



THE DROVES
SOLAR FARM

The Droves Solar Farm

Preliminary Environmental Information Report

Volume I, Chapter 9: Transport and Access

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9 Transport and Access

9.1 Introduction

- 9.1.1 This chapter of the PEIR presents the findings of a preliminary assessment of the likely significant effects in relation to transport and access. The information presented within this chapter has been informed by the design information of the Scheme provided in **Volume I, Chapter 5: Scheme Description**.
- 9.1.2 Information considered in this chapter includes relevant transport and access policy and guidance, baseline transport and access, sets out the methodologies and approaches intended to be used to inform the transport and access chapter of the Environmental Statement (ES) for the Scheme. This is realised through a description of the transport and access baseline conditions (as they are understood at time of writing in March 2025). This chapter details the findings of work undertaken to date and presents a preliminary assessment of the likely significant effects arising from the Construction, Operational and Decommissioning Phases of the Scheme in relation to transport and access. The chapter also considers proposed avoidance, Mitigation and compensation measures and any residual effects following the implementation of such measures.
- 9.1.3 Embedded mitigation measures are presented, where necessary, and discussed to minimise the impacts of the Scheme to an acceptable level (i.e. to a residual minor or negligible effect), during the Construction, Operation and Decommissioning Phases.
- 9.1.4 This chapter should be viewed as a preliminary assessment that will be updated and refined as necessary, particularly as the results of further evaluation become available and as the Scheme design evolves. Initial assumptions have been made based on the survey and background information available to date and professional judgement. The PEIR does not replicate or act as a draft ES but rather aims to enable consultees to understand the likely environmental effects of the Scheme and helps to inform consultation responses during the pre-application stage.

Consultation

- 9.1.5 The content and assessment methodology contained within this chapter has been informed by the Scoping Opinion from the Planning Inspectorate (PINS) dated 18 December 2024 (**Volume III, Appendix 2.2**) as well as further updated and informed following consultation with key stakeholders in relation to transport and access matters.
- National Highways (NH); and
 - Norfolk County Council (NCC).
- 9.1.6 Consultation feedback received throughout the pre-application phase of the Scheme has been considered in preparing this PEIR chapter. Further detail on consultation undertaken is included at **Volume III, Appendix 9.1**.



Legislation, Planning Policy and Guidance

- 9.1.7 A detailed review of the Legislation, Policy and Guidance that is relevant to the transport and access assessment of the Scheme is included at **Volume III, Appendix 9.1**. The review demonstrates that the Scheme has been developed in accordance with the requirements identified in the **Appendix 9.1**.

9.2 Assessment Methodology

Assessment Scope

- 9.2.1 The transport and access assessment assesses the potential likely significant environmental effects of the Scheme during the Construction and Decommissioning Phases, as agreed with in the Scoping Opinion provided by PINS (**Volume III, Appendix 2.2**).
- 9.2.2 The potential likely significant environmental effects of the Scheme have been considered on both motorised and non-motorised users (NMU), with further details on the justification for scoping in and scoping out provided in the following sections of this chapter.
- 9.2.3 A summary of the scope is included at Table 9.1 of this chapter.

Scoped in

- 9.2.4 The traffic generated during the Construction and Decommissioning Phases of the Scheme will be assessed.
- 9.2.5 The effect of the Decommissioning Phase is anticipated to be equivalent to or less than the Construction Phase as decommissioning activities will utilise the same access points and routes as construction but will generally require fewer vehicle movements since existing site infrastructure like access tracks will already be in place and less specialist equipment will be needed for dismantling compared to construction and installation. Equipment can also be compressed or consolidated upon the Decommissioning Phases as there is less of a need to coordinate the supply chain and logistics when compared to during the Construction Phase.
- 9.2.6 Therefore, it is considered that the Construction Phase assessment represents a robust, reasonable worst-case scenario, as the Construction Phase assessment provides an appropriate upper limit for potential traffic impacts.
- 9.2.7 The effects to be assessed during the Construction Phase of the Scheme are as required by the Environmental Assessment of Traffic and Movement (EATM, 2023) Guidance produced by the Institute of Environmental Management and Assessment (hereafter referred to as the 'IEMA EATM Guidance') [**Ref 9-1**], which are as follows:
- Severance
 - Driver Delay
 - Pedestrian Delay
 - Non-motorised User Amenity
 - Fear and Intimidation; and
 - Road Safety.



Scoped Out

9.2.8 The Scoping Report submitted to PINS in November 2024 (**Volume III, Appendix 2.1**) proposed to scope out some potential effects from assessment within the EIA. In the Scoping Opinion provided by PINS (**Volume III, Appendix 2.2**), PINS confirmed acceptance to scope out the following effects:

- Alternative Modes of Construction Access (Excluding Road)
- Operational Phase Transport and Access; and
- Hazardous and Large Loads.

9.2.9 In relation to Hazardous and Large Loads, while these have been scoped out of the assessment, the ES will include a description of the number and composition of any hazardous loads and any safety measures, as required by paragraph 3.4.4 of the Scoping Opinion which states *“on the basis that the number and composition of any hazardous loads and any safety measures would be described within the ES, an assessment of impacts associated with the transport of hazardous loads can be scoped out of the ES”*.

9.2.10 While it was proposed in the Scoping Report (**Volume III, Appendix 2.1**) to scope out effects during the Decommissioning Phase of the Scheme (due to the Construction Phase assessment representing a worst-case scenario that would capture all effects associated with the Decommissioning Phase, as highlighted within this chapter), PINS did not agree to this approach and instead requested for further justification to be provided in the ES to demonstrate whether significant effects would occur during decommissioning, and where significant effects are identified, these must be fully assessed within the ES.

Scheme Replacement and Maintenance Activities

9.2.11 During the Operational Phase of the Scheme, both routine operational maintenance and programmed replacements of key infrastructure will be undertaken. This section distinguishes between the minimal, day-to-day maintenance activities associated with ongoing operations and the periodic replacement of PV panels and Battery Energy Storage System (BESS) components, which is anticipated to involve increased, but still lower, traffic movements relative to the Construction Phase.

9.2.12 Further details regarding the replacement of PV panel components during the Operational Phase are provided in **Volume I, Chapter 5: Scheme Description**, with the management of these activities secured through a requirement in the DCO to prepare an Operational Traffic Management Plan (OTMP) and Operational Environmental Management Plan (OEMP), that must be substantially in accordance with the Outline OEMP to be submitted with the DCO Application. The Applicant will also submit a replacement schedule to NCC at agreed intervals (years 10, 20, and approximately every five years thereafter), as outlined in **Volume I, Chapter 5: Scheme Description**.

9.2.13 During the Operational (and maintenance) Phase, ad-hoc replacement of defective Solar PV panels will occur due to routine wear and tear or unforeseen damage. These replacements will be carried out on a small scale typically by using light servicing vehicles (e.g., 4x4 or Panel Vans), resulting in a non-material increase in heavy goods vehicle (HGV) movements. Given the low volume and negligible impact of these maintenance activities, they are not expected to give rise to significant environmental effects, and no specific Mitigation measures beyond those outlined in the OEMP and OTMP are required.



- 9.2.14 Where emergency replacements are required, the Applicant will notify NCC as soon as practicable and no later than 14 days after the emergency replacement has been carried out.
- 9.2.15 Throughout the Operational Phase, programmed replacements will be required to upgrade key components as they approach the end of their design life. The expected replacement frequency is as follows:
- PV panels – replaced once during the Operational Phase of the Scheme; and
 - BESS components – replaced up to five times, due to their shorter operational lifespan.
- 9.2.16 The replacement programme is anticipated to be phased, with sequential replacement to allow for replacement works while maintaining energy generation. Based on the operational life of PV panels being 40 years, replacement will comprise both replacement of individual defective and broken PV panels on an ad hoc basis and planned replacement of all PV panels once during the Operational Phase.
- 9.2.17 The PV panels are anticipated to be replaced over a 12 to 24 month period. It is expected that the BESS could be replaced up to five times during the operational phase. The operational replacement of BESS will be assessed in the ES; however the effects are not anticipated to be greater than those associated with PV panel replacement.
- 9.2.18 The access arrangements for PV panel replacement will remain consistent with those used during the Construction Phase, as shown in **Volume II, Figure 9.1**. New panels will be delivered while the old panels are removed in coordinated vehicle movements, ensuring efficient logistics management and minimising transport impact. While exact vehicle movement numbers cannot be confirmed at this stage, they will be managed in accordance with the OTMP and OEMP to ensure impacts remain within assessed limits, with further details on the exact vehicle requirements to be set out at ES stage. The OTMP and OEMP will set out the protocol for any future amendments needed to the vehicle requirements which will be set out for agreement with the Local Planning Authority.
- 9.2.19 Any Mitigation implemented to ensure that the construction and decommissioning effects remain non-significant during construction and decommissioning will be secured through the outline OTMP and outline OEMP submitted with the DCO Application.
- 9.2.20 On that basis it is considered that any flows associated with replacement activities will not require further assessment or be significant in EIA terms. Further details as to how the replacement flows will be managed will be provided in the ES and future OTMP and OEMP.
- 9.2.21 Exact vehicle movement numbers associated with replacement cannot be confirmed at this stage. The ES will include further details and expected numbers of the maintenance and replacement flows associated with replacement activities.

Junction Capacity Assessments

- 9.2.22 For the purposes of the PEIR, the assessment considers total changes in traffic flow, rather than local capacity assessments, in accordance with the IEMA EATM Guidance.
- 9.2.23 It is not considered that the Scheme would generate sufficient demand within the typical network peak one-hour periods (e.g. 08:00-09:00 and 17:00-18:00) to warrant the need for local capacity assessments, as agreed with NCC within the correspondence included at **Volume III, Appendix 9.1**. Consultation with NH regarding this matter is ongoing.



9.2.24 To validate this assumption, reference is made to the (now superseded) Department for Transport (DfT) 'Guidance on Transport Assessment' (2007) [Ref 9-2], which sets out a threshold of 30 two-way vehicle trips in any one-hour peak period to warrant the need for further assessment. Despite the DfT guidance being superseded, the threshold has not been replaced and many Local Highway Authorities across the UK still refer to this threshold. This threshold is also utilised by NH for requiring junction capacity assessments and is still considered to be appropriate to utilise as an assumption for this chapter.

9.2.25 It is noted that the majority of the Light Goods Vehicle (LGV) and HGV trips associated with the Scheme will take place outside the AM and PM one-hour peaks and would therefore not meet this threshold, meaning no localised capacity assessments are considered to be required. Further details on this are provided within the assessment of Driver Delay later within this chapter.

Summary of Scope

9.2.26 A summary of the transport and access assessment scope is provided within Table 9.1.

Table 9.1 Transport and Access Scope Summary

Category	Aspect	Construction	Operation	Decommissioning
Access Strategy	Alternative Methods of Transport (excluding Road)	Scoped Out	Scoped Out	Scoped Out
	Alternative Access Routes	Scoped Out	Scoped Out	Scoped Out
Traffic Capacity	Junction Modelling	Scoped Out	Scoped Out	Scoped Out
Traffic Effects associated with IEMA EATM Guidance	Severance	Scoped In	Scoped Out	Scoped In
	Driver Delay	Scoped In	Scoped Out	Scoped In
	Pedestrian Delay	Scoped In	Scoped Out	Scoped In
	Non-motorised User Amenity	Scoped In	Scoped Out	Scoped In
	Fear and Intimidation	Scoped In	Scoped Out	Scoped In
	Road Safety	Scoped In	Scoped Out	Scoped In



Category	Aspect	Construction	Operation	Decommissioning
	Hazardous and Large Loads	Scoped Out	Scoped Out	Scoped Out

Assessment Process

9.2.27 The PEIR methodology that will be utilised for the assessment in the ES and the stages followed, can be summarised as follows:

- Initial consultation with the relevant highway authorities (NH and NCC)
- Procure and process baseline traffic data, arranging additional surveys where necessary in collaboration with key stakeholders and consultees
- Undertake vehicle route feasibility assessments for construction vehicles equipment and staff, including detailed observations of each of the proposed route options and identifying any sensitive receptors or constraints along the length of the routes. The main route assessments will primarily comprise the Local Road Network (LRN) from the Strategic Road Network (SRN) to the Site, however, the impact on the SRN has also been assessed where relevant
- Application of 'DfT Trip End Model Presentation Program (TEMPro) Growth Factors [Ref 9-3] in order to develop and assess future construction years, with an emphasis placed on assessing the peak year, the details of which will be set out within the ES
- In consultation with NCC and NH, route options have been explored and developed further to determine the feasibility of each route and whether they are acceptable or require further refinement
- An initial assessment of traffic generation from the Scheme on the LRN, including routes between the different areas of the Scheme, undertaken alongside an initial assessment of the likely significant environmental effects
- Refinement of assessment to reflect any changes in the design of the Scheme or consultation feedback, followed by an additional assessment of the effects. At this stage, the requirement for additional surveys or localised assessments, including junction capacity modelling, is determined
- Following the outcomes of the additional assessments to identify the residual effects, there will be ongoing consultation with the key stakeholders, consultees and residents to discuss the findings
- Initial Mitigation measures have been identified, in order to mitigate any residual impacts or concerns raised during consultation. Further Mitigation measures will be considered and refined as part of the ES; and
- The assessment will be further refined to reflect this consultation feedback, with appropriate updates made to the assessment, as well as assessment of the cumulative effects of other developments within the area.



- 9.2.28 The assessment of transport and access will be updated and refined for the ES once further details on the Scheme are developed and there is further engagement with key stakeholders, including NCC and NH.
- 9.2.29 This PEIR assessment has been undertaken primarily through a desktop-based assessment, supported by a series of site visits utilised to validate the findings of the vehicle routing strategy.
- 9.2.30 The approach to the sensitivity of receptors, magnitude of impacts and the significance of effect in relation to transport and access for the PEIR assessment is described from Paragraph 9.2.29 onwards.
- 9.2.31 The PEIR assessment has been undertaken using a robust interpretation of the likely number of construction vehicles and construction staff that will be required. Further details on the methodology and assumptions utilised to generate the construction vehicle and staff numbers will be detailed within the Transport Assessment (TA) that accompanies the future ES submission.
- 9.2.32 To provide a robust worst-case assessment of the likely significant environmental effects, it is assumed that the Scheme will be constructed in one phase.
- 9.2.33 The IEMA EATM Guidance identifies two broad rules which could be used as a scoping process to determine the scale and extent of assessment. These rules are summarised as follows:
- Rule 1 - include highway links where traffic flows will increase by more than 30% (or the number of heavy goods vehicles (HGVs) will increase by more than 30%); and
 - Rule 2 - include any other specifically sensitive areas where traffic flows may increase by 10% or more (or there is a significant change in the mix of vehicles, such as an increase of more than 10% in the number of HGVs).
- 9.2.34 With respect to the need for peak hour assessments, whilst there is no guidance set by NCC, reference is made to the DfT 'Guidance on Transport Assessment' (2007) which refers to a threshold of 30 two-way trips during a peak hour to warrant the need to undertake junction capacity assessments. It is not considered that the level of trip generation for the Scheme during the AM and PM peak hours will be significant enough to warrant detailed junction capacity assessment based on these thresholds.
- 9.2.35 The following sub-sections set out the IEMA EATM screening thresholds for determining the need for detailed assessment:
- **Severance** is defined as the "*perceived division that can occur within a community when it becomes separated by a major traffic artery*". In addition, the assessment will consider any effects from traffic flow changes, as well as effects from formal diversions or closures required for network or infrastructure upgrades.
 - **Driver Delay** is defined as any delay which may occur to motorists. The IEMA EATM Guidance states that any delays due to a Scheme are only likely to be significant when the network is close to or already at capacity. The IEMA EATM Guidance goes on to state "*The assessment of driver delay will normally be based on technical work reported within the Transport Assessment, which generally focuses on conditions in the network peak periods, with highway mitigation defined to ensure conditions within the development are not*



materially worse than would otherwise have been the case without the development and mitigation."

- **Pedestrian Delay** is utilised as a proxy for other NMU delay when crossing a road. In the IEMA EATM Guidance, it is stated "Given the range of local factors and conditions that can influence pedestrian and non-motorised user delay (e.g. a discrete delay may have a lesser impact in an urban environment than a rural setting), it is not considered wise to set down definitive thresholds. Instead, it is recommended that the competent traffic and movement expert use their judgement to determine whether pedestrian delay constitutes a significant effect."
- **NMU Amenity** is defined as "the relative pleasantness of a journey and is considered to be affected by traffic flow, traffic composition and pavement width/separation from traffic". The guidance suggests that a tentative threshold for judging the significance of changes in NMU amenity would be where the traffic flow is halved or doubled which would lead to a high impact, although that any assessment should pay full regard to the local conditions.
- **Fear and Intimidation** is defined as "a further environmental impact that affects people is the fear and intimidation created by all moving objects. While the traffic and movement assessment has to consider motorcycles, cars, lorries and buses, this scope of consideration is not exclusive – it also has to consider other modes of travel, including horses, cycles, mobility scooters, e-scooters and e-cycles, if appropriate". For the assessment of Fear and Intimidation, the IEMA EATM Guidance refers to an assessment of the 'degree of hazard' (DoH) but acknowledges professional judgement should be used with reference to local conditions.
- **Road Safety** refers to the use of collision rates and identification of collision clusters to assess the implications of a development. The IEMA EATM Guidance recommends consultation with local highway authorities to determine the significance of any Road Safety effects.

9.2.36 The guidance also notes "*The movement of hazardous/large loads will heighten people's perception of fear and intimidation and, if this is likely to occur, it should be noted.*"

Assessment Scenarios

9.2.37 The assessment will comprise an assessment of the daily Scheme traffic in the peak construction year against:

- Baseline (2024) daily flows; and
- Future baseline (2031) peak construction year - without Scheme traffic.

Determining Significance of Effect

Receptor Sensitivity

9.2.38 Categories of receptor sensitivity have been defined based on the principles set out in the IEMA EATM Guidance and include the following:

- Particular groups or locations which may be sensitive to changes in traffic conditions



- The list of affected groups and special interests set out in the guidance; and
- The identification of links or locations where it is felt that specific environmental problems may occur noting that such locations "*...would include accident black spots, conservation areas, hospitals, links with high pedestrian flows etc.*"

9.2.39 In accordance with the IEMA EATM Guidance, the following sensitive receptors are considered within the preliminary assessment:

- NMUs
- Public Right of Way (PRoW) users
- Motorists and freight vehicles
- Public transport users; and
- Emergency services.

9.2.40 Any nearby Sites of Special Scientific Interest (SSSI), Special Protection Areas (SPA), Local Wildlife Sites (LWS), County Wildlife Sites (CWS) and Roadside Nature Reserves (RNR), where present along the proposed construction routes, are identified as standard sensitive receptors, as these could be impacted by construction vehicles, or any highway works required to facilitate the Scheme. This includes, but is not limited to, River Road (ref. U22086 and ref. U33086) RNR, Narborough Railway Embankment SSSI, and SSSI situated along the A1065 to the north.

9.2.41 The assessment of potential impacts on these receptors will be undertaken in accordance with the IEMA EATM guidance where relevant.

9.2.42 For the purpose of the preliminary assessment with respect to transport and access, it is assumed that 'High Sensitivity' refers to any receptors who are non-motorised or vulnerable road users, such as children, elderly people or disabled people who could be negatively impacted by a change in traffic flows. For example, a change in HGV composition may significantly impact these users more than other motorised road users.

9.2.43 The key receptors identified to be incorporated within the preliminary assessment can therefore be categorised into the following key groups:

- NMUs, including vulnerable road users such as children, elderly and disabled people - categorised as High Sensitivity; and
- Drivers and other users of the LRN - categorised as Low Sensitivity.

9.2.44 The links within the Study Area are then to be classified with a sensitivity based on their characteristics and likelihood to be accommodating sensitive receptors.

Magnitude of Change

9.2.45 To determine the magnitude of change experienced by the receptors and to determine the likely significance of the effects resulting from the Scheme, thresholds set out in the IEMA EATM Guidance have been used and interpreted using professional judgement and industry good practice.

9.2.46 The criteria used for determining the magnitude of change are summarised below in



Table 9.2 Assessment Criteria for Determining the Magnitude of Change

Effect	Assessment Criteria for Determining the Magnitude of Change
Severance	<p>The IEMA EATM Guidance sets out a range of indicators for determining the magnitude of severance effects. It suggests changes in traffic flows and associated magnitude of impacts as:</p> <ul style="list-style-type: none"> • <30% - negligible magnitude of change • 30% - 60% - small magnitude of change • 60% - 90% - medium magnitude of change; and • >90% - large magnitude of change.
Driver Delay	<p>The IEMA EATM Guidance does not provide set thresholds for determining when a change in driver delay is likely to be significant and instead refer to any junction capacity assessments that may be undertaken, alongside professional judgement.</p> <p>As there is unlikely to be any junction modelling undertaken for the DCO Application (given the anticipated levels of trip generation being low during the peak hours), it is proposed to use professional judgement and the overall changes in traffic flows with reference to the typical IEMA Guidance thresholds (<30% is negligible, 30-60% is small, 60-90% is medium and >90% is large), to determine whether there is likely to be any significant changes to driver delay.</p>
Pedestrian Delay	<p>The IEMA EATM Guidance recommends the use of professional judgement to determine whether pedestrian delay is significant across individual links, taking into consideration the varying characteristics of local conditions within the Study Area. For the purposes of this assessment, the following thresholds related to changes in total traffic are applied alongside professional judgement and interpretations of the local conditions:</p> <ul style="list-style-type: none"> • 0-30% - negligible magnitude of change • 30% - 60% - small magnitude of change • 60% - 90% - medium magnitude of change; and • Greater than 90% - large magnitude of change.
Non-motorised User Amenity	<p>The IEMA EATM Guidance notes that a tentative threshold for determining significance of changes in non-motorised user amenity is when traffic flows are halved/doubled (which would lead to a high impact). A change of less than a quarter would represent a low impact and a change more than a quarter would present a medium impact. However, the guidance notes that any changes should be considered with professional judgement in light of the local conditions.</p>



Effect	Assessment Criteria for Determining the Magnitude of Change
	<p>It is proposed to use these thresholds alongside professional judgement taking into consideration the likely demand and provisions for non-motorised users across the links.</p>
<p>Fear and Intimidation</p>	<p>The IEMA EATM Guidance refers to an assessment for the ‘degree of hazard’ (DoH) in Table 3-1 of the guidance to assess fear and intimidation. Each road link in the Study Area will be assessed to determine the values of these parameters using traffic data. These values will then be compared to the thresholds defined in Table 3.1 to determine the degree of hazard score, from 0 up to 30.</p> <p>In determining the degree of hazard, the assessment will apply a score based on three parameters:</p> <ul style="list-style-type: none"> • Average daily vehicle flows - This covers the total volume of all vehicles across an 18-hour period from a road link. Higher volumes indicate a greater hazard. • Total HGV flows - The total volume of heavy goods vehicles (HGVs) over an 18-hour day. A higher HGV volume represents a greater perceived hazard. • Average speeds - The mean speed of vehicles on the road link. Higher speeds are associated with greater hazard. <p>Once calculated, the total hazard score will be presented to determine the level of fear and intimidation, as follows:</p> <ul style="list-style-type: none"> • 0-20 - Small • 21-40 - Moderate • 41-70 - Great • 71+ - Extreme <p>A comparison of the degree of hazard will be undertaken for the peak construction year with/without the construction flows and against the baseline traffic flows to determine any changes.</p> <p>Step changes are defined as increases in average daily traffic or heavy vehicle flow compared to baseline. A low step change is an increase of <400 vehicles/day or <500 heavy vehicles/day. A medium step change is an increase of >400 vehicles/day or >500 heavy vehicles/day. A high step change is two increases in separate flow thresholds from baseline.</p> <p>The magnitude of impact will then be determined as follows:</p> <ul style="list-style-type: none"> • Negligible - no step change from baseline • Low - one step change from baseline (<400 daily vehicle trip increase)



Effect	Assessment Criteria for Determining the Magnitude of Change
	<ul style="list-style-type: none"> • Medium - one step change from baseline (>400 daily vehicle trip increase) • High - two step changes from baseline
Road Safety	The IEMA EATM Guidance suggests that the magnitude of Road Safety impacts will be related to identifying collision clusters and collision rates through a detailed review of baseline characteristics to determine road safety sensitivity. However, it does not provide any defined thresholds. Instead, the IEMA Guidance advises that professional judgement will be needed to assess the implications of local circumstances, or factors which may elevate or lessen risks of accidents occurring. In addition, the IEMA Guidance refers to the use of a Stage 1 Road Safety Audit to determine the suitability of any Transport and Access related works that are proposed.

9.2.47 It is noted throughout the IEMA EATM Guidance that the assessment of environmental effects arising from road traffic is not an exact science and a degree of professional judgement is required in all instances. This is particularly the case for the assessments of effects on NMUs where local characteristics need to be fully considered.

Significance of Effect

9.2.48 The predicted significance of the effect is determined through a standard method of assessment and based on professional judgement, considering both the sensitivity of the receptor and the magnitude of the potential effect, as shown in **Table 9.3**.

Table 9.3 Scale of Effect Matrix

Magnitude of Change	Sensitivity of Receptor		
	High	Medium	Low
High	Major	Major	Minor
Medium	Major	Moderate	Minor
Small	Moderate	Minor	Negligible
Negligible	Negligible	Negligible	Negligible

9.2.49 In order to provide a consistent and comparable assessment of the degree of significance for each effect, the significance criteria being applied is set out in



Table 9.4 Significance of Effect Criteria

Significance Criteria	Description of Criteria
Major Beneficial	A considerable positive effect to the receptor which is of a scale that has more than local importance
Moderate Beneficial	A positive effect on the receptor in terms of extent, duration, or magnitude
Minor Beneficial	A positive effect on the receptor that is small, localised, or short term
Neutral / Not Significant	No perceivable impact
Minor Adverse	A negative effect on the receptor that is small, localised, or short term
Moderate Adverse	A negative effect on the receptor in terms of extent, duration, or magnitude
Major Adverse	A negative effect on the receptor that will have an impact on the wider area or that may be in breach in standards or legislation

9.2.50 The IEMA EATM guidelines allow for the use of professional judgement in determining whether an effect is significant. For the assessment of the likely significant environmental effects associated with transport and access, only effects that are assessed as 'Major' and 'Moderate' are considered significant in EIA terms.

9.2.51 This is based on professional judgment and that the transport and access effects of the Scheme will primarily be limited to the Construction and Decommissioning Phases, so any effects are inherently temporary in nature.

9.3 Study Area

9.3.1 The review of the baseline conditions relevant to the assessment of transport and access impacts has been undertaken based on the Transport and Access Study Area (hereafter the 'Study Area'). The Study Area has been defined as the routes from the SRN via the LRN required to facilitate traffic movements associated with the Construction, Operational and Decommissioning Phases of the Scheme, as well as any improvements or changes required to facilitate traffic access.

9.3.2 The Study Area is illustrated in **Volume II, Figure 9.2** and comprises the nine links which have been identified based on the likely routing of vehicles to access the Scheme (discussed in more detail below), the extent of which has been agreed with NCC during consultation associated with the Scoping Opinion (**Volume III, Appendix 2.2**), as outlined within **Volume III, Appendix 9.1**. This figure addresses the request made by PINS in section 9.2.2 of the



Scoping Opinion for a plan illustrating the extent of the study area and the expected routes of construction traffic.

- 9.3.3 Whilst not all links will be utilised by the construction vehicles or staff associated with the Scheme, they have been incorporated into the Study Area to provide a robust assessment and to allow for comparison and validation, to ensure that the data collected for the other links is representative.

9.4 Baseline Conditions

Highway Network

- 9.4.1 The majority of the equipment required to construct, operate and maintain the Scheme is likely to be imported into the UK from abroad and as such will most likely arrive at an appropriately located port. Although the details of exactly where the equipment will arrive are not yet known, it is assumed that it would be transported from the relevant port via the SRN to the Site.
- 9.4.2 On that basis, an initial feasibility exercise has been undertaken to determine potential access routes along the LRN to the Site from the SRN.
- 9.4.3 To access the Site from the SRN, three routes have been identified as follows:
- Route A: Access to/from the south from the A47, via the A1065
 - Route B: Access to/from the north via A1065; and
 - Route C: Access to/from the A47, from the west via Narford Road, Low Road, South Acre Road and A1065.
- 9.4.4 The proposed access routes to the Scheme from the SRN alongside the constraints on the LRN are shown at **Volume II, Figure 9.1**.
- 9.4.5 Approximately 2km to the south of the Site, the A47 forms part of the SRN, with NH as the Highway Authority. It is a dual carriageway with a speed limit of 70mph, aligned in an east-west orientation to the south of the Site. The A47 provides strategic connections to Norwich approximately 48km to the east and King's Lynn approximately 40km to the west.
- 9.4.6 The A1065 is a single carriageway road that runs in a north-south alignment along the Site's eastern boundary. It has varying speed limits, with 30mph sections through built-up areas and national speed limit (60mph) in rural stretches. Where the A1065 runs adjacent to the Site's eastern boundary, it is subject to a 60mph speed limit.
- 9.4.7 The A1065 connects Swaffham to Fakenham in the north and forms a key junction with the A47 via the Fakenham Road interchange. The A1065 serves as an important link for local and regional traffic movements.
- 9.4.8 West Acre Road is a single carriageway road running from Swaffham in a north westerly direction before becoming Narford Lane. It forms a priority junction with Lynn Road in the south. It has a varying speed limit, with 30mph restrictions towards the southern end, transitioning to the national speed limit (60mph) as it progresses northward through the Site boundary up to Narford Road further north.



- 9.4.9 Narford Road is a single carriageway road subject to the national speed limit (60mph). It forms a priority junction with the A47 to the west of the Site and connects north to Low Road and subsequently River Road, before joining back onto the A1065 in the east via South Acre Road.
- 9.4.10 It is noted that the routing strategy has been informed by feedback received from CC, consultation discussions at **Volume III, Appendix 9.1**.
- 9.4.11 It is assumed that staff and other LGVs would not be restricted to the use of these routes only and would instead route via the shortest practicable route, based on the likely origin / destination of the trip.
- 9.4.12 Personal injury collision data has been requested from NCC for all of the proposed access routes to determine whether there are any existing collision trends or highway safety issues on the road network that could be exacerbated by construction of the Scheme that would impact both motorised and NMUs. This will be detailed within the future TA that will accompany the ES and DCO Application.
- 9.4.13 To further inform the suitability of the identified routes, Ordnance Survey (OS) 'Mastermap' data has been obtained and topographical survey data has been collected to refine the swept path analysis of the construction vehicle access routes for the anticipated vehicles. Further details on this analysis, including an overview of the different types of vehicles anticipated, will be provided within the future TA and ES that will support the DCO Application.

Non-Motorised User

- 9.4.14 Due to the rural nature of the Study Area, there is a limited provision of footways alongside the carriageways of the roads within the Study Area. There is no footway along the A1065 where it passes along the Site's eastern boundary.
- 9.4.15 There are no designated sections of the National Cycle Network within the Study Area, though there are some recreational cycle routes that include:
- The Peddars Way: A 46-mile route from Knettishall Heath, Suffolk to Holme-Next-The-Sea, Norfolk. It follows an ancient Roman road and is largely cyclable; and
 - The Rebellion Way: A 232-mile cycling adventure around Norfolk, utilising quiet back roads, byways, cycle paths and bridleways.

Public Right of Way User

- 9.4.16 There are a number of Public Right of Ways (PRoW) that pass alongside the boundaries between the individual field- parcels that make up the Site, described in the Landscape and Visual Impact (LVIA) section of this PEIR and shown at **Volume III, Figure 9.3**.
- 9.4.17 It is noted that given the wide extent of the Study Area there are a number of PRoW in close proximity to the access routes, though there is unlikely to be much interaction between construction vehicles and PRoW users as the construction routes do not pass directly over the PRoW. The implications of any interactions between construction vehicles and PRoW users will be considered within the relevant assessment of likely significant environmental effects later within this chapter and within the ES that will accompany the DCO Application.



9.4.18 With respect to horse-riders and walkers, it is anticipated that these users may utilise the existing PRow and bridleway network, as well as some of the local roads within the Study Area, particularly where dedicated footways are limited.

Survey Data

9.4.19 Traffic surveys were undertaken in October 2024 on the nine identified links to understand the existing baseline traffic levels within the Study Area.

9.4.20 Traffic levels were recorded using Automatic Traffic Counters (ATCs), which record traffic data over a continuous 24-hour period for seven consecutive days and include traffic flows, speeds and vehicle classification.

9.4.21 The traffic surveys were undertaken in a 'traffic neutral' month and outside of any school holiday periods, in accordance with DfT's Transport Analysis Guidance (TAG) Unit M1.2 2020 [Ref 9-4].

9.4.22 NCC has requested surveys during the summer months to validate the recorded data against any increases in traffic associated with the agricultural season which will be undertaken in the summer of 2025 and incorporated in the eventual ES. However, at this stage, it is considered that the current surveys provide a robust basis for assessment that complies with all relevant industry standard guidance including the DfT TAG Unit M1.2.

9.4.23 A summary of the baseline traffic flows is provided in **Table 9.5**. An overview of the locations at **Volume II, Figure 9.2**. The associated sensitivity of the links is also identified based on the methodology presented in this chapter.

Table 9.5 Baseline Traffic Flows

Link	Name	Base 2024			
		Daily Two-way AADT			
		Total	HGV	HGV %	Cyclists
1	A1065 South	7937	332	4%	3
2	A1065 MID	7819	371	5%	3
3	South Acre Road North	199	10	5%	3
4	A1065 North	7125	398	6%	3
5	South Acre Road South	240	7	3%	3
6	West Acre Road	329	15	5%	11
7	Narford Lane	234	14	6%	5
8	River Road South	99	2	2%	5
9	River Road North	100	2	2%	3

Assumptions and Limitations

9.4.24 For the purposes of this PEIR and in order to assess a reasonable worst-case, the peak construction vehicle movements for the Scheme is estimated to be 622 two-way movements



per day, comprising 526 LGVs (associated with staff and smaller deliveries) and 96 HGVs, which would capture both construction staff trips and deliveries. Further details on the assumptions and methodology used to generate construction trips will be provided within the TA that accompanies the DCO Application.

- 9.4.25 This is based on the likely construction requirements for the peak in construction of the Scheme being assumed to be required across the entirety of the programme rather than the true peak, which based on initial construction programme planning is likely to only take place over a month or so. In reality there is likely to be phasing and thus the typical peak in vehicle numbers would be reduced, thus the assessment approach forms a reasonable worst-case scenario.
- 9.4.26 The distribution of the trips has been discussed and agreed with NH and NCC as local highway authorities, with further details provided within the TA that will accompany the future ES as part of the DCO Application. The assessment has been based on a 27-month construction Schedule. This will be revised for ES.
- 9.4.27 A future year assessment of 2031 has been undertaken as this is expected to be the year when construction commences. Growth factors have been extracted from the DfT's Trip End Model Presentation Programme (TEMPro), in order to uplift the baseline flows to the 2031 construction year.
- 9.4.28 With respect to the Decommissioning Phase, the traffic movements are anticipated to be equivalent to or less than the Construction Phase peak of 622 two-way vehicle movements per day (526 LGVs and 96 HGVs). This assumption is based on the principles that decommissioning activities will utilise the same access points and routes as construction but will generally require fewer vehicle movements since existing site infrastructure like access tracks will already be in place.
- 9.4.29 Additionally, a lesser quantum of specialist equipment will need to be dismantled compared to what is required to be constructed during construction and installation, further reducing the number of HGV movements during the Decommissioning Phase. A detailed breakdown of anticipated decommissioning traffic movements and supporting evidence for these assumptions will be provided within the ES.

9.5 Embedded Mitigation

- 9.5.1 The embedded Mitigation measures that have been integrated into the design of the Scheme relevant to transport and access are as follows:
- **Construction Access Routes:** the routes to the Scheme have been identified through a review of the LRN to identify suitable locations in highway safety terms, including being sufficient to accommodate HGVs and the provision of appropriate visibility splays. The use of existing access points onto the LRN has been prioritised to minimise the environmental impacts associated with the creation of new points of vehicular access, such as the removal of hedgerows. Where there is not a reasonable existing vehicle access location within the vicinity of the relevant area of the Scheme, a new vehicle access is proposed that complies with all relevant highway safety requirements. This has been informed by the Access Strategy as part of the Scheme design as set out within the Masterplan Strategies (Volume III, Appendix 5.2) of the PEIR.



- Further details on the individual access points will be provided within the TA that will support the ES. The routing for construction traffic will be secured through the Outline Construction Traffic Management Plan (oCTMP) which will be secured by way of requirement in the DCO.
- Compound Location and Consolidation: Use of internal Construction Compounds for the Scheme where deliveries can be made from the SRN, directly from the A1065. From the compounds, deliveries will be distributed out via smaller, local vehicles to the area of works where possible. The strategy for consolidation will be secured through the oCTMP which will be secured by way of requirement in the DCO.
- Internal routing: internal access routes will be provided within the Site to minimise vehicles needing to use the LRN where possible. The details of this will be secured through the detailed design of the Scheme.
- Highway improvements within the Site: permanent improvements will be made to assist with the movement of vehicles within the Site, which will be outlined in the TA and ES that will support the DCO Application. These improvements will be secured through the eventual Order limits and Access and Right of Way Plans; and
- Staff Shuttle: The Scheme will seek to employ the use of a shuttle bus service for staff who will park within the relevant construction compound which will contain a designated parking area, to remove staff trips from the LRN. It is also anticipated that a shuttle service will be provided directly from the accommodation of staff to the area of works across the Scheme, which will be subject to phasing of the construction works. Further details of the shuttle bus service will be provided within the ES and will be secured via a requirement in the Travel Plan, with further details to be provided prior to commencement of the Construction Phase.

9.5.2 In addition, the following outline management plans will be prepared in support of the DCO Application and will be provided with ES.

Outline Construction Traffic Management Plan

9.5.3 An oCTMP will be prepared and submitted to support the DCO Application which sets out the management, mitigation and monitoring strategy for construction traffic for the Scheme. The oCTMP will form a 'live' document, being updated as necessary with contractor input to set out the strategy to manage construction vehicle access to the Scheme.

9.5.4 A final CTMP (to be substantially in accordance with the oCTMP) will be secured via requirement under the DCO and approved by the Local Planning Authority in consultation with NCC and NH prior to commencement of the Construction Phase of the Scheme and will include details on the following:

- Required access routes from the LRN;
- Scheme entry and exit points, including compound locations; and
- Measures to mitigate the impact of construction vehicles.



Outline Travel Plan

- 9.5.5 An outline Travel Plan (oTP) will be prepared and submitted with the DCO Application. The oTP will set out the strategy to reduce the vehicular impact of construction staff trips on the highway network, by encouraging the use of sustainable modes, where appropriate.
- 9.5.6 The oTP will include details on the measures such as the staff shuttle bus service, provision of any staff parking facilities, as well as the other proposed measures to be implemented to encourage mode shift away from private car use.
- 9.5.7 A final Travel Plan (to be in accordance with the oTP) will be secured via a requirement and the final details will be approved by the Local Planning Authority, in consultation with NCC and NH, prior to the commencement of the Construction Phase.

Decommissioning Traffic Management Plan

- 9.5.8 A Decommissioning Traffic Management Plan (DTMP) will be secured via a requirement and provided once details on the Decommissioning Phase are available, which will focus on the traffic impacts and traffic management measures to be associated with the decommissioning Phase. The DTMP will be approved by the Local Planning Authority, in consultation with NCC and NH, prior to the commencement of the Decommissioning Phase.

Outline Construction Environmental Management Plan

- 9.5.9 An Outline Construction Environmental Management Plan (oCEMP) will be provided in support of the DCO Application. The oCEMP will focus on the wider environmental management and Mitigation measures, rather than focusing solely on traffic. The oCEMP will address the potential for any in-combination effects.
- 9.5.10 The oCEMP will form a 'live' document, being updated as necessary with contractor input to set out the strategy to manage construction the likely significant environmental effects of the Scheme.
- 9.5.11 A final CEMP (to be in substantially in accordance with the oCEMP) will be secured via a requirement and will be approved by Local Planning Authority, in consultation with NCC and NH, prior to the commencement of the Construction Phase.

Outline Operational Environmental Management Plan

- 9.5.12 An Outline Operational Environmental Management Plan (oOEMP) will be submitted with the DCO Application. The oOEMP will focus on the maintenance aspects of the Scheme, including the ongoing maintenance and replacement of kit and equipment during the lifespan of the Scheme.
- 9.5.13 A final oOEMP (to be in substantially in accordance with the oOEMP) will be secured via a requirement and will be approved by the Local Planning Authority, in consultation with NCC and NH, prior to operation of the Scheme.

Decommissioning Strategy

- 9.5.14 In advance of the DTMP being prepared and to set out the principles as to how the Decommissioning Phase will initially be mitigated and managed, an Outline Decommissioning Management Plan (oDEMP) will be submitted with the DCO Application.



9.6 Assessment of Likely Significant Effects

- 9.6.1 This section describes the likely significant environmental effects of the Scheme on transport and access during the Construction and Decommissioning Phases of the Scheme. Likely effects related to transport and access during the construction of the Scheme represent the worst-case scenario for decommissioning as stated earlier in Assumptions and Limitations section of this chapter. As such, construction and decommissioning are assessed together.
- 9.6.2 **Table 9.6** sets out the percentage increase of construction traffic associated with the Scheme across all links within the Study Area in the future baseline year of 2031, as the anticipated year of peak construction.
- 9.6.3 A future baseline year of 2031 is considered to be robust as it is the earliest construction would commence thus it reduces the amount of background growth from the growth factors, which in turn increases the relative traffic impact of the Scheme and presents a worst-case scenario. The links referred to within this section are as shown in **Volume II, Figure 9.1**.

Table 9.6 Future Traffic Flows

Link	Name	Base 2031				Base 2031 + Proposed Construction + Staff Trips				% Change	
		Daily Two-way AADT				Daily Two-way AADT				AADT Percentage change	
		Total	HGV	HGV %	Cyclists	Total	HGV	HGV %	Cyclists	Total	HGV %
1	A1065 South	8394	351	4%	4	8849	437	5%	4	5%	25%
2	A1065 MID	8269	392	5%	4	8647	402	5%	4	5%	2%
3	South Acre Road North	210	11	5%	4	221	11	5%	4	5%	0%
4	A1065 North	7535	421	6%	4	7692	430	6%	4	2%	2%
5	South Acre Road South	254	7	3%	4	264	7	3%	4	4%	0%
6	West Acre Road	348	16	5%	12	358	16	4%	12	3%	0%



Link	Name	Base 2031				Base 2031 + Proposed Construction + Staff Trips				% Change	
		Daily Two-way AADT				Daily Two-way AADT				AADT Percentage change	
		Total	HGV	HGV %	Cyclists	Total	HGV	HGV %	Cyclists	Total	HGV %
7	Narford Lane	247	15	6%	6	247	15	6%	6	0%	0%
8	River South Road	105	2	2%	6	114	12	10%	6	9%	453%
9	River North Road	106	2	2%	4	106	2	2%	4	0%	0%

9.6.4 A summary of the likely significant effects associated with transport and access is provided at the end of this section, with an overview of the assessment of each effect provided below.

Severance

9.6.5 NMUs crossing the highway network are identified as high sensitivity receptors. The Construction Phase of the Scheme would lead to a local, temporary, medium term and negligible magnitude of change on the severance of NMUs of the LRN and PRow network, with an increase of less than 30% of the AADT on all links within the Study Area.

9.6.6 There could potentially be changes to the severance of NMUs of the SRN through temporary road closures or temporary traffic management for the Scheme. However, any changes would be temporary in nature and mitigated through appropriate signage and road diversions in accordance with the CTMP that would be secured by way of requirement under the DCO.

9.6.7 There would be no permanent closures of diversions in relation to the PRow network. However, temporary closures and / or diversions may be required. Details of any closures and diversions impacting the PRow network will be set out within the oCEMP and oCTMP, as well as being shown on the Traffic Regulation Measures Plans that will accompany the DCO Application.

9.6.8 On that basis, the effects on severance on NMUs are considered to be negligible adverse and **not significant**.



Driver Delay

- 9.6.9 Whilst no localised capacity assessments have been undertaken for the PEIR, as agreed with NCC, the majority of vehicle trips associated with the Scheme would take place outside of the typical network peak hours (assumed as 08:00-09:00 and 17:00-18:00), with the exception of any emergencies or exceptional circumstances, and therefore would not meet the former DfT threshold of 30 two-way vehicles during a peak hour noted earlier in this PEIR to require localised capacity assessments. The restrictions on the timings of trips will be detailed within the oCTMP that accompanies the DCO Application.
- 9.6.10 Based on the assessment included at Table 9.6, the AADT uplift across any of the links within the Study Area does not exceed 30%, the threshold recognised within the IEMA EATM Guidance as a typical threshold from which changes in traffic flow may lead to resultant transport and access impacts and leading to a negligible magnitude of change.
- 9.6.11 Taking the above into consideration, it is considered that the Scheme would lead to a local, temporary, medium term and negligible adverse effect on driver delay (high sensitivity receptor) which is **not significant**.

Pedestrian Delay

- 9.6.12 Across the Study Area, the Construction Phase of the Scheme will lead to less than a 10% increase in AADT which is considered by the IEMA EATM Guidance to fall within the typical levels of daily traffic fluctuations on a link as shown in Table 9.6.
- 9.6.13 There may be changes in pedestrian delay to NMUs of the local highway network and users of PRoWs through temporary road closures or temporary traffic management to facilitate works within the Study Area. Further details will be provided in the Traffic Regulation Measures Plans and oCTMP with the DCO Application. However, any changes would be temporary in nature and mitigated through appropriate signage and alternative provisions for NMUs being made.
- 9.6.14 As a result, the effects of the Scheme would lead to a local, temporary, medium term and negligible adverse effect on Pedestrian Delay (High sensitivity receptor) which is **not significant**.

Non-motorised User (NMU) Amenity

- 9.6.15 In relation to NMU Amenity, all of the links within the Study Area fall within the threshold of a negligible magnitude of change by being less than a quarter change in AADT.
- 9.6.16 With respect to changes in HGVs, both Link 1 (A1065 South) and Link 8 (River Road South) experience a respective uplift in daily HGV flows of 25% and 453% respectively. The uplift on Link 1 represents a low magnitude of change whilst Link 8 represents a high magnitude of change.
- 9.6.17 With respect to Link 8 which is identified as being of low sensitivity, this high percentage change is due to the very low baseline HGV flows (two vehicles per day) rather than a significant absolute increase in HGV movements and this link is only likely to be crossed temporarily by vehicles travelling internally east to west within the Scheme, rather than travelling along the full length of this link.



- 9.6.18 Whilst there may be some associated recreational use of these links by NMUs, it is likely that this would be on an ad-hoc basis only, as well as being influenced by other factors such as time of year and weather. To inform this assumption, reference is made to the baseline flows included at **Table 9.6**, which includes data on the average number of cyclists using each link.
- 9.6.19 The baseline data highlights that even if assuming the total numbers of cyclists are all recreational, this equates to on average three cyclists per day using each respective link. When applying professional judgement and assuming the usage would apply similarly to other NMUs, this would not indicate a high level of demand for recreational use.
- 9.6.20 As a result, the effects of the Construction Phase of the Scheme would lead to a local, temporary, medium term and negligible adverse effect on NMU Amenity (High sensitivity receptor) which is **not significant**.

Fear and Intimidation

- 9.6.21 Due to the rural nature of the Scheme, the majority of the LRN does not benefit from any footway or dedicated cycleway provisions, meaning NMUs are not segregated from vehicular traffic.
- 9.6.22 However, the volume of NMUs using the LRN is also considered to be low based on the baseline flows presented at Table 9.6 which captures AADT cyclist flows - a trend which is assumed to apply similarly to other NMUs, in that they would reflect both recreational use of a link or potential travel to work flows.
- 9.6.23 A DoH assessment has been undertaken on the identified links which is detailed within **Volume III, Appendix 9.3**, which assigns a DoH score based on vehicle flows and speeds. A DoH score was assigned to links in the future baseline 2031 scenario as well as the future baseline 2031 with Development scenario, to assess the impact of the Scheme.
- 9.6.24 The assessment at **Volume III, Appendix 9.3** identifies that there is no change in DoH across any of the links assessed leading to a negligible magnitude of change upon Fear and Intimidation.
- 9.6.25 On this basis, the effect of the Scheme on Fear and Intimidation (High sensitivity receptor) would be local, temporary, medium term and negligible adverse which is **not significant**.

Road Safety

- 9.6.26 The Construction Phase of the Scheme could have adverse, local, temporary and medium term impacts on Road Safety (High sensitivity receptor).
- 9.6.27 The TA that will support the ES will also include a Stage 1 Road Safety Audit (RSA) of any proposed highway works related to access or improvements within the Study Area which will inform the outcomes of this assessment. The scope of the Stage 1 RSA will be developed with NCC prior to it being undertaken.
- 9.6.28 At this initial stage and as agreed with NCC, a review of the online database CrashMap has been undertaken over the latest three-year period (2022-2024) available to identify any collisions. It is considered that three years' worth of data is appropriate, as five years' worth of data would include years that were subjected to COVID-19 lockdowns and therefore not provide representative data. This approach has been agreed with NCC during scoping



discussions detailed at **Volume III, Appendix 9-1** and data covering such period will be included in the TA and safety Audit to accompany the ES.

- 9.6.29 A preliminary review of collision data on CrashMap along the access routes to the Scheme has identified that no junctions within the Study Area appear to have any collision cluster evident, identified as being five or more serious / fatal collisions over the three-year period. A comprehensive assessment of all recorded collisions within the Study Area will be provided in the ES in coordination with the RSA and NCC to fully assess the implications of the Scheme on Road Safety.
- 9.6.30 Overall, the effect of the Scheme on Road Safety is therefore likely to be local, temporary, medium term and negligible adverse which is **not significant**.

9.7 Additional Mitigation

- 9.7.1 At this stage in the process, no mitigation in addition to the embedded mitigation set out in Section 9.5 is proposed for the PEIR.

9.8 Residual Effects

- 9.8.1 In the absence of any additional mitigation, the residual effects are the same as the Potential Effects presented in Table 9.5 at the end of this chapter.

9.9 Cumulative Effects

Inter-project Cumulative Effects

- 9.9.1 The ES will give consideration to potential cumulative effects of the Scheme and other relevant projects within the vicinity of the Scheme on a single receptor/resource. At this stage, the relevant cumulative schemes detailed in the ES have been reviewed to identify whether there is scope for inter-project cumulative effects. The primary project to be carried through to the ES for cumulative assessment is the High Grove Solar Farm, with potential impacts related to construction traffic on the A1065 corridor if construction periods overlap.
- 9.9.2 At this stage, it is considered that all cumulative traffic flows associated with cumulative schemes are already inherently accounted for within the TEMPro growth factors utilised within Section 9.4 of this chapter to generate the future baseline 2031 traffic flow scenario as no dedicated traffic flows are available within the documentation of the cumulative schemes
- 9.9.3 If additional information on trip generation for these cumulative schemes becomes available and has the potential to affect the Study Area, they will be defined and included within the ES.



Table 9.7: Transport and Access Significance of Effects

Receptor/Feature	Activity	Embedded Mitigation Measures	Nature and Duration of Effect	Sensitivity of Receptor	Magnitude of Impact	Preliminary Likely Significant Effects	Additional Mitigation Measures	Residual Effect Significance
Construction Phase								
'Severance' of NMUS across LRN	Construction	oCTMP and oTP	Adverse, local, temporary, medium term	High	Negligible	Non-significant	None	Negligible Adverse (Non-significant)
'Driver Delay' of motorised vehicles	Construction	oCTMP and oTP	Adverse, local, temporary, medium term	High	Negligible	Non-significant	None	Negligible Adverse (Non-significant)
'Pedestrian Delay' of NMUs across LRN	Construction	oCTMP and oTP	Adverse, local, temporary, medium term	High	Negligible	Non-significant	None	Negligible Adverse (Non-significant)
'Non-motorised User Amenity' of NMUs across LRN	Construction	oCTMP and oTP	Adverse, local, temporary,	High	Negligible	Non-significant	None	Negligible Adverse



Receptor/Feature	Activity	Embedded Mitigation Measures	Nature and Duration of Effect	Sensitivity of Receptor	Magnitude of Impact	Preliminary Likely Significant Effects	Additional Mitigation Measures	Residual Effect Significance
			medium term					(Non-significant)
'Fear and Intimidation' of NMUs across LRN	Construction	oCTMP	Adverse, local, temporary, medium term	High	Negligible	Non-significant	None	Negligible Adverse (Non-significant)
Road Safety of all receptors	Construction	oCTMP	Adverse, local, temporary, medium term	High	Negligible	Non-significant	None	Negligible Adverse (Non-significant)
Decommissioning Phase								
'Severance' of NMUS across LRN	Decommissioning	DTMP	Adverse, local, temporary, medium term	High	Negligible	Non-significant	None	Negligible Adverse (Non-significant)



Receptor/Feature	Activity	Embedded Mitigation Measures	Nature and Duration of Effect	Sensitivity of Receptor	Magnitude of Impact	Preliminary Likely Significant Effects	Additional Mitigation Measures	Residual Effect Significance
'Driver Delay' of motorised vehicles	Decommissioning	DTMP	Adverse, local, temporary, medium term	High	Negligible	Non-significant	None	Negligible Adverse (Non-significant)
'Pedestrian Delay' of NMUs across LRN	Decommissioning	DTMP	Adverse, local, temporary, medium term	High	Negligible	Non-significant	None	Negligible Adverse (Non-significant)
'Non-motorised User Amenity' of NMUs across LRN	Decommissioning	DTMP	Adverse, local, temporary, medium term	High	Negligible	Non-significant	None	Negligible Adverse (Non-significant)
'Fear and Intimidation' of NMUs across LRN	Decommissioning	DTMP	Adverse, local, temporary, medium term	High	Negligible	Non-significant	None	Negligible Adverse (Non-significant)



Receptor/Feature	Activity	Embedded Mitigation Measures	Nature and Duration of Effect	Sensitivity of Receptor	Magnitude of Impact	Preliminary Likely Significant Effects	Additional Mitigation Measures	Residual Effect Significance
Road Safety of all receptors	Decommissioning	DTMP	Adverse, local, temporary, medium term	High	Negligible	Non-significant	None	Negligible Adverse (Non-significant)



References

- Ref. 9-1 Institute of Environmental Management and Assessment (IEMA) (2023). Environmental Assessment of Traffic and Movement (EATM) Guidance.
- Ref. 9-2 Department for Transport (DfT) (2007). Guidance on Transport Assessment.
- Ref. 9-3 Department for Transport (2023). Trip End Model Presentation Program (TEMPro) Database.
- Ref. 9-4 Department for Transport (2020). Transport Analysis Guidance (TAG) Unit M1.2 Data Sources and Surveys.



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