle flows on link 3 in the 'Maximum Staff' scenario. HGV flows would also be doubled on link 5 in that scenario.
- 9.8.49 In the 'Maximum HGVs' scenario, the level of HGV traffic is forecast to double on links 4 and 5 in the AAWT time period, and on links 3, 4, 5 and 11 in the AADT time period. However, the actual increase in HGV numbers is low in absolute terms, and the overall percentage impact in terms of total vehicles is low on all links in this scenario.
- 9.8.50 As described in paragraph 9.8.34, the magnitude of the percentage increase indicated on link 3 is reflective of a low level of baseline traffic along Moor Road. Furthermore, the impact on Moor Road would be at a single crossing point. Measures to control the movement of construction traffic across Moor Road are set out within the oCTMP [EN010141/DR/7.4], which is secured by a Requirement of the DCO. This identifies that the crossing point would be manned by banksmen to ensure that construction traffic only crosses Moor Road when there is an appropriate gap in traffic, which would include the movement of NMU traffic.
- 9.8.51 Having regard to the points above, the overall magnitude of impact on NMU Amenity is considered to be Medium Adverse on links 4 and 5, and Low Adverse across the rest of the study area. As the sensitivity of all highway links within the study area is considered to be Low, with reference to the significance of effects matrix at Table 9.7 it is concluded that the effect of the Scheme on Non-Motorised User Amenity would be of **negligible or minor** significance in EIA terms.



- 9.8.52 With regard to Fear and Intimidation, the IEMA guidance presents a suggested scoring system to help establish the degree of hazard, in order to establish the magnitude of impact by reference to the relative change in the level of fear and intimidation resulting from development traffic.
- 9.8.53 Based on this scoring system, on links where the overall percentage increase in construction traffic exceeds the IEMA 30% threshold, the Scheme is only forecast to result in a step change of a single level compared to the baseline on link 5 in the 'Maximum Staff' scenario. This would result in the level of Fear and Intimidation increasing from 'Moderate' to 'Great', although the overall increase in traffic would be fewer than 400 vehicles per day. The magnitude of impact on this link would therefore be Low Adverse.
- 9.8.54 As previously noted, the impact of the Scheme is limited to a distance of less than 300m on link 5. The forecast increase in traffic during the 'Maximum Staff' scenario would only persist for a maximum of 3 months, with the number of staff on site being generally lower.
- 9.8.55 The overall magnitude of impact on Fear and Intimidation is therefore considered to be Low Adverse on link 5, and Negligible across the rest of the study area. As the sensitivity of all highway links within the study area is considered to be Low, with reference to the significance of effects matrix at Table 9.7 it is concluded that the effect of the Scheme on Fear and Intimidation would be of **negligible or minor** significance in EIA terms.

### Public Transport Users

- 9.8.56 It is not considered that there will be a significant change in delay on any sections of the local highway network within the study area which facilitate public transport routes. It is also not anticipated that there would be any need for the closure of roads during the construction period which would impact on any bus services within the study area.
- 9.8.57 It is therefore considered that the significance of effect on public transport users would be of **negligible** significance in EIA terms.



#### **PRoWs**

- 9.8.58 As described in section 9.6, there is an extensive PRoW network within and surrounding the Order Limits. The Scheme layout has been designed to minimise the impact on this network.
- 9.8.59 There will not be any requirement for the permanent closure or diversion of any PRoW routes as a result of either the construction or operation of the Scheme, but some temporary diversions and user management will be required for health and safety purposes during construction.
- 9.8.60 The magnitude of change on those using the PRoW network is Low Adverse and the sensitivity is Low. The overall significance of the effect is therefore **negligible** in EIA terms.

## Accidents and Safety

- 9.8.61 With regard to accidents and safety, the accident history summarised in Table 9.10 demonstrates that there were no accidents recorded on any of the links within the study area other than the B645 between the A1 and the main site access. Two of these accidents did occur close to the location of the main site access junction, although both of these occurred outside of the proposed construction hours.
- 9.8.62 As such, the magnitude of the impact in relation to Accidents and Safety is considered to be Low Adverse. The sensitivity is Low, and the overall significance of the effect is therefore **negligible** in EIA terms.

#### **Summary of Impacts**

9.8.63 Table 9.19 outlines a summary of the magnitude of impact and significance of effects for vehicle travellers, NMUs and public transport users as a result of the Scheme during the construction phase.



Table 9.19: Summary of Magnitude of Impact and Significance of Effects During Construction Phase

Description of Effect	Sensitivity	Description of Change	Magnitude of Change	Effect Category	Significant Effect (Yes / No)				
Vehicle Trave	Vehicle Traveller								
Impact on A1	Low	Low percentage increase in both overall traffic and HGVs	Negligible	Negligible	No				
Driver Delay	Low	High percentage increase in both overall traffic flows and HGVs on some links, but this is generally a reflection of low baseline traffic flows.	Low Adverse	Negligible or Minor	No				
Accidents & Safety	Low	Small number of accidents along B645 in vicinity of proposed main Site access junction.	Low Adverse	Negligible	No				
NMU									
Severance	Low	Largest increase in traffic flows forecast to occur over short distances on public highway.	Low Adverse	Negligible	No				
NMU Delay	Low	No specific NMU facilities on any of the	Low Adverse	Negligible	No				



Description of Effect	Sensitivity	Description of Change	Magnitude of Change	Effect Category	Significant Effect (Yes / No)
		links where overall magnitude of impact would exceed 30%, and largest increases in traffic flows forecast to occur only over short distances.			
NMU Amenity	Low	Largest increase in traffic flows forecast to occur over short distances on public highway.	Low to Medium Adverse	Negligible or Minor	No
Fear & Intimidation	Low	Largest increase in traffic flows forecast to occur over short distances on public highway.	Low Adverse	Negligible or Minor	No
PRoW Network	Low	Some temporary diversion and user management on PRoW network.	Low Adverse	Negligible	No
Public Trans	port Users				
Delay	Neutral	No impact on bus services	Neutral	Neutral	No



## **Operational Phase**

- 9.8.64 During the operational phase it is anticipated that there will be 20 FTE staff on-site at any one time, primarily undertaking maintenance tasks. There will also be a small number of visitor trips per week for deliveries and servicing of equipment.
- 9.8.65 Staff and maintenance vehicles will primarily be four-wheel drive vehicles or vans. The requirement for HGV access to the Site during the operational phase will be rare, for example for exceptional maintenance activities such as the replacement of solar panels or transformers and would generally be less than the agricultural traffic that would otherwise arise.
- 9.8.66 Due to the low level or trips likely to be generated within the local highway network peak hours, and as agreed with the Planning Inspectorate at the Scoping stage, operational phase transport effects have been **scoped out** of detailed assessment within the ES.

## **Decommissioning**

- 9.8.67 At this stage the number of vehicle movements required during the decommissioning phase is not known, and as such the level of potential significant effects cannot be identified at this time. However, it is predicted to be similar to or less than the construction phase. As such, and as agreed with the Planning Inspectorate at the Scoping stage, decommissioning phase transport effects have been **scoped out** of detailed assessment within the ES.
- 9.8.68 An outline Decommissioning Environmental Management Plan (oDEMP)

  [EN010141/DR/7.6] has been prepared as part of the application for development consent. This would be secured through the DCO and details management and mitigation measures and setting out the general principles to be followed in the decommissioning of the Scheme, which would be agreed with the relevant authorities in advance of the commencement of decommissioning. It is expected that the principles agreed to minimise the



impact of development-related traffic during the construction phase will be reviewed and applied during decommissioning. A Decommissioning Traffic Management Plan will be prepared as part of the final DEMP.



## 9.9 Additional Mitigation and Monitoring

## **Construction Phase**

- 9.9.1 Based on the assessment of likely impacts and effects, the only adverse effects that are forecast are anticipated to occur only over relatively short sections of the highway network or would only occur for relatively short periods of the overall construction schedule. As such, no additional mitigation, other than the embedded mitigation, is proposed.
- 9.9.2 As previously described, mitigation measures including travel planning and HGV management have been incorporated into an **oCTMP** [EN010141/DR/7.4], which is secured by a Requirement of the DCO. The measures included within the oCTMP include:
  - Restriction of construction traffic to a specific, defined route, and restricted periods of the day and working week;
  - Use of temporary traffic signals or banksmen to monitor and control construction traffic entering and leaving the Site, and manage any interface between Site activities and the local highway / PRoW network;
  - Appropriate signage and safety fencing / barriers will be implemented at major crossing points and intersections with the local highway / PRoW network;
  - Provision of hardstanding areas within the Site to allow construction vehicles accessing the Site to manoeuvre within the Site and drop off loads without impacting on the local highway network;
  - Details of construction staff parking arrangements within the Site area; and
  - Consideration of co-ordinated working with developers of nearby sites to manage the delivery of schemes in order to minimise the cumulative impacts of construction traffic.
- 9.9.3 The oCTMP also sets out procedures for monitoring and review of measures, as well as procedures for enforcement and corrective measures in the event of any breaches of the CTMP.



- 9.9.4 The most notable increases in traffic are indicated to result from the forecast increase in construction staff movements between the A1 and the main site access. This would not in itself constitute a significant effect in EIA terms. However, as described under Embedded Mitigation in Section 9.7 it is proposed that an internal minibus shuttle service to transport staff from the Main Construction Compound to the other Site compounds will be provided. During the periods of maximum construction activity, the number of staff vehicle trips could be further reduced by extending this minibus shuttle service to provide a collection and drop off service to transport staff to the Main Construction Compound from nearby transport hubs, town centres and/or local accommodation.
- 9.9.5 The coppicing, pushing back or removal of hedgerows may be required, depending on site specific issues, in particular at temporary access SA14. Such activity will facilitate temporary construction access from the carriageway along with using traffic management as well as standard hedgerow maintenance. However, the site accesses have been located where possible such that the required visibility will be achievable with minimal requirement for hedgerow management.

# **Operational and Decommissioning Phase**

9.9.6 No additional mitigation is required during the operational and decommissioning phases of the Scheme.



## 9.10 Residual Effects

- 9.10.1 As summarised in Table 9.19, the anticipated effect of the Scheme during the construction phase with regard to Traffic and Transport is forecast to be negligible or minor with regard to Driver Delay, Accidents & Safety, Pedestrian Delay, Severance, NMU Amenity and Fear & Intimidation, and neutral with regard to public transport.
- 9.10.2 These effects are not considered to be significant in EIA terms, and no additional mitigation, other than the proposed embedded mitigation measures, is proposed. The residual effects are therefore considered to be negligible, and therefore not significant in EIA terms.



#### 9.11 Cumulative Effects

## **Overview**

- 9.11.1 A description of the approach taken with regard to the appraisal of cumulative developments is included within ES Vol 1 Chapter 17: Cumulative and In-Combination Effects [EN010141/DR/6.1].
- 9.11.2 Through this process, it was established that the cumulative impact assessment with regard to traffic and transport effects should take account of the following committed developments:
  - High Wood Solar Farm;
  - Cobholden Solar Farm; and
  - Cobholden Farm BESS.
- 9.11.3 It was also identified that the following committed infrastructure schemes should also be taken into account:
  - A428 Black Cat to Caxton Gibbet; and
  - East-West Rail.
- 9.11.4 The following sections describe the approach to how the cumulative impacts associated with each of the above committed developments has been accounted for within this assessment.

# **High Wood Solar Farm**

- 9.11.5 Planning consent for the proposed development of a 50MW solar farm on land to the east and west of Little Staughton (land south of High Wood) was granted on 4<sup>th</sup> December 2024 (HDC application ref: 22/01813/FUL; BBC application ref. 22/01998/MAF).
- 9.11.6 Based on this, it is anticipated that the construction of this development will need to commence by December 2027 at the latest (i.e. three years from the date of the planning consent).



- 9.11.7 An Indicative Traffic Management Plan was submitted as part of the planning application for this development. This identified an anticipated construction programme of 40 weeks. As such, it could be expected that construction would be completed by September 2028. As such, there could be some overlap with the construction phase of the Scheme.
- 9.11.8 The High Wood solar farm would be accessed from the A1 at the St Neots junction via the B645. The site access for the High Wood site would be at Sharp's Barn, approximately 700m west of the A1. Any overlap between the construction phases of the two developments would therefore be limited to link 1 of the study area.
- 9.11.9 The Indicative Traffic Management Plan prepared for the High Wood development identified a maximum of approximately 240 two-way delivery movements per week, inclusive of construction staff trips and deliveries by HGV. Based on a 6-day working week this equates to approximately 40 two-way movements per day, on average (inclusive of approximately 8 daily two-way HGV movements). This peak was forecast to occur within week 9 and week 33 of the indicative construction programme.

## **Cobholden Solar Farm and BESS**

- 9.11.10 Planning consent for the proposed construction of a 100MW BESS facility, comprising 2no. 50MW battery storage compounds on land to the south of Bushmead road, west of Cobholden Farm, was granted on 4<sup>th</sup> May 2023 (BBC application ref. 22/01828/MAF).
- 9.11.11 Subsequently, a separate planning application for the proposed development of a 50MW solar farm on land to the north and south of Bushmead Road, adjacent to Cobholden Farm, was granted on 31<sup>st</sup> January 2025 (BBC application ref. 24/00858/MAF).
- 9.11.12 It is understood that construction of these developments will take place concurrently, with a construction period of 50-60 weeks commencing in late-



- 2025. Both developments are therefore likely to be operational by late-2026 / early-2027.
- 9.11.13 Based on the supporting documents submitted with the respective planning applications, there would be a forecast trip generation of 18 two-way HGV movements per day, on average, associated with the Cobholden Solar Farm and BESS sites. There would also be approximately 70 construction staff on site per day, on average, with a maximum of approximately 120 staff during peak construction activities.
- 9.11.14 The proposed construction traffic access route for these developments would be from the A1 / A521 Black Cat Roundabout junction to the south, via Roxton Road, Staploe Road and Bushmead Road. There would be two site access junctions, one utilising the existing Cobholden Farm access track, and one new access off Bushmead Road. Both of these accesses would be located at least 300m west of Scheme accesses SA19 and SA20.
- 9.11.15 As such, since there would be little to no overlap between the proposed construction access route or the proposed construction period of the Cobholden Solar Farm and BESS sites relative to the Scheme, it is considered that no further detailed consideration of the cumulative traffic and transport impacts of these developments is necessary.

#### A428 Black Cat to Caxton Gibbet

- 9.11.16 The A428 Black Cat to Caxton Gibbet project is a highway improvement scheme by National Highways, which will entail the construction of a new 10-mile section of dual-carriageway road between St Neots and Caxton Gibbet. This will include the construction of a new three-level grade-separated junction at the A1 / A421 Black Cat Roundabout.
- 9.11.17 Construction of this improvement scheme commenced in December 2023 and is scheduled to be completed and open to traffic in spring 2027. It is therefore assumed for the purpose of this assessment that the construction phase of the Scheme would not commence until after the Black Cat to Caxton



Gibbet project is completed. Since the highway improvement scheme is intended to provide additional highway capacity and improve journey times along the A1, A421 and A428 in the vicinity of St Neots, it would therefore represent a beneficial change to the assessed baseline position. As such, it is considered that no further detailed consideration of the cumulative impacts of the Black Cat to Caxton Gibbet improvement scheme is required with regard to traffic and transport.

## **East West Rail**

- 9.11.18 East West Rail is a long-term strategic project to construct a new railway line connecting Oxford and Cambridge. Construction of the eastern section of the line between Bedford and Cambridge comprises Stage 3 of the project. This is still in the planning phase and is dependent on final government funding and approval. There are currently no projected timescales for the anticipated construction of this section of the route. Furthermore, Stage 2 of the project, between Bletchley and Bedford, is not currently forecast to be operational until 2030.
- 9.11.19 As such, it is unlikely that any construction activity associated with East West Rail within the Study Area will occur until after the construction phase of the Scheme has been completed. It is therefore considered that no further detailed consideration of the cumulative impacts of the East West Rail scheme is required with regard to traffic and transport.

# Percentage Impact Assessment of Cumulative Developments

- 9.11.20 As described above, only the proposed High Wood Solar Farm has the potential to result in any significant cumulative impacts with regard to environmental effects resulting from traffic and transport.
- 9.11.21 Based on the information provided within the Indicative Traffic Management Plan prepared for the High Wood Solar development, during the peak of construction there would be a maximum of approximately 40 two-way vehicle



movements per day, on average (inclusive of approximately 8 daily two-way HGV movements).

9.11.22 Table 9.20 summarises the anticipated cumulative percentage impact of the construction traffic associated with the High Wood Solar development.

**Table 9.20: Cumulative Development Percentage Impact Assessment Summary** 

Link	Base Vehicles	Base HGVs	Dev Vehs	Dev HGVs	Cumulative Dev Vehicles	Cumulative Dev HGVs	% Impact Vehicles	% Impact HGVs	
2028 – Max HGVs (Month 2)									
2028 1	2028 12hr AAWT Scenario								
1	6,746	106	112	60	40	8	2.25%	64.71%	
2028 2	4hr AADT S	cenario							
1	8,228	113	112	60	40	8	1.85%	60.43%	
2028 -	Max Staff (I	Month 12	)						
2028 1	2hr AAWT S	Scenario							
1	6,746	106	884	24	40	8	13.69%	30.29%	
2028 2	4hr AADT S	cenario							
1	8,228	113	112	60	40	8	11.23%	28.29%	
2028 -	Average Co	onstruction	on Trips						
2028 1	2hr AAWT S	Scenario							
1	6,746	106	522	16	40	8	8.33%	22.69%	
2028 2	4hr AADT S	cenario							
1	8,228	113	522	16	40	8	6.83%	21.19%	



- 9.11.23 Table 9.20 shows that regardless of whether any potential overlap between construction programmes between the two schemes happens to occur during the Max HGVs (Month 2), Max Staff (Month 12), or the Average Construction Trips scenarios, the overall cumulative impact in terms of total vehicles would not exceed the IEMA 30% threshold on link 1.
- 9.11.24 The assessment also indicates that the cumulative impact with regard to the increase in HGVs would only exceed the IEMA 30% threshold during the Max HGVs (Month 2) scenario and would reach the 30% threshold in the Max Staff (Month 12) scenario in the 12hr AAWT time period.
- 9.11.25 As described in paragraph 9.8.34, these percentage increases are predominantly a reflection of low baseline HGV flows along these links. In absolute terms, the total cumulative increase in HGVs along link 1 is low. The forecast cumulative development traffic would result an increase in HGVs on links 1 of approximately 1 additional two-way HGV movement per hour, on average.
- 9.11.26 It should also be noted that the assumption that the High Wood Solar scheme would be constructed between December 2027 and September 2028 represents a robust appraisal of the potential impacts, since this is the absolute latest that the High Wood Solar scheme could commence construction based on the date of the planning consent. It is likely, therefore that construction of the High Wood Solar site would commence earlier than December 2027, and consequently it is unlikely that the peak construction period would overlap with that of the Scheme.

# **Summary of Effects from Cumulative Impacts**

9.11.27 In light of the above factors, the cumulative level of vehicle movements set out above are considered very unlikely to have an adverse impact on the local highway network within the study area, particularly given the conservative nature of the assumptions, i.e. that construction of the High Wood Solar development would coincide with the construction phase of the Scheme. As such, it is considered that there would be no significant cumulative effects in



EIA terms Consideration of the co-ordination of scheme delivery in order to mitigate and minimise any cumulative impacts of construction traffic is set out in the oCTMP [EN010141/DR/7.4].

9.11.28 An assessment of the in-combination effects arising from the interaction and combination of different residual environmental effects of the Scheme affecting a single receptor is reported in Section 17.5 of ES Vol 1 Chapter 17: Cumulative and In-Combination Effects [EN010141/DR/6.1].



## 9.12 Conclusions

9.12.1 The residual effects of the Scheme are not significant in EIA terms, and it can therefore be concluded that the environmental effect of the Scheme with regard to Traffic and Transport both on its own, and when considered in conjunction with cumulative background growth within the study area, is not significant in EIA terms.



#### 9.13 References

<sup>1</sup> Department of Energy and Climate Change (2023). Overarching National Policy Statement for Energy (EN-1). Available at: https://assets.publishing.service.gov.uk/media/65a7864e96a5ec0013731a93/overarching-nps-forenergy-en1.pdf [Last Accessed: 11 September 2024]

<sup>2</sup> Department of Energy and Climate Change (2023). National Policy Statement for Renewable Energy Infrastructure (EN-3). Available at: https://assets.publishing.service.gov.uk/media/65a7889996a5ec000d731aba/nps-renewable-energy-infrastructure-en3.pdf [Last Accessed: 11 September 2024]

- <sup>3</sup> Department of Energy and Climate Change (2023). National Policy Statement for Electricity Networks Infrastructure (EN-5). Available at: https://assets.publishing.service.gov.uk/media/64252f852fa848000cec0f53/NPS\_EN-5.pdf [Last Accessed: 11 September 2024]
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