Springwell Solar Farm

Preliminary Environmental Information Report

Volume 1
Chapter 12: Traffic and Transport

Phase 2 consultation
Springwell Energyfarm Ltd

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12. Traffic and Transport

12.1. Introduction

12.1.1. This chapter presents the preliminary environmental information and a preliminary assessment of the likely significant environmental effects arising from the construction and decommissioning of the Proposed Development upon traffic and transport.

12.1.2. Due to the extent of baseline information currently known and the maturity of the design of the Proposed Development, it should be noted that this preliminary assessment only considers severance impacts during construction and decommissioning. Assessment of pedestrian delay; amenity; fear and intimidation; driver delay and highway safety will be reported within the ES once further baseline information has been obtained and the design of the Proposed Development has progressed.

12.1.3. As proposed in the EIA Scoping Report and agreed through the Scoping Opinion received, impacts during operation (including maintenance) have not been considered within this preliminary assessment. Refer to **Section 12.2** below for further detail.

12.2. Consultation, scope and study area

Consultation undertaken to date

12.2.1. An Environmental Impact Assessment (EIA) Scoping Report, presented in **Appendix 4.1**, setting out the proposed traffic and transport assessment scope and methodology for the Proposed Development, was submitted to the Planning Inspectorate in March 2023. A Scoping Opinion, presented in **Appendix 4.2**, was issued by the Planning Inspectorate on behalf of the Secretary of State in May 2023 and included responses from Lincolnshire County Council and National Highways, these being the relevant highway authorities. **Appendix 4.3** provides responses to comments relating to traffic and transport in the Scoping Opinion and details how these have been addressed in this preliminary assessment.

12.2.2. The key consultees for this preliminary assessment have been identified as the relevant highway authorities and planning authorities that may be impacted during the construction and decommissioning phase of the Proposed Development. These consultees comprise:

- North Kesteven District Council;
- Lincolnshire County Council; and
- National Highways.

12.2.3. **Table 12.1** provides a summary of the consultation activities undertaken to date in support of the preparation of this preliminary assessment, outside the EIA Scoping process.

Table 12.1 Summary of consultation undertaken

Consultee	Key matters raised	Actions in response to consultee comments
Lincolnshire County Council (Transportation Team)	Initial feedback received at a meeting held on 25th May 2023 suggests that there should not be an absolute constraint in terms of capacity; however, there should be focus on managing the timing of construction activities to minimise impacts on local road networks and communities in the area.	Measures required to control any construction traffic impacts will be documented within and secured by the Outline Construction Traffic Management Plan. The approach to traffic surveys was discussed and the quantity and location of Automatic Traffic Counts (ATC) and Manual Classified Counts (MCC) surveys was agreed.
	The preferred road network to be utilised for construction traffic was discussed in principle.	The usage of the A15, B1191, B1188 was identified. These discussions resulted in the subsequent exclusion of the B1189 and the inclusion of the B1202 in the ongoing assessments relating to construction traffic.

12.2.4. Consultation and engagement with consultees and relevant stakeholders is ongoing, and will continue to inform the design and EIA process.

Scope of the assessment

12.2.5. This section updates the scope of assessment and confirms, and where necessary updates, the evidence base for scoping out receptors/matters following further iterative assessment and consideration of the Scoping Opinion.

12.2.6. As documented in **Appendix 4.2** and **Appendix 4.3**, the scope of the assessment proposed in the EIA Scoping Report has been confirmed as being acceptable to both Lincolnshire County Council and National Highways (the relevant highway authorities). Following an initial site visit and route investigation following the submission of the EIA Scoping Report, it has been proposed to include the B1202 within the study area and exclude the B1189, as discussed in **Table 12.2** and **Table 12.3** below. No other changes to the scope of the assessment presented in the EIA Scoping Report are proposed.

Receptors/matters scoped out of further assessment

12.2.7. **Table 12.2** presents the receptors/matters that are scoped out of further assessment, together with appropriate justification. Where a change has occurred to the approach proposed within the EIA Scoping Report, this is clearly stated and justified.

Table 12.2 Receptor/matters scoped out of further assessment

Receptor/ matter	Phase	Justification	Change to the approach proposed in the EIA Scoping Report
B-Road B1189	Construction and decommissioning	This route is no longer considered relevant to the assessment as it is not proposed to be used to route construction traffic to working areas, nor is it proposed to access Site during decommissioning.	Change - this receptor was included within the EIA Scoping Report, but due to additional information having been obtained since the EIA Scoping Report was submitted, this receptor is now scoped out of further assessment for the reasons outlined in the 'Justification' column.
All	Operation	Once the Proposed Development is operational, the effect on the local road system is expected to be minimal. Access will be required from time to time for routine maintenance, and less frequently for major maintenance and upgrades. Therefore, the changes in traffic on the existing network are not expected to increase by more than 30% for HGVs or 30% for all vehicle movements, these being defining thresholds (IEMA, 2023) for environmental effects on the local transport network.	No change – this matter was proposed to be scoped out of further assessment within the EIA Scoping Report and the Scoping Opinion has agreed with this approach.

Receptors/matters scoped into further assessment

12.2.8. **Table 12.3** presents the receptors/matters that are scoped into further assessment, together with appropriate justification. Where a change has occurred to the approach proposed within the EIA Scoping Report, this is clearly stated and justified.

Table 12.3 Receptor/matters scoped into further assessment

Receptor/ matter	Phase	Justification	Change to the approach proposed in the EIA Scoping Report
B-Road B1202 (A15 to Metheringham)	Construction	This road link has been included based on the findings of the access route optioneering which now includes this link for construction traffic.	Change - this receptor was not considered within the EIA Scoping Report, but due to additional information having been obtained since the EIA Scoping Report was submitted, this receptor is now scoped into further assessment for the reasons outlined in the 'Justification' column.
B-Road B1188 (Scopwick to Digby; Scopwick to Metheringham)	Construction	During the construction phase, traffic will be generated by a range of activities including: • Construction workers arriving and leaving site areas/ compounds; • Supply of construction materials and plant associated with the establishment of compounds and main construction works; • Movement of plant;	No change – these receptors were proposed to be scoped in within the EIA Scoping Report and the Scoping Opinion has agreed with this approach.
B-Road B1191 (A15 to Scopwick)	Construction		
A-Road A15	Construction		
Local (minor) roads (Navenby Lane; Bloxholm Lane; Temple Road; Gorse Hill Road)	Construction		

Receptor/ matter	Phase	Justification	Change to the approach proposed in the EIA Scoping Report
		• Removal of soil resources, spoil or waste; and • Service vehicles and visitors. Construction traffic estimates are broadly identified. As such, this phase of works is being assessed to enable consideration of likely impacts on receptors within the study area against the 'Environmental Assessment of Traffic and Movement' (Institute of Environmental Management and Assessment (IEMA), 2023)	
B-Road B1202	Decommissioning	For the purposes of the EIA, the decommissioning is assumed to be 40 years from opening. The decommissioning phase is expected to be similar in duration and nature to the construction phase, albeit with fewer vehicle trips over a slightly shorter duration.	Change - this receptor was not considered within the EIA Scoping Report, but due to additional information having been obtained since the EIA Scoping Report was submitted, this receptor is now scoped into further assessment for the reasons outlined in the 'Justification' column.
B-Road B1188 (Scopwick to Digby;	Decommissioning		No change – these receptors were proposed to be

Receptor/ matter	Phase	Justification	Change to the approach proposed in the EIA Scoping Report
Scopwick to Metheringham)			scoped in within the EIA Scoping Report and the Scoping Opinion has agreed with this approach.
B-Road B1191 (A15 to Scopwick)	Decommissioning		
A-Road A15	Decommissioning		
Local (minor) roads (Navenby Lane; Bloxholm Lane; Temple Road; Gorse Hill Road)	Decommissioning		

Extent of the study area

12.2.9. The assessment considers the impacts of road traffic on the highway network. This will examine relevant junctions and connecting road links, the latter being the primary consideration for assessment of likely significant environmental effects.

12.2.10. The study area, focussing on the construction phase impacts for the reasons outlined above, will comprise the following road links. At this stage, the broad location of access points (as shown in **Figure 12.1**) is known and as such, the following road links will comprise the study area (at the site access points along the Site boundary):

- B1202;
- B1188;
- B1191;
- A15; and
- A small number of local minor roads to serve compounds.

12.2.11. These study area links, as illustrated in **Figure 12.1**, have been identified based on identified construction traffic routes to the Proposed Development, following agreement with stakeholders (North Kesteven Council; Lincolnshire County Council and National Highways as appropriate). These routes will be documented within and secured by the Outline Construction Traffic Management Plan.

12.2.12. The extent of the study area will be refined and agreed through subsequent discussions with the local highway authorities prior to undertaking the assessment for the ES. This will be based on the findings of the preliminary assessment within this chapter and following the agreement of the access locations.

12.3. Legislative framework, planning policy and guidance

Relevant planning policy

12.3.1. This section outlines planning policy relevant to traffic and transport. These policy documents have been reviewed and considered in respect to the Proposed Development, with the aim of contributing to the goals and visions of these documents:

- Overarching National Policy Statement for Energy (NPS EN-1) (2011)[1] provides the basis for decisions regarding nationally significant energy infrastructure. Section 5.13 outlines the planning policy for traffic and transport, including guidance on undertaking relevant parts of the EIA.
- Draft Overarching National Policy Statement for Energy (NPS EN-1) (2023)[2] - Section 5.14 outlines the planning policy for traffic and transport, including guidance on undertaking relevant parts of the EIA.
- National Policy Statement for Renewable Energy Infrastructure (NPS EN-3) (2011)[3] sets out the policies relating to electricity generation from renewable sources of energy. However, solar farms are not explicitly included within the document.
- Draft National Policy Statement for Renewable Energy Infrastructure (NPS EN-3)[4] (2023) - Paragraph 2.54.1 references the requirement for the applicant to 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 considering abnormal loads. This section also refers to mitigation measures such as controlling the number of vehicle movements and consultation with the relevant local highway authority. Consistent with the generic policy set out in NPS EN-1, this section confirms that if there are abnormal loads proposed, that they can be safely transported in a way that minimises inconvenience to other

[1] Overarching National Policy Statement for Energy (EN-1) (2011). Available online: https://www.gov.uk/government/publications/national-policy-statements-for-energy-infrastructure
[2] Draft National Policy Statement for Energy (EN-1) (2023). Available online: https://www.gov.uk/government/consultations/planning-for-new-energy-infrastructure-revisions-to-national-policy-statements
[3] National Policy Statement for Renewable Energy (EN-3) (2011). Available online: https://www.gov.uk/government/publications/national-policy-statements-for-energy-infrastructure
[4] Draft National Policy Statement for Renewable Energy (EN-3) (2023). Available online: Planning for new energy infrastructure: revisions to National Policy Statements - GOV.UK (www.gov.uk)

road users and that the environmental effects of this and other construction traffic, after mitigation, are acceptable;

- National Policy Statement for Electricity Networks Infrastructure (NPS EN-5)[5] (2011) which provides the primary basis for decisions regarding electricity networks infrastructure;
- Draft National Policy Statement for Electricity Networks Infrastructure (NPS EN-3)(2023)[6]
- National Planning Policy Framework (NPPF) (September 2023)[7] – no transport related changes applied in the 2023 release;
- Relevant policies of the Central Lincolnshire Local Plan 2018-2040 include the following:
  - Policy S14: Renewable Energy
  - Policy S47: Accessibility and Transport
- Local Transport Plan 5 (LTP 5), Lincolnshire County Council (2022), and associated documents:
  - Lincolnshire Cycling Strategy;
  - Electric Vehicle Strategy;
  - Freight Strategy;
  - Local Bus Strategy;
  - Passenger Rail Strategy;
  - Rail Infrastructure Strategy; and
  - Walking Strategy.

12.3.2. The Lincolnshire County Council LTP 5[8] focuses on six key themes for the county's transport aspirations across the period 2022-2026 and beyond, which include:

- *"Supporting economic growth;*
- *Future ready, green transport;*
- *Promote thriving environments;*
- *Supporting safety, security and a healthy lifestyle;*
- *Promoting high aspirations; and*
- *Improve quality of life."*

[5] National Policy Statement for Electricity Networks Infrastructure (EN-5) (2011). Available online: National Policy Statements for energy infrastructure - GOV.UK (www.gov.uk)
[6] Draft National Policy Statement for Renewable Energy (EN-3) (2023). Available online: https://www.gov.uk/government/consultations/planning-for-new-energy-infrastructure-revisions-to-national-policy-statements
[7] National Planning Policy Framework (2023). Available online. https://www.gov.uk/government/publications/national-planning-policy-framework--2
[8] Lincolnshire County Council. 2022. Local Transport Plan 5. Available from: https://www.lincolnshire.gov.uk/downloads/file/7200/local-transport-plan-5

12.3.3. These key themes will be considered throughout the design of the Proposed Development with a focus on contributing to the achievement of these aspirations where relevant and appropriate.

12.3.4. One of the objectives of the Proposed Development is to manage the traffic associated with the construction (and the future decommissioning) to limit the impacts on the surrounding highway network. Maintaining a reliable route for freight throughout the construction (and future decommissioning) of the Proposed Development is also a key priority.

12.3.5. The DCO Application will provide further information on the relevant planning policies and how they have informed the design of the Proposed Development.

Applicable guidance

12.3.6. The following relevant industry guidance documents have been used during the preparation of this preliminary assessment:

- *Environmental* Assessment of Traffic and Movement, IEMA (2023)[9]; and
- Overarching Principles on Travel Plans, Transport Assessments and Statements, Department for Levelling Up, Housing and Communities (DLUHC) (2014)[10].

12.4. Methodology

Data sources to inform baseline characterisation

12.4.1. The following data sources have been used to inform this preliminary assessment:

- Local aerial and street-level imagery and Ordnance Survey mapping;
- Road accident and safety statistics, Department for Transport (DfT) (2017-2021); and
- Traffic volumes: Manual count points, Department for Transport (DfT) (2021).

Surveys to inform baseline characterisation

12.4.2. The following surveys have been undertaken during June 2023, this being a key time period outside of school holidays but reflecting moderate agricultural activities which are predominant in this area. The locations were discussed and agreed with Lincolnshire County Council:

[9]Institute of Environmental Management and Assessment (IEMA). 2023. Environmental Assessment of Traffic and Movement. Available from: https://www.iema.net/resources/blog/2023/07/12/new-iema-guidance-environmental-assessment-of-traffic-and-movement
[10]Department for Levelling Up, Housing and Communities (DLUHC). 2014. Overarching Principles on Travel Plans, Transport Assessments and Statements. Available from: https://www.gov.uk/guidance/travel-plans-transport-assessments-and-statements

- Automatic Traffic Counts (ATCs) – 6 ATC counters were located throughout the study area to capture link flows on the A15, B1191 and B1188; and
- Manual Classified Count (MCC) – located at the A15/B1191 priority junction to capture the turning movements at this location.

12.4.3. A site visit was undertaken on 15th June 2023 where a site walkover was conducted to review:

- The potential traffic access routes to the Site for construction and worker traffic. These routes were inspected, and the suitability of these routes was considered;
- Appraisal of the proposed site access locations and associated construction compounds for vehicle speeds and visibility;
- The existing public rights of way (PRoW) located within the site boundary; and
- Local areas of sensitivity and receptors within the study area.

Design assumptions

12.4.4. **Chapter 2: Description of the Proposed Development** details the preliminary design principles of the Proposed Development components as they are currently known. Preliminary parameter plans, which define the broad extents within which development can take place, are presented in the following figures within **Volume 2**:

- **Figure 2.3** – Zonal Masterplan;
- **Figure 2.4** – Indicative Height Parameters Plan;
- **Figure 2.5** – Indicative Green Infrastructure Parameters Plan;
- **Figure 2.6** – Indicative Operational Access & Movement Parameters Plan; and
- **Figure 2.9** – Indicative Construction Access Parameter Plan.

12.4.5. **Chapter 4: Approach to EIA** sets out those elements of the Proposed Development for which optionality is present within the current design and sets out the scenario assessed for the purpose of this PEIR.

12.4.6. The design principles and parameters that have been applied in relation to traffic and transport are detailed below.

12.4.7. As outlined in **Chapter 2**, the Proposed Development is predicted to require c.40 HGV deliveries per day at peak construction stage across all temporary compounds. Theoretically, this maximum value could occur at any single temporary compound at any given time, taking into account that construction, will be phased across different areas.

12.4.8. In the absence of a detailed phasing strategy and defined origins of materials, it has been assumed for the purposes of this preliminary assessment that c.40 HGV arrivals and c.40 HGV departures could occur on any road link considered for construction traffic. Realistically, this would be spread across a small number of compounds at any specific period of construction and may be dispersed across the road network. This is a reasonable worst case scenario which has been assessed in accordance with the methodology.

12.4.9. The Proposed Development is predicted to require c.600 construction workers per day at peak construction stage across all temporary compounds. For the purposes of this preliminary assessment, it has been assumed, that at any given compound and time, it is anticipated that c.400 workers will be required. This preliminary assessment has assumed a conservative estimate of 1.5 workers per vehicle, acknowledging that the majority of workers will travel as a team on a daily basis as illustrated in **Table 12.3**.

Table 12.4 Estimated Construction Phase traffic data (2-way)

Link	2026 Construction Traffic associated with the Proposed Development	
	All Vehicles	HGVs
A15 (north of B1191)	640	80
A15 (south of B1191)	640	80
B1191 (between RAF Digby and Ashby de la Launde)	880	80
B1191 (between Scopwick and RAF Digby)	880	80
B1188 (north of Scopwick)	640	80
B1188 (south of Digby)	640	80
A15 (south of Metheringham Heath Lane)	640	80
A15 (north of Leadingham)	640	80
B1188 (south of Scopwick)	640	80
A153 (directly north of junction with A17)	640	80
A17 (between A15 and A153)	640	80

12.4.10. Construction workers may travel from a wide area and are likely to arrive along different routes from nearby towns and cities, dispersing the traffic impact. In the absence of a detailed assessment of workforce locations at this stage, this preliminary has assumed that up to 70% of workers could arrive on any given route towards the Proposed Development, offering a higher than expected volume on all road links, resulting in a reasonable worst case assessment. However, once routes have merged, closer to

the Site, a combined flow of 100% of workers could be travelling along these road links.

12.4.11. Abnormal Indivisible Loads (AILs) are most likely to arrive at Immingham Port based on other similar loads in the region. However, other port options are available. The Strategic Road Network (SRN) and defined Heavy Load Routes will be used where possible to reach the Proposed Development. The impact of these deliveries are limited and are different to daily traffic movements as such loads are under strict vehicle escort and management. This can include rolling road closures and night time movement, potentially as a single delivery, thereby minimising impacts to all users. On the basis that these loads are very small in number and very short duration, AILs are not assessed in this preliminary assessment, but will be documented within and secured by the Outline Construction Traffic Management Plan, to be prepared and submitted in support of the DCO application.

Embedded mitigation measures

12.4.12. This preliminary assessment has been based on the principle that measures have been 'embedded' into the design of the Proposed Development to remove potential significant effects as far as practicable, for example by the considered placement of infrastructure. Embedded (primary) environmental mitigation measures that are considered to be an inherent part of the Proposed Development are detailed within **Table 4.4** of **Chapter 4: Approach to EIA**.

12.4.13. Regarding those embedded mitigation measures relevant to this preliminary traffic and transport assessment, the Proposed Development seeks to protect and enhance the existing PRoW network and strategic cycle routes and ensure the provision of new and improved multi-user routes whilst aligning with Local/Neighbourhood Plan aspirations and through comprehensive engagement with stakeholders.

12.4.14. Key routes have been identified and are being proposed in respect to improvement as part of the Proposed Development as part of measures to be delivered. This could include the alteration or improvement of existing links, though additional consultation and further assessment is required and will be undertaken as part of the ES and associated Transport Assessment. These proposed links and improvements are as detailed in **Figure 2.6** and comprise the following:

- Link between RAF Digby and Scopwick;
- Walking loop for Heath Farm (an autism care centre) (including part of the RAF Digby to Scopwick route);
- A new path along western edge of the Proposed Development (linking New England Lane to join Brauncewell) as proposed by the Ramblers Society;

- Improvements to a route between Scopwick, Blankney and Metheringham as identified within the Neighbourhood Plan;
- Improvements to the Bloxholm Woods access on Heath Road.

Assessment methodology

12.4.15. For this preliminary assessment, the likely significant effects on identified receptors are reported based on the information available at the time of writing. The final assessment of likely significant effects will be reported in the ES using refined traffic assumptions and construction methods.

12.4.16. As noted above in **Section 12.1**, due to the extent of baseline information currently known and the maturity of the design of the Proposed Development, this preliminary assessment only considers severance impacts during construction and decommissioning. Assessment of pedestrian delay; amenity; fear and intimidation; driver delay and highway safety will be reported within the ES once further baseline information has been obtained and the design of the Proposed Development has progressed.

12.4.17. The assessment of traffic and transport impacts has used a quantitative approach, in accordance with IEMA 2023 guidance, based on high level assumptions of construction parameters. For the majority of environmental aspects, this relies on percentage increases in daily traffic movements along road links, which determines the significance of effects.

12.4.18. The assessment also considers vehicle delay at junctions, which focuses on peak hours. Within this preliminary assessment, a high level analysis of vehicle delay has been undertaken to identify the likelihood of mitigation or the need for refinement of parameters, construction methods and/or phasing.

12.4.19. The IEMA 2023 guidance recommends the application of two broad rules of thumb as criteria to assist in delimiting the scale and extent of the environmental assessment:

Rule 1

- Include highway links where traffic flows will increase by more than 30% (or the number of heavy goods vehicles will increase by more than 30%).

Rule 2

- Include highway links of high sensitivity where traffic flows have increased by 10% or more.

12.4.20. These criteria should not necessarily apply to assessments of road safety and driver delay, though both of these aspects will be assessed in further detail within the Transport Assessment, with results reported in the ES as part of a dedicated study area for these assessments.

12.4.21. The assessment of impacts calculates the predicted changes in daily traffic volumes and changes during peak hours, extending across the study area(s). The traffic surveys have been assigned to different links and junctions, where applicable, and appropriate growth factors applied to generate future baseline assessments.

12.4.22. Traffic associated with the Proposed Development during the construction phase has been assigned using broad assumptions to generate a maximum level of impact across all road links as a reasonable worst case. This approach identifies which road links are likely to experience a significant effect and allows traffic routing proposals to be refined while considering potential areas for mitigation.

Sensitivity of receptors

12.4.23. A review has been undertaken of all construction traffic routes and each link, or section of link, has been given an overall level of sensitivity based on the character and the presence of certain receptors along the link.

12.4.24. For example, where a construction traffic route does not, or has, very minimal features including, but not limited to, residential dwellings, footpaths, cycle paths or other features of the built environment likely to be used and consequently presenting an impact on users of these routes, then it is determined as having a low sensitivity, unless the local highway authority has advised of noteworthy cycling and pedestrian activity on routes with none/limited such features.

12.4.25. To categorise sensitivity of a highway link proposed to be utilised for construction, **Table 12.5** below illustrates the rationale of assigning link sensitivity by 'affected parties', where affected parties are potentially considered to be 'sensitive receptors'. These criteria are taken from the IEMA 2023 guidance.

Table 12.5 Sensitivity criteria

Affected Party (Sensitive Receptor)	Built Environment Indicator on Link	Link Sensitivity
People at home	Residential properties	**Negligible:** No properties with direct frontage **Low:** Few properties with direct highway frontage on construction traffic routes. **Medium:** A number of properties with direct highway frontage on construction traffic routes **High:** A large number of properties with direct frontage

Affected Party (Sensitive Receptor)	Built Environment Indicator on Link	Link Sensitivity
People at work	Employment uses (Offices, Industrial Units etc)	**Negligible/Low:** Not adversely impacted when at work
Sensitive groups (Disabled, elderly, children)	Disabled parking bays, retirement/care centres, playgrounds/centres and schools	**Negligible:** No indication of sensitive groups present **Low:** c.1 indicator of sensitive groups present, with direct highway frontage **Medium:** Low number of sensitive groups present, with direct highway frontage **High:** Multiple indicators of sensitive groups present, with direct highway frontage
Sensitive Locations	Hospitals, schools, historic buildings, places of worship	**Negligible:** No indication of sensitive groups present **Low:** c.1 indicator of sensitive groups present, with direct highway frontage **Medium:** Low number of sensitive groups present, with direct highway frontage **High:** Multiple indicators of sensitive groups present, with direct highway frontage
Users walking	Crossing points, PRoWs, Footways	**Negligible:** No indication of sensitive groups present **Low:** c.1 indicator of sensitive groups present **Medium:** Medium use by receptor group – footways present **High:** High receptor use with no footways
Users cycling/scooting	On/off-road routes, designated routes or infrastructure	**Negligible:** No indication of sensitive groups present **Low:** c.1 indicator of sensitive groups present e.g. off-road cycle route

Affected Party (Sensitive Receptor)	Built Environment Indicator on Link	Link Sensitivity
		Medium: On-road cycle route present with segregation **High:** On-road cycle route present with no segregation
Recreational areas/Open spaces	Parks, playgrounds/areas, shopping and community centres	**Negligible:** No indication of sensitive groups present (unlikely usage) **Low:** c.1 indicator of sensitive groups present **Medium:** Low number of sensitive groups present **High:** Multiple indicators of sensitive groups present e.g. children present
Road users	Road links/junctions, baseline traffic volume, existing signage/infrastructure	Presence of affected parties outlined in this table determine the sensitivity

12.4.26. Based on the criteria outlined in **Table 12.5**, each of the highway links allocated as construction routes for the Proposed Development have been assigned an overall link sensitivity (refer to **Table 12.8**).

Magnitude of impact/change

12.4.27. **Table 12.6** below presents the criteria that have been used to determine the magnitude of severance impacts, in accordance with IEMA (2023).

Table 12.6 Magnitude of severance impact criteria

Impact	Negligible	Minor	Moderate	Major
Severance	Increase in total traffic flows of less than 30% or under (or increase in HGV flows under 10%)	Increase in total traffic flows of 30-60% (or increase in HGV flows of between 10%-40%)	Increase in total traffic flows of 60-90% (or increase in HGV flows between 40%-90%)	Increase in total traffic flows of 90% and above (or increase in HGV flows over 90%)

As outlined in the IEMA 2023 guidance, the assessment of severance should *"pay full regard to specific local conditions, e.g. sensitivity of adjacent land uses,*

Impact	Negligible	Minor	Moderate	Major
prevalence of vulnerable people, whether or not crossing facilities are provided, traffic signal settings, etc." which will be considered within the detailed assessments of effects associated with the Proposed Development.				

Significance of effect

12.4.28. Following assignment of sensitivity and magnitude of impact/change, severance effects are considered to be significant or not significant according to the matrix in **Table 12.7** below. The shaded boxes indicate significant effects.

Table 12.7 Significance of severance effects

Sensitivity of Receptors	Magnitude of Impact/Change			
	Negligible	Minor	Moderate	Major
High	Negligible / Slight	Slight / Moderate	Moderate / Large	Large / Very Large
Medium	Negligible / Slight	Slight	Moderate	Moderate / Large
Low	Negligible	Negligible / Slight	Slight	Slight / Moderate
Negligible	Neutral	Negligible / Minor	Negligible / Slight	Slight

12.5. Summary of baseline conditions

Local highway network

12.5.1. The highway network surrounding the Proposed Development site, encompassing the proposed study area, is presented in **Figure 12.1** of **Volume 2**. This figure illustrates the Site in relation to the surrounding highway network.

12.5.2. The local roads within the study area will be used for direct access to the Site and will be considered, as well as the strategic routes (A1/M180) which will be used to link these local roads to the wider network but the latter will not be assessed.

A1

12.5.3. The A1 is an SRN link approximately 28km from the proposed study area. It is anticipated that traffic routeing from Immingham may utilise this link.

M180

12.5.4. Linking via the A180, the M180 enables access to the A1 via Immingham and is also part of the SRN.

A15

12.5.5. The A15 is a principal road which forms part of the primary road network, running in a north to south direction, bisecting Springwell West.

12.5.6. The A15 runs north to connect with Lincoln approximately 17.0km north of Springwell West. To the south, the A15 connects with Sleaford and the A17 approximately 9.0km to the south.

12.5.7. The A15 is a two-way single carriageway road subject to the national speed limit which provides access to a number of settlements and local roads across Lincolnshire. This road will provide a key route to and from the Site for construction traffic.

B1191 (Heath Road)

12.5.8. The B1191 is a two-way single carriageway road which splits the western and central portions of the Proposed Development in a south-west to north-east direction. The B1191 runs for approximately 6.7km, connecting the A15 to the B1188 and Scopwick village, passing the village of Ashby de la Launde and the RAF Digby air force base.

12.5.9. The south-western portion of the B1191 is subject to the national speed limit and the road is lined with hedgerows and grass verges with agricultural land beyond. There are a handful of properties/agricultural buildings set back from the carriageway in this area before the B1191 reaches Ashby de la Launde.

12.5.10. At Ashby de la Launde there are a number of residential properties in close proximity to the B1191; however, these properties are not accessed off the B1191, but instead off Main Street which connects to the B1191 at a priority junction.

12.5.11. The national speed limit continues on the B1191 as it passes Ashby de la Launde and continues north-east where the road continues to pass agricultural land and a couple of agricultural buildings, including Glebe Farm until the B1191 reaches RAF Digby.

12.5.12. As the B1191 approaches RAF Digby, the speed limit reduces to 30 mph for approximately 800m whilst the road travels alongside the air force base, a number of residential dwellings and Heath Farm, an autism care centre, which are all accessed directly from the B1191.

12.5.13. Through RAF Digby there are footways on both sides of the B1191 as well as street lighting and a zebra crossing and bus stops in place outside the air force base frontage. The crossing and footway provision can be viewed in **Plate 12.1** below.

Plate 12.1 B1191 RAF Digby (view to south)

12.5.14. Where the B1191 departs RAF Digby to the north-east, the speed limit returns to the national speed limit as the road continues to pass agricultural land with occasional agricultural buildings and some residential buildings, including Scopwick Mill until the B1191 approaches Scopwick.

12.5.15. As the B1191 approaches Scopwick, the speed limit reduces to 30 mph for the remainder of its length until it meets the B1188 at a priority junction.

12.5.16. Through Scopwick, the B1191 is lined with residential properties and has a footway running along the southern side of the carriageway and some areas of provision on the northern side. There is street lighting and a set of bus stops located in the vicinity of the B1188 junction, as illustrated in **Plate 12.2** below.

Plate 12.2 B1191 Scopwick (view to east)

B1188

12.5.17. The B1188 is a two-way single carriageway road which splits the central and eastern portions of the Proposed Development in a north to south direction. The B1188 runs for approximately 30.0km, running north as far as Lincoln and south as far as the A17 and Sleaford.

12.5.18. Where the B1191 meets the B1188 at a priority junction, the B1188 runs north through Scopwick passing through the settlements of Blankney and Metheringham in the vicinity of the Site. To the south of Scopwick, the B1188 runs through Digby before Dorrington then Ruskington.

12.5.19. Through Scopwick, the B1188 is subject to a 30 mph speed limit and the road is lined with residential properties and footway provision through the village, as illustrated in **Plate 12.3**.

Plate 12.3 B1188 Scopwick (view to south)

12.5.20. To the south, the B1188 continues, and the speed limit increases to 50 mph as it leaves Scopwick and passes through a large area of agricultural land before it meets Digby, approximately 3.5km south of Scopwick. There are no properties lining this section of the B1188.

12.5.21. The central portion of the Proposed Development will be located to the south of Scopwick, to the west of the B1188.

12.5.22. To the north of Scopwick, the B1188 leaves the village, where the speed limit increases to 50 mph. From here, the eastern side of the carriageway is lined with agricultural land until the road reaches Blankney. This is where the eastern portion of the Proposed Development will be located.

12.5.23. On the western side of the B1188 between Scopwick and Blankney, there are some recently converted residential properties before the road passes Longwood Quarry.

12.5.24. As the B1188 approaches Blankney, the speed limit reduces to 40 mph before the road passes a Church on the eastern side of the carriageway.

12.5.25. Where the B1188 passes through Blankney, there are residential properties and footways on both sides of the road, as illustrated in **Plate 12.4**

Plate 12.4 B1188 Blankney (view to north)

12.5.26. As the B1188 departs Blankney to the north, the speed limit increases to 50 mph as it passes agricultural land before it reaches Metheringham.

12.5.27. At Metheringham, the speed limit reduces to 40 mph on the B1188 as it passes along the western border of this settlement with some residential properties accessed off the B1188.

12.5.28. From Metheringham, the B1188 continues north towards Lincoln passing through a number of other settlements further afield from the study area.

B1202 (Metheringham Heath Lane)

12.5.29. The B1202 is a two-way single carriageway road which runs in a west to east direction between the A15 and B1188 just north of Metheringham. The road is subject to the national speed limit and runs for approximately 5.0km.

12.5.30. Agricultural land lines both sides of the B1202 for the majority of its length with just a few sporadic properties. Approximately four residential properties are accessed off the northern side of the B1202 as well as a Biomethane Plant and what appears to be a disused quarry.

Local (Minor) Roads

Navenby Lane

12.5.31. Navenby Lane is a two-way single carriageway road subject to the national speed limit which runs in a west to east direction between

the A15 and B1191. Navenby Lane splits one area of the western portion of the Proposed Development.

12.5.32. Navenby Lane runs for approximately 2.1km and connects to the A15 at a priority junction to the west and to the B1191 at Ashby de la Launde village at a priority junction to the east.

12.5.33. The road is approximately 5.5m wide and both sides of the carriageway are lined with grass verges and agricultural land, with no properties along its length.

Bloxholm Lane

12.5.34. Bloxholm Lane is a two-way single carriageway road which runs in a north-west to south-east direction between the B1202 and the B1188. Bloxholm Lane runs for approximately 4.2km from the B1202 to the south-east connecting to the B1188 at a priority junction just north of Scopwick.

12.5.35. Bloxholm Lane is subject to the national speed limit and is lined by agricultural land on both sides of the carriageway for most of its length.

12.5.36. As Bloxholm Lane travels south-east from the B1202, it passes approximately three residential properties which are accessed directly from Bloxholm Lane. To the south-east, the road is lined by Longwood Quarry on the northern side of the carriageway as Bloxholm Lane approaches the B1188.

Gorse Hill Lane

12.5.37. Gorse Hill Lane is an unsurfaced rural road which runs in an east to west direction from the A15 to Pottergate Road at the northern extent of Springwell West. Gorse Hill Lane runs for approximately 3.7km, meeting the A15 and Pottergate Road at priority junctions.

12.5.38. Gorse Hill Lane is subject to the national speed limit and is lined by agricultural land, with trees and hedgerows on both sides of the carriageway with a couple of agricultural properties along its length.

Temple Road

12.5.39. Temple Road is a two-way single carriageway road which runs in an east to west direction from the A15 to Pottergate Road at the south of Springwell West. Temple Road runs for approximately 6.0km, meeting the A15 and Pottergate Road at priority junctions.

12.5.40. Temple Road is subject to the national speed limit and is lined by agricultural land on both sides of the carriageway with a couple of agricultural properties set back from the carriageway along its length.

Summary of baseline data

12.5.41. The following highway links form the network study area for this preliminary assessment. Baseline 24-hour annual average daily

traffic (AADT) two-way link flows have been collated using 2021 Department for Transport (DfT) and 2023 survey data sources, applying TEMPro growth factors where required and to derive the baseline flows as illustrated below in **Table 12.8**. These factors are industry standard utilising the National Trip End Model (NTEM) datasets required as part of the process forecasting the impact of transport projects as described in the Department for Transport's TAG 'Unit M.4 Forecasting and Uncertainty'.

Table 12.8 Baseline traffic data

	Base Scenario DfT AADT Data			
Link	**Count ID**	**Year**	**All Vehs**	**HGVs**
A15 (north of B1191)	ATC Data (2023)		13967	1396
A15 (south of B1191)			15538	1510
B1191 (between RAF Digby and Ashby de la Launde)			2761	424
B1191 (between Scopwick and RAF Digby)			2042	332
B1188 (north of Scopwick)			5732	867
B1188 (south of Digby)			4923	912
A15 (south of Metheringham Heath Lane)	16208	2021	9599	692
A15 (north of Leadingham)	36224	2021	11292	847
B1188 (south of Scopwick)	806250	2021	4019	195

Accident analysis

12.5.42. A review of accident data covering the most recent five-year period available has been undertaken using data available from the Road, Accidents and Safety Statistics[11] (DfT). This covers the years 2017-2021 and provides a map-based depiction of the available data including the date, the number of vehicles involved, the number of casualties and the severity of any resulting injuries.

12.5.43. A high-level review of the study area has been conducted to identify any potential accident hotspots across any of the highway links within this area. **Figure 12.2** of **Volume 2** presents the

[11] Department for Transport (2023. Road, Accidents and Safety Statistics. Available online: Road accidents and safety statistics - GOV.UK (www.gov.uk)

accidents that have been recorded within the study area with slight accidents highlighted in yellow, serious accidents in red and fatal accidents in black.

12.5.44. Over the five-year period throughout the study area, as part of the detailed assessments to be presented in the ES, key junctions and/or clusters will be reviewed in detail, seeking to further interrogate any patterns or trends that may identify any insufficiencies in the road network infrastructure relevant to the Proposed Development.

12.5.45. The junctions/links to be considered include the following locations:

- A15 between B1202 to Metheringham;
- A15 at B1191 Bloxholm Woods;
- B1191 to Scopwick-Blankney-Metheringham; and
- B1188 at Scopwick junction.

Public rights of way (PRoWs)

12.5.46. Within and intersecting the Preferred Order Limits of the Proposed Development are a series of links and routes utilised by Non-motorised Users (NMUs) comprising; pedestrians (on foot travel), cyclists, wheel-based travel (wheelchairs/mobility scooters/scooters etc) and equestrians.

12.5.47. Following the completion of PRoW surveys, an assessment of pedestrian amenity will be undertaken on affected routes and documented in the ES, taking into account any diversions that may increase journey times.

Cycle routes

12.5.48. Locally, there are no National Cycle Routes (NCN) within reasonable vicinity of the Proposed Development and as such, no link to existing NCNs is proposed. It should be noted that route improvement benefit for cyclists could be the Scopwick-Blakney-Metheringham route identified within the Neighbourhood Plan.

Public transport

12.5.49. Local public transport services comprise bus services only:

- 18M – Metheringham Callconnect
- 31 and 31X – Lincoln Central Bus Station – Sleaford Rail Station
- M1 – Anwick Moy Park Factory – North Hykeham Health Centre
- M2 – Anwick Moy Park Factory – Tower Estate Crofton Road
- 55 and B5 and B5X – Coningsby – Lincoln

- 18S – Sleaford Callconnect.

Sensitive receptors

12.5.50. The sensitive receptors identified across the study area are presented in **Table 12.9** and their extent and location is illustrated in **Figure 12.3**.

Table 12.9 Sensitive receptors

Link	Section	Sensitive receptors
A15	Full length of route within study area	Properties set back from the carriageway and PRoW road crossings. **Low sensitivity**
B1191	A15 – Ashby de la Launde	Sporadic agricultural properties, not located close to the carriageway. **Low sensitivity**
	Ashby de la Launde – RAF Digby	Residential settlements (Ashby de la Launde and RAF Digby); operational Air Force base; and, Heath Farm (an autism care centre). All located close to the carriageway. **High sensitivity**
	RAF Digby – Scopwick	Sporadic residential and agricultural properties close to the carriageway. **Low sensitivity**
	Scopwick – B1188	Residential settlement (Scopwick) located close to the carriageway. **High sensitivity**
B1188	Scopwick	Residential settlement (Scopwick) located close to the carriageway. **High sensitivity**
	Scopwick – Blankney	No properties identified close to the carriageway. **Low sensitivity**
	Blankney	Residential settlement (Blankney) and a Church located close to the carriageway. **High sensitivity**
	Blankney – Metheringham	Sporadic residential properties set back from the carriageway.

Link	Section	Sensitive receptors
		Low sensitivity
	Metheringham	Residential settlement (Metheringham) located close to the eastern side of the carriageway. Cluster of 'slight' accidents recorded at the B1202/B1188 junction. **Medium sensitivity**
	Scopwick – Digby	Sporadic agricultural properties, not located close to the carriageway. **Low sensitivity**
	Digby	Residential settlement (Digby) located close to the carriageway. **High sensitivity**
B1202	Full length of route within study area	Sporadic residential properties located close to the carriageway and some agricultural properties set back from the carriageway. Cluster of 'slight' accidents recorded at the B1202/B1188 junction. **Medium sensitivity**
Navenby Lane	Full length of route	No sensitive receptors identified on this link. **Low sensitivity**
Bloxholm Lane	Full length of route	Small cluster of residential properties located close to the carriageway. **Low sensitivity**
Gorse Hill Lane	Full length of route	Sporadic agricultural properties located close to the carriageway. **Low sensitivity**
Temple Road	Full length of route	Sporadic agricultural properties set back from the carriageway. **Low sensitivity**

Future baseline

12.5.51. The future baseline conditions relating to transport will generally be affected by a number of factors. This can include traffic generated by new development, changes in transport trends and availability of infrastructure.

12.5.52. There are currently no known significant future developments that already have planning consent, which are likely to have a material

impact on the operation of the road network within the study area. Other existing developments in the area have been considered as part of the preliminary cumulative assessment reported in **Chapter 15: Cumulative Effects**, with full details to be included and assessed where necessary, in the ES. Notwithstanding, changes in traffic flows associated with general growth in development across the region are applicable, particularly as these will also take into account changes in transport trends, such as increased car ownership.

12.5.53. It is currently anticipated that subject to consents and approvals, construction of the Proposed Development would commence in 2026. Traffic growth factors are calculated based on changes within a specific zone and are derived using the Department for Transport's TEMPro national program (Trip End Model Presentation Program). Such factors have been derived to factor traffic flows from a survey year of 2023 (survey data) to a construction year of 2026. This represents a reasonable worst-case year of assessment as traffic growth increases year on year and any percentage impacts would therefore reduce beyond 2026. The impacts have been assessed on the basis of peak construction traffic during this year, although construction traffic volumes will vary across the anticipated four year construction period.

12.5.54. The TEMPro factors applied are illustrated in **Table 12.10** by future year and road classification:

Table 12.10 TEMPro Factors

2023-2026	
Principal	
Daily	1.02415

12.5.55. Future year baseline traffic flows for the 2026 assessment scenario are presented in **Table 12-10**.

Table 12.11 Future year baseline flows

Link	2026 Construction Year	
	All Vehs	HGVs
A15 (north of B1191)	14,304	1,430
A15 (south of B1191)	15,913	1,546
B1191 (between RAF Digby and Ashby de la Launde)	2,828	434
B1191 (between Scopwick and RAF Digby)	2,091	340

Link	2026 Construction Year	
	All Vehs	HGVs
B1188 (north of Scopwick)	5,870	888
B1188 (south of Digby)	5,042	934

12.5.56. For NMUs, significant alterations to the pedestrian, cycle and PRoW networks within the timeframe of construction of the Proposed Development are not anticipated, though some isolated alterations may be required to enable construction.

12.5.57. Public transport networks are often subject to changes, particularly in rural areas. Bus services are susceptible to reductions in service due to the way they are funded and there is the potential for available services to be less frequent and/or less connected in 2026 than they are currently without maintaining or increasing funding.

12.6. Likely effects, additional mitigation and residual effects

12.6.1. As noted above in **Section 12.1**, due to the extent of baseline information currently known and the maturity of the design of the Proposed Development, this preliminary assessment only considers severance impacts during construction and decommissioning. Assessment of pedestrian delay; amenity; fear and intimidation; driver delay and highway safety will be reported within the ES once further baseline information has been obtained and the design of the Proposed Development has progressed.

12.6.2. Access to the construction compounds for construction workers associated with the Proposed Development is likely to be made from the B1202; B1188; A1191 and the A15, as displayed in **Figure 2.6**.

12.6.3. Additional mitigation measures to manage the movement of construction traffic will be documented within and secured by the Outline Construction Traffic Management Plan, which will minimise those likely impacts identified in **Table 12.11** below. The Outline Construction Traffic Management Plan will likely include the following details:

- Access and parking arrangements for site personnel, contractors and visitor arrangements for delivery and removal of materials;
- Arrangements for loading, unloading and storage of plant and materials;
- A scheme for routing and control of traffic associated with the construction and temporary signage during the construction phase;

- Implementation programme including the proposed construction period and hours of operation; and
- Details of any additional management measures, including details of wheel washing facilities and condition surveys.

12.6.4. An Outline Travel Plan will be prepared as part of the Outline Construction Traffic Management Plan. The Outline Travel Plan will set out strategies to encourage the use of sustainable transport for the construction workforce. This will include details on initiatives to increase car sharing, while other measures will be explored for the preparation of the ES such as shuttle services to/from temporary compounds and provision of staff parking facilities, as well as other measures to encourage mode shift away from private car use.

12.6.5. The final details of both the Outline Travel Plan and Outline Construction Traffic Management Plan will be agreed with the local planning authorities, prior to the commencement of the construction phase.

Construction phase

Table 12.12 Qualitative assessment of likely effects, additional mitigation and residual effects during construction effects

Receptor/Matter	Likely Effects/Additional (Secondary and Tertiary) Mitigation/Residual Effects	
A15	Likely effects	The A15 is part of the primary road network with a high volume of traffic and high speed with very limited frontage or users alongside. However, PRoWs cross the A15 and therefore the likely effects will be on severance, while road safety will be affected by additional turning traffic.
	Additional (secondary and tertiary) mitigation	The routing of construction traffic, including avoidance of accident hotspots, will be documented within and secured by the Outline Construction Traffic Management Plan, while improvements to PRoW crossing points will be considered.
	Likely residual effects	The sensitivity of the A15 link is **low** and the magnitude of impact/change, following additional mitigation, is predicted to be **negligible**. Therefore, there is likely to be a **negligible**, temporary adverse residual severance effect, which is predicted to be **not significant**.
	Likely effects	This section of the B1191 is expected to carry the largest volume of construction

Receptor/Matter	Likely Effects/Additional (Secondary and Tertiary) Mitigation/Residual Effects	
B1191 (A15 to Scopwick)		traffic aside from the A15 as it serves a number of temporary compounds along the primary construction route. The predicted increase in traffic volumes exceeds 30%, which could have potential effects on driver delay, road safety, severance and NMUs.
	Additional (secondary and tertiary) mitigation	Subject to the outcome of further assessments, potential mitigation could include junction and crossing improvements and PRoW protection or temporary closure/diversions. Traffic access routes and any restrictions on timings will be documented within and secured by the Outline Construction Traffic Management Plan.
	Likely residual effects	The sensitivity of the B1191 link is categorised as both **low** and **high** across the link. The likely significance of the severance effect has been categorised per link section: <u>A15 – Ashby de la Launde:</u> The sensitivity of the link section is **low** and the magnitude of impact/change, following additional mitigation, is predicted to be **negligible**. Therefore, there is likely to be a **negligible**, temporary adverse residual severance effect, which is predicted to be **not significant**. <u>Ashby de la Launde – RAF Digby</u> The sensitivity of the link section is **high** and the magnitude of impact/change, following additional mitigation, is predicted to be **minor**. Therefore, there is likely to be a **slight/moderate**, temporary adverse residual severance effect, which is predicted to be **not significant**. <u>RAF Digby – Scopwick</u> The sensitivity of the link section is **low** and the magnitude of impact/change, following additional mitigation, is predicted to be **negligible**. Therefore, there is likely to be a **negligible**, temporary adverse residual severance effect, which is predicted to be **not significant**. <u>Scopwick – B1188</u>

Receptor/Matter	Likely Effects/Additional (Secondary and Tertiary) Mitigation/Residual Effects	
		The sensitivity of the link section is **high** and the magnitude of impact/change, following additional mitigation, is predicted to be **minor**. Therefore, there is likely to be a **slight/moderate**, temporary adverse residual severance effect, which is predicted to be **not significant**.
B1188 (Scopwick to Digby)	Likely effects	This section of the B1188 could potentially carry a moderate volume of construction traffic from the A17 to the south to serve a number of temporary compounds. The predicted increase in traffic volumes would exceed 10% on links that are categorised as sensitive due to passing through built up areas. This increase could have potential effects on driver delay, road safety, severance and NMUs.
	Additional (secondary and tertiary) mitigation	The routing of construction traffic will be documented within and secured by the Outline Construction Traffic Management Plan, including avoidance of sensitive locations by HGVs such as Ruskington and Digby.
	Likely residual effects	<u>Scopwick</u> The sensitivity of the link section is **high** and the magnitude of impact/change, following additional mitigation, is predicted to be **minor**. Therefore, there is likely to be a **slight/moderate**, temporary adverse residual severance effect, which is predicted to be **not significant**. <u>Scopwick-Digby</u> The sensitivity of the link section is **low** and the magnitude of impact/change, following additional mitigation, is predicted to be **negligible**. Therefore, there is likely to be a **negligible**, temporary adverse residual severance effect, which is predicted to be **not significant**. <u>Digby</u> The sensitivity of the link section is **high** and the magnitude of impact/change, following additional mitigation, is predicted to be **minor**. Therefore, there is likely to be a **slight/moderate**, temporary adverse

Receptor/Matter	Likely Effects/Additional (Secondary and Tertiary) Mitigation/Residual Effects	
		residual severance effect, which is predicted to be **not significant**.
B1188 (Scopwick to Metheringham)	Likely effects	This section of the B1188 could potentially carry a moderate volume of construction traffic from the A15 to the west to serve a number of temporary compounds. The predicted increase in traffic volumes would exceed 10% on links that are categorised as sensitive due to passing through built up areas. This increase could have potential effects on driver delay, road safety, severance and NMUs.
	Additional (secondary and tertiary) mitigation	The routing of construction traffic will be documented within and secured by the Outline Construction Traffic Management Plan, including minimising use of sensitive routes by HGVs such as Metheringham.
	Likely residual effects	<u>Scopwick - Blankney</u> The sensitivity of the link section is **low** and the magnitude of impact/change, following additional mitigation, is predicted to be **negligible**. Therefore, there is likely to be a **negligible**, temporary adverse residual severance effect, which is predicted to be **not significant**. <u>Blankney</u> The sensitivity of the link section is **high** and the magnitude of impact/change, following additional mitigation, is predicted to be **minor**. Therefore, there is likely to be a **slight/moderate**, temporary adverse residual severance effect, which is predicted to be **not significant**. <u>Blankney - Metheringham</u> The sensitivity of the link section is **low** and the magnitude of impact/change, following additional mitigation, is predicted to be **negligible**. Therefore, there is likely to be a **negligible**, temporary adverse residual severance effect, which is predicted to be **not significant**. <u>Metheringham</u> The sensitivity of the link section is **medium** and the magnitude of

Receptor/Matter	Likely Effects/Additional (Secondary and Tertiary) Mitigation/Residual Effects	
		impact/change, following additional mitigation, is predicted to be **negligible**. Therefore, there is likely to be a **negligible/slight**, temporary adverse residual severance effect, which is predicted to be **not significant**.
B1202 (A15 to Metheringham)	Likely effects	This section of the B1202 could be used for routing of construction traffic from the A15 to the west to serve a number of temporary compounds. The predicted increase in traffic volumes is unlikely to exceed 30% if it were to only serve Springwell East (**Figure 2.2**), though its junction with the A15 has a moderate level of accidents. This increase could have potential effects on driver delay and road safety.
	Additional (secondary and tertiary) mitigation	The routing of construction traffic will be documented within and secured by the Outline Construction Traffic Management Plan, including minimising use of sensitive routes by HGVs such as the B1202.
	Likely residual effects	The sensitivity of the link section is **medium** and the magnitude of impact/change, following additional mitigation, is predicted to be **negligible**. Therefore, there is likely to be a **negligible/slight**, temporary adverse residual severance effect, which is predicted to be **not significant**.
Navenby Lane	Likely effects	Navenby Lane will only be crossed by construction traffic and not be travelled by HGVs. A crossing point could therefore have a potential effect on NMUs.
	Additional (secondary and tertiary) mitigation	The routing of construction traffic will be documented within and secured by the Outline Construction Traffic Management Plan, including details and controls of road crossings by HGVs.
	Likely residual effects	The sensitivity of the link section is **low** and the magnitude of impact/change, following additional mitigation, is predicted to be **negligible**. Therefore, there is likely to be a **negligible**, temporary adverse residual

Receptor/Matter	Likely Effects/Additional (Secondary and Tertiary) Mitigation/Residual Effects	
		severance effect, which is predicted to be **not significant**.
Bloxholm Lane	Likely effects	Bloxholm Lane could be used as an alternative to travelling through Metheringham to reach eastern areas of the Proposed Development by construction traffic. This increase could have potential effects on driver delay due to the narrow carriageway.
	Additional (secondary and tertiary) mitigation	The routing of construction traffic will be documented within and secured by the Outline Construction Traffic Management Plan, including minimising use of sensitive routes by HGVs.
	Likely residual effects	The sensitivity of the link section is **low** and the magnitude of impact/change, following additional mitigation, is predicted to be **negligible**. Therefore, there is likely to be a **negligible**, temporary adverse residual severance effect, which is predicted to be **not significant**.
Temple Road	Likely effects	Temple Road could potentially be used for routing of construction traffic from the A15 to the east to serve a temporary compound. The predicted increase in traffic volumes could exceed 30% on this link, based on the single compound it serves and the lightly trafficked nature. This increase could have potential effects on driver delay, road safety, severance and NMUs.
	Additional (secondary and tertiary) mitigation	Subject to the outcome of assessments, potential mitigation could include junction improvements and PRoW enhancements. Traffic access routes and any restrictions on timings will be documented within and secured by the Outline Construction Traffic Management Plan.
	Likely residual effects	The sensitivity of the link section is **low** and the magnitude of impact/change, following additional mitigation, is predicted to be **negligible**. Therefore, there is likely to be a **negligible**, temporary adverse residual

Receptor/Matter	Likely Effects/Additional (Secondary and Tertiary) Mitigation/Residual Effects	
		severance effect, which is predicted to be **not significant**.
Gorse Hill Road	Likely effects	Gorse Hill Road could potentially carry a moderate volume of construction traffic from the A15 to the east to serve a temporary compound. The predicted increase in traffic volumes is expected to exceed 30% on this link. This increase could have potential effects on driver delay and road safety.
	Additional (secondary and tertiary) mitigation	Subject to the outcome of assessments, potential mitigation could include junction improvements, carriageway widening and resurfacing. Traffic access routes and any restrictions on timings will be documented within and secured by the Outline Construction Traffic Management Plan.
	Likely residual effects	The sensitivity of the link section is **low** and the magnitude of impact/change, following additional mitigation, is predicted to be **negligible**. Therefore, there is likely to be a **negligible**, temporary adverse residual severance effect, which is predicted to be **not significant**.

Decommissioning phase

12.6.6. For the purposes of this preliminary assessment, the decommissioning year is assumed to be 40 years post-completion. This is considered to be too far into the future to be able to accurately predict traffic flows or road/junction layouts at that time. It is therefore considered reasonable to assume that the impacts during the decommissioning phase will be the same as, or not greater than, the construction phase. This may overestimate the actual impacts slightly, but it is considered broadly accurate.

12.6.7. The management of movement of decommissioning traffic will be documented within and secured by the Outline Decommissioning Environmental Management Plan.

12.7. Opportunities for environmental enhancement

12.7.1. At the time of writing, there are limited opportunities for environmental enhancement specifically related to traffic and transport associated with the Proposed Development.

12.7.2. Some recreational enhancements to NMU movement and crossing point provision may be provided, as discussed within this chapter.

All such elements will be considered and reviewed within the ES and associated Transport Assessment reports.

12.8. Intra-project combined effects

12.8.1. There is potential for the interaction and combination of different environmental residual effects from within the Proposed Development to affect identified traffic and transport receptors. These can include impacts on PRoWs or permissive routes. Such impacts will be considered within the ES once relevant assessments are further progressed.

12.8.2. Conversely, the emissions from construction traffic are a source of effects for multiple receptors related to other environmental assessments including air quality, noise and vibration and biodiversity. These effects are, and will be, addressed within the other relevant environmental factor chapters rather than in this chapter, which focuses on traffic and transport.

12.8.3. Inter-project effects are assessed and presented in **Chapter 15: Cumulative Effects**.

12.9. Difficulties and uncertainties

12.9.1. The information provided in this PEIR is preliminary and is based on the information available at the time of writing. The final assessment of likely significant effects will be reported in the ES.

12.9.2. In respect to access to construction compounds, the number and set locations of accesses have not yet been finalised; these will be defined and assessed within the ES and associated Transport Assessment reports. Measures to manage construction traffic will be documented within and secured by the Outline Construction Traffic Management Plan.

12.9.3. Definitive construction traffic estimations are not known but estimates have been considered within this PEIR and will be refined as necessary to inform assessments presented in the ES and Transport Assessment reports.

12.10. Further work to inform the ES

12.10.1. Discussions will be held with the relevant highway authorities to identify the need for adjustments to assumptions or parameters. This will include any restrictions on routing as a result of likely effects on specific road links. As noted in this chapter, associated analysis within the Transport Assessment will be used to inform the ES, further to the methodology outlined above. Assessment of pedestrian delay; amenity; fear and intimidation; driver delay and highway safety will be reported within the ES.

Springwell
Solar Farm

springwellsolarfarm.com