# Meridian Solar Farm

EN010169

**Volume 6**

**Environmental Statement**

**6.1** ES Chapter 15: Traffic and Access (Rev 1) (Clean)

APFP Regulation 5(2)(a)

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

**October 2026**

## Table of Contents

**15. Traffic and Access 1**

15.1. Introduction 1
15.2. Legislation and Planning Policy 3
15.3. Stakeholder Engagement 4
15.4. Assessment Methodology 42
15.5. Assessment Assumptions and Limitations 65
15.6. Baseline Conditions 69
15.7. Embedded Mitigation 84
15.8. Assessment of Potential Impacts and Likely Significant Effects 88
15.9. Additional Monitoring, Mitigation and Enhancement Measures 136
15.10. Residual Effects 137
15.11. Cumulative Effects 138

## Tables

Table 15-1: Scoping Opinion responses in relation to Traffic and Access ..... 5
Table 15-2: Key matters raised by prescribed or statutory consultees in relation to Traffic and Access ..... 14
Table 15-3: Stakeholder engagement relating to Traffic and Access ..... 41
Table 15-4: Local Link Receptors ..... 43
Table 15-5: Local Junction Receptors ..... 46
Table 15-6: Sensitivity / Value Criteria for Severance, Pedestrian Delay, Non-Motorised User Amenity, and Fear and Intimidation ..... 51
Table 15-7: Sensitivity / Value Criteria for Driver Delay ..... 53
Table 15-8: Sensitivity / Value Criteria for Road Safety and Large Loads ..... 54
Table 15-9: Magnitude Criteria for Transport and Access (All Assessment Criteria) .. 57
Table 15-10: Additional Magnitude Criteria for Fear and Intimidation ..... 58
Table 15-11: Significance Criteria ..... 59
Table 15-12: Construction Staff Modal Split ..... 60
Table 15-13: Daily Peak Construction Staff travelling to and from the Site (One-Way Trips) ..... 60
Table 15-14: Construction Staff Trip Generation (One-Way Trips) ..... 61
Table 15-15: Gravity Model Routing ..... 62
Table 15-16: Trip Distribution Scenarios ..... 63
Table 15-17: PRoW within the Order Limits ..... 70
Table 15-18: Baseline Traffic Flows ..... 73
Table 15-19: Traffic Growth Factors (Future Baseline) ..... 78
Table 15-20: Future Baseline Traffic Flows (2031) ..... 80
Table 15-21: Construction Traffic Impact – Development Peak Hours ..... 89
Table 15-22: Screened-in Traffic Receptors ..... 94
Table 15-23: Receptor Sensitivity for Severance, Pedestrian Delay, Non-Motorised User Amenity and Fear & Intimidation ..... 96

Table 15-24: Receptor Sensitivity for Driver Delay ..... 99
Table 15-25: Receptor Sensitivity for Road Safety ..... 102
Table 15-26: Receptor Sensitivity for Large Loads ..... 104
Table 15-27: Severance & Pedestrian Delay Assessment for Link and Junction Receptors ..... 107
Table 15-28: Driver Delay Assessment for Link and Junction Receptors ..... 110
Table 15-29: Potential Road Closures ..... 113
Table 15-30: Non-motorised User Amenity Assessment for Link and Junction Receptors ..... 119
Table 15-31: Fear and Intimidation Assessment for Link and Junction Receptors ..... 123
Table 15-32: Road Safety Assessment for Link and Junction Receptors ..... 126
Table 15-33: Large Loads Assessment for Link and Junction Receptors ..... 130
Table 15-34: Assessment of PRoW/Common Land ..... 133
Table 15-35: Screened in Cumulative Schemes ..... 139
Table 15-36: Screened in Cumulative Schemes – 24-Hour Total Vehicle Traffic Flows ..... 147
Table 15-37: Screened in Cumulative Schemes – 24-Hour HGV Traffic Flows ..... 150
Table 15-38: Cumulative Schemes Significance Summary (excluding Meridian Solar Traffic Flows) ..... 153
Table 15-39: Cumulative Schemes Significance Summary (including Meridian Solar Traffic Flows) ..... 154
Table 15-40: Cumulative Schemes Road Safety Significance Summary (excluding Meridian Solar Traffic Flows) ..... 155
Table 15-41: Cumulative Schemes Road Safety Significance Summary (including Meridian Solar Traffic Flows) ..... 156

# 15. Traffic and Access

## 15.1. Introduction

15.1.1. This chapter of the Environmental Statement (ES) presents the findings of an assessment of the potential significant effects on Traffic and Access as a result of the Scheme. For more details about the Scheme, refer to **ES Chapter 2: The Scheme** (Doc. Ref. 6.1).

15.1.2. This chapter identifies and proposes measures to address the potential impacts and significant effects of the Scheme on Traffic and Access, during the construction and decommissioning phases.

15.1.3. The chapter assesses the Scheme based on a worst-case scenario with regards to the information available at the time of writing.

15.1.4. This chapter is supported by the following figures (Doc. Ref. 6.2):

- ES Figure 2-2 Indicative Solar Development Area and Inter-Array Layout Plan;
- ES Figure 2-4 Indicative Grid Connection Route Layout Plan;
- ES Figure 2-5 Construction, Operational and Decommissioning Accesses;
- ES Figure 2-6 Solar Development Area and Inter-Array Connections Illustrative Construction Layout Plan;
- ES Figure 2-7 Grid Connection Route Illustrative Construction Layout Plan;
- ES Figure 14-7 Drive Time Analysis;
- ES Figure 15-1 Traffic and Access Study Area;
- ES Figure 15-2 Existing Walking and Cycling Network;
- ES Figure 15-3 Heavy Goods Vehicle (HGV) Routing;
- ES Figure 15-4 Abnormal Indivisible Load (AIL) Routing;
- ES Figure 15-5 Staff Trip Routing;
- ES Figure 15-6 Cumulative Schemes; and
- ES Figure 15-7: Grid Connection Route Zones.

15.1.5. This chapter is supported by the following technical appendices (Doc. Ref. 6.3):

- ES Appendix 15-1: Traffic and Access Legislation, Policy and Guidance;

- ES Appendix 15-2: Traffic and Transport Significance Assessment Summary;
- ES Appendix 15-3: Receptor Traffic Flow Tables;
- ES Appendix 15-4 Transport Assessment Note;
- ES Appendix 15-5 Cumulative Schemes Traffic and Access Screening; and
- ES Appendix 15-6 Cumulative Scheme Traffic Flows.

15.1.6. Furthermore, this chapter is supported by the following Volume 7 documents;

- Outline Construction Environmental Management Plan (CEMP) (Doc. Ref. 7.10);
- Outline Decommissioning Environmental Management Plan (DEMP) (Doc. Ref. 7.12).
- Outline Construction Traffic Management Plan (CTMP) (Doc. Ref. 7.13);
- Outline Public Rights of Way Management Plan (PRoW-MP) (Doc. Ref. 7.15); and
- Outline Landscape and Ecology Management Plan (LEMP) (Doc. Ref. 7.16).

## 15.2. Legislation and Planning Policy

15.2.1. Full details of the policy and guidance (there is no specific legislation relevant to Traffic and Access) of relevance to the assessment of Traffic and Access are provided in **ES Appendix 15-1: Traffic and Access Legislation, Policy and Guidance** (Doc. Ref. 6.3).

15.2.2. It should be noted that there are several policies that relate to how Traffic and Access related impacts should be assessed, in terms of identifying both the level of impact of the Scheme and any necessary mitigation.

## 15.3. Stakeholder Engagement

15.3.1. A request for an EIA Scoping Opinion, provided in **ES Appendix 1-1: EIA Scoping Report** (Doc. Ref. 6.3), was sought from the Secretary of State through the Planning Inspectorate as part of the EIA Scoping Process. A summary of consultation responses in relation to Traffic and Access are presented in Table 15-1.

**Table 15-1: Scoping Opinion responses in relation to Traffic and Access**

| Consultee | Inspectorate's comments of main matters raised | How has the matter been addressed? | Location of response in the ES |
|---|---|---|---|
| Planning Inspectorate | **Operational phase assessment**<br>The Scoping Report estimates 7 LDV and 7 HGV movements per day during operation (page 144) which will not trigger the screening thresholds specified in the Institute of Sustainability and Environmental Professionals (ISEP) (Formerly known as IEMA) Guidelines – Environmental Assessment of Traffic and Movement (2023)[1].<br>On this basis, the Inspectorate is content that this matter can be scoped out of further assessment. However, the ES description of development should confirm the operational vehicle types and numbers (with reference to thresholds within guidance) to justify this position. | Operational Traffic and Access effects remain scoped out following the provision of relevant information regarding maintenance visits, consideration of ISEP thresholds and cumulative traffic effects outlined in Section 15.8. The Scheme is expected to attract a low level of vehicle trips during the operational phase, typically c. 11 vehicle arrivals and 11 vehicle departures daily (22 two- way daily movements), therefore the operational traffic is not expected to result in a significant impact on the surrounding highway network.<br>It is expected that during the operational phase the Scheme will be served by 10 full time staff per day and c. 5 visitors per week. | Section 15.8 of this ES Chapter. |

[1] Institute of Sustainability and Environmental Professionals (ISEP) Guidelines (2023). Environmental Assessment of Traffic and Movement

| Consultee | Inspectorate's comments of main matters raised | How has the matter been addressed? | Location of response in the ES |
|---|---|---|---|
| Planning Inspectorate | **Assessment of decommissioning traffic**<br>The Scoping Report states that effects during the decommissioning phase will be less than those during the construction phase and proposes to scope out this matter due to uncertainties in relation to future traffic flows. The Inspectorate acknowledges these potential limitations but does not agree that decommissioning can be excluded from the ES. The ES should provide information on the likely trip generation during decommissioning and confirm the assessment conclusions for the decommissioning phase, based on reasonable assumptions. Further details on the specific mitigation measures required to avoid likely significant effects should also be provided. | The decommissioning effects of the Scheme are expected to be of a similar (or lesser) magnitude to the construction phase effects. On this basis, the construction period is expected to have the greatest change on the surrounding transport network. Therefore, the likely impacts of the Scheme during the decommissioning phase (as well as any mitigation) have been based on the assessment of the construction phase. Any mitigation to be implemented during the construction and decommissioning phases will be secured through the DCO, including through the **Outline CTMP** (Doc. Ref. 7.13), **Outline PRoW-MP** (Doc. Ref. 7.15), **Outline CEMP** (Doc Ref. 7.10) and **Outline DEMP** (Doc. Ref. 7.12).<br>The decommissioning period is expected to last approximately two years and require fewer vehicle trips than the construction phase. In addition, this scenario is considered to be too far into the future to be able to accurately predict traffic flows or road/ junction layouts at | Section 15.7 of this ES Chapter sets out the embedded mitigation measures that have been incorporated into the Scheme design and Section 15.8 of this ES Chapter discusses the likely impacts and effects. |

| Consultee | Inspectorate's comments of main matters raised | How has the matter been addressed? | Location of response in the ES |
|---|---|---|---|
| | | that time. It is therefore considered reasonable to assume that the traffic flows during the decommissioning phase will be the same as, or not greater than, the construction phase. This may overestimate the actual impacts, but it is considered to be broadly accurate and robust. The impact would therefore be less than during the construction phase, but for the purposes of the assessment it has been conservatively assumed that the impacts are the same, and therefore range between negligible and minor adverse effects, which is not significant. | |
| Planning Inspectorate | **Access Routes**<br>Figure 2.8 depicts access routes to the Solar Development Areas. The access routes to the grid connection and construction compounds should be depicted in the ES, once determined. | This ES Chapter sets out the proposed construction routing for HGVs and AILs for the Grid Connection Route and construction compounds (see **ES Figure 15-3** and **ES Figure 15-4**) (Doc. Ref. 6.2). | See **ES Figure 15-3** and **ES Figure 15-4** (Doc. Ref. 6.2). |
| Planning Inspectorate | **Study area**<br>The ES should confirm the final study area and key roads included in the assessment and explain how they have | This ES Chapter sets out the proposed construction routing as well as the peak construction numbers associated with the most intensive phase of construction | See Section 0 of this ES Chapter and refer to **ES Figures 15-1** and **15-3** (Doc. Ref. 6.2). |

| Consultee | Inspectorate's comments of main matters raised | How has the matter been addressed? | Location of response in the ES |
|---|---|---|---|
| | been identified. A plan illustrating the extent of the study area, the expected route(s) of construction traffic and the anticipated numbers of vehicle movements (including vehicle type, peak hour and daily movements) should be included in the ES. | (including vehicle types required, hourly and daily movements. **ES Figure 15-1** shows the extent of the Traffic and Access Study area, whilst **ES Figure 15-3** sets out the proposed HGV routing to the access points (Doc. Ref. 6.2). This approach was discussed and agreed with LCC and National Highways (NH) in the Transport scoping meeting in September 2025. | |
| Planning Inspectorate | **Baseline conditions**<br><br>The Scoping Report presents the baseline conditions for the Solar Development Area only. Page 132 states that the location of new access for the Grid Connection Route will be subject to further assessment for access requirements. The baseline environment for the entire application site should be clearly described within the ES. | This ES Chapter sets out the baseline conditions for the whole extent of the Scheme, as shown within **ES Figure 15-1 Traffic and Access Study Area** (Doc. Ref. 6.2). Section 15.6 Baseline Conditions, describes the baseline environmental characteristics for the Scheme and the surrounding areas with specific reference to Traffic and Access, related to local highway network (traffics flows and collision data), walking, cycling and equestrian facilities (including the Public Rights of Way located within or in close proximity of the Scheme), public transport facilities (including bus and rail services) and future baseline conditions. | See Section 15.6 of this ES Chapter. |

| Consultee | Inspectorate's comments of main matters raised | How has the matter been addressed? | Location of response in the ES |
|---|---|---|---|
| Planning Inspectorate | **Abnormal Indivisible Loads (AILs)**<br><br>Page 135 of the Scoping Report states that where AILs are required, detailed swept path analysis will be undertaken with an AIL Transport Management Plan to be submitted in support of the DCO application. The impacts on safety from the delivery of AILs should be assessed within the ES where significant effects are likely to arise. Appropriate measures to ensure safe transportation of hazardous loads (if any) should be included within the AIL Transport Management Plan. | There are not expected to be any hazardous and dangerous loads associated with the Scheme, therefore the assessment of these has been scoped out of the ES. Nonetheless, the risk of accidents has been considered and assessed in relation to 'large' loads in Section 15.8.<br><br>Swept path analysis for the AILs required for the movements of materials to the relevant access points of the Scheme has been undertaken and set out in Annexes A to C of the **Outline CTMP** (Doc. Ref. 7.13). | See Section 15.8 of this ES Chapter and the **Outline CTMP** (Doc. Ref. 7.13). |
| Planning Inspectorate | **Cumulative effects**<br><br>Page 135 of the Scoping Report states that schemes that are in pre-application, or that do not have a planning determination, will not be included in the cumulative assessment. The Inspectorate does not agree with this approach. The assessment of cumulative effects should identify schemes for inclusion following | Details of the approach and assessment of the cumulative effects are included in Section 15.11.<br><br>The ES includes a cumulative assessment of other proposed developments in the study area. The list of cumulative proposed developments for review has been agreed with the LHAs and NH and are shown in **ES Figure 4-1** (Doc Ref. 6.2). Cumulative schemes considered in the cumulative | Section 15.11 of this ES Chapter, as well as **ES Figure 4-1** and **ES Figure 15-6** (Doc. Ref. 6.2). |

| Consultee | Inspectorate's comments of main matters raised | How has the matter been addressed? | Location of response in the ES |
|---|---|---|---|
| | the methodology set out in section 3.6 of the Scoping Report. | traffic assessment are shown on **ES Figure 15-6** (Doc Ref. 6.2). | |
| Planning Inspectorate | **Traffic Surveys**<br>Page 136 of the Scoping Report states that traffic counts will be undertaken, if considered necessary. The ES should identify the locations of traffic count surveys, explain how these locations were selected and confirm precise details of when the counts were undertaken. Effort should be made to agree these details with relevant local highway authorities. To provide assurance that the assessment of likely significant effects is supported by a robust dataset, the ES should include a justification to support the extent of the survey effort, including why the traffic data collected is considered to represent the typical (neutral) flow conditions on the network. | The ES Traffic and Access Chapter is based on the ISEP guidance on the Environmental Assessment of Traffic and Movement (July 2023). **ES Figure 15-1** (Doc. Ref. 6.2) sets out the proposed Study Area for Traffic and Access and shows the locations of traffic counts undertaken to support the ES chapter. This approach was discussed and agreed with the LCC before commissioning the traffic surveys and purchasing the Personal Injury Collision (PIC) data. Details associated with the methodology of the data and the assessment approach are set out within Section 15.4. | See Section 15.4 of this ES Chapter, as well as **ES Figure 15-1** (Doc. Ref. 6.2). |
| Planning Inspectorate | **Public Rights of Way (PRoWs)**<br>The Scoping Report states that there are numerous PRoW passing through and in proximity to the site. Surveys should be | Only two PRoWs within the Scheme would require temporary closure for four to six weeks. Management measures would be introduced at the other PRoWs, | See Section 15.8 of this ES Chapter and the **Outline PRoW Management Plan** (Doc. Ref. 7.15). |

| Consultee | Inspectorate's comments of main matters raised | How has the matter been addressed? | Location of response in the ES |
|---|---|---|---|
| | undertaken to provide baseline data in relation to the use of the PRoWs affected by the Proposed Development and the ES should provide a figure clearly depicting the location of said PRoWs. The ES should assess impacts to PRoW and on walking, cycling and horse-riding receptors from the Proposed Development such as the need for temporary closures or diversions, where significant effects are likely to occur.<br><br>Lincolnshire County Council has identified a number of walking, cycling and equestrian facilities. These should be identified in the ES and impacts on them assessed, where significant effects are likely. | which do not require closure, and on the Common Land on Martins Lane, to ensure that there would be no material impact on users. Following consultation with the LHAs, it was agreed that PRoW surveys are not required (in line with the methodology adopted on other Solar DCOs in LCC including Gate Burton Energy Park [EN010131], Tillbridge Solar [EN010142] and Fosse Green Energy [EN010154]).<br><br>Section 15.8 of this Chapter provides a PRoW assessment, including of the impacts on walking, cycling and horse-riding receptors, and any temporary closures, diversions or other management required. The effects range between negligible and minor adverse, which is not significant.<br><br>An **Outline PRoW Management Plan** (Doc. Ref. 7.15) has been produced to support the ES Traffic and Access chapter. The document sets out all the PRoW which are located within or in close proximity to the Scheme and sets out the proposed | |

| Consultee | Inspectorate's comments of main matters raised | How has the matter been addressed? | Location of response in the ES |
|---|---|---|---|
| | | management and mitigation measures to limit the impact on PRoW connectivity and PRoW users during the construction phase. | |

15.3.2. Further pre-application engagement was undertaken through the publication of the Preliminary Environmental Information Report (PEIR) as part of the statutory consultation. Table 15-2 outlines the main matters raised by statutory stakeholders relating to Traffic and Access during the statutory and targeted consultations and how these have been addressed through the ES.

**Table 15-2: Key matters raised by prescribed or statutory consultees in relation to Traffic and Access**

| Consultee | Summary of main matters raised | How has the matter been addressed? | Location of response |
|---|---|---|---|
| National Highways | NH acknowledge the construction baseline peak hour traffic flows are from 06:00 to 07:00 AM and 07:00 to 08:00 PM. We note that these fall outside of the SRN peak hours. Request further clarification on the rationale for selecting these time periods. For the assessment of traffic impacts on the SRN, NH expects network peak hours to be between 08:00 to 09:00 AM and 17:00 to 18:00 PM.<br><br>Request for consistency and recommend peak hour discrepancy be clarified / corrected. | Section 15.8 of this chapter sets out the Scheme peak hour as well as the network peak hour assessment (based on baseline data collected in September 2025). It should be noted that the local network peak has a different peak than the Strategic Road Network (SRN) due to the rural nature of the Scheme. The nearest SRN junction from the Scheme is located approximately 8 km away. | Section 15.8 of this chapter. |
| National Highways | We understand that the construction phase is between 2027 and 2030, and 2029 is the assumed peak year for construction traffic movement and will be used as the future assessment year to provide a worst-case assessment. | Section 0 of this chapter sets out the details of the construction period, which is now expected to occur between 2029 and 2033 with peak construction traffic expected to occur in 2031. Details on the duration of the construction programme are shown in Plate 2-13 of **ES Chapter 2: The Scheme** (Doc. Ref. 6.1). | Section 0 of this chapter.<br><br>**ES Chapter 2: The Scheme** (Doc. Ref. 6.1) |

| Consultee | Summary of main matters raised | How has the matter been addressed? | Location of response |
|---|---|---|---|
| National Highways | TEMPro has been used to derive traffic growth factors. Based on our independent review, the growth factors presented in do does not match the TEMPro outputs for the five locations. Request provision of the methodology used to extract the growth factors. | Section 15.6 of this chapter outlines the TemPRO growth rates which have been updated since the PEIR to provide robust rates for the peak construction year of 2031. These factors were agreed with LHAs and NH during the meeting in September 2025. | Section 15.6 of this chapter. |
| National Highways | NH acknowledge that the construction trip generation is estimated based on proxy sites and expected requirements for the scheme.<br><br>During construction, a daily 400 HGV movements and 570 construction workers have been identified.<br><br>NH welcomes the commitment by the applicant to ensure deliveries to the site are managed outside of peak network hours, thus minimising the impact on the A1 and the A47. However, it is noted that HGV deliveries will be restricted to 08.00-16.00 with some HGV deliveries taking place during the network AM peak hour of 08.00-09.00 which will have an impact on the SRN. A Delivery Management System should be | The **Outline CTMP** (Doc. Ref. 7.13) sets out the construction trips generation associated with the whole extent of the Scheme. HGV movements associated with the construction phase are expected to be managed across an 8-hour window outside of the SRN network peaks (08:00 – 09:00 and 17:00 – 18:00), however it is expected some HGV trips will be required in the local network peak of 16:00 – 17:00.<br><br>Peak daily traffic numbers for the Scheme are outlined in Section 15.8 of this chapter. | **Outline CTMP** (Doc. Ref. 7.13)<br><br>Section 15.8 of this chapter. |

| Consultee | Summary of main matters raised | How has the matter been addressed? | Location of response |
|---|---|---|---|
| | implemented to regulate HGV deliveries and compliance of HGV routing, however, to understand the proposed impact to the SRN, NH welcome further information on the likely number of vehicles arriving/departing the site during the peak of the construction period as a worse-case scenario. | | |
| National Highways | NH recognise that construction staff will work 12-hour shifts (Monday to Friday from 07:00-19:00). | Details on construction staff working hours are provided in Section 0. | Section 0 of this chapter. |
| National Highways | NH acknowledge that 95% of workers would travel by private vehicle. Initiatives such as shuttle services provision to encourage the use of sustainable transport modes to minimise the impacts of travel are recommended. | The **Outline CTMP** (Doc. Ref. 7.13) sets out updated assumptions associated with construction staff, 45% of staff are expected to travel by private vehicle, whilst 55% of staff are expected to travel in via Shuttle service provision – updated assumptions were discussed with LHAs and NH during the meeting in September 2025. | **Outline CTMP** (Doc. Ref. 7.13) |
| National Highways | NH acknowledges that a Transport Assessment (TA), Construction Traffic Management Plan (CTMP) and Environmental Statement (ES) will be | An **Outline CTMP** (Doc. Ref. 7.13) and ES has been prepared in support of the DCO Application. As agreed in the scoping meeting with | This ES chapter.<br>**Outline CTMP** (Doc. Ref. 7.13) |

| Consultee | Summary of main matters raised | How has the matter been addressed? | Location of response |
|---|---|---|---|
| | prepared in support of the planning application and request them for review. | LHAs and NH in September 2025, a Transport Assessment Note (TAN) has been prepared in place of a full TA and is included as **ES Appendix 15-4** (Doc. Ref. 6.3). | **ES Appendix 15-4: Transport Assessment Note** (Doc Ref. 6.3) |
| National Highways | Due to the scale and nature of the proposed development, traffic generated from the proposed development is likely to have an impact on the SRN, in particular the A47 trunk road. As such, National Highways would expect to be consulted on the TA which would form a key submission of any forthcoming planning application.<br><br>NH recommends that the TA is undertaken in a staged approach with the contents and methodology scoped out with NH and LCC in advance. As a starting point, it is suggested that the TA be prepared in accordance with Planning Practice Guidance on Travel Plans, Transport Assessments and Statements (March, 2014). In addition, due to the proximity of the site to the SRN, the TA should be produced in accordance with DfT Circular 01/2022: The Strategic Road | As noted above, during the Transport scoping meeting (September 2025) it was agreed with LCC, PCC and NH that a Transport Assessment Note (TAN) would be produced instead of a full TA in order to reduce duplication of information across a number of transport deliverables which support this ES Chapter. The TAN is compliant with Planning Practice Guidance on Travel Plans, Transport Assessments and Statements (March, 2014) and the DfT Circular 01/2022: *The Strategic Road Network and the Delivery of Sustainable Development*.<br><br>Details on the Scheme can be found in **ES Chapter 2: The Scheme** (Doc. Ref. 6.1). The trip generation, trip | **ES Appendix 15-4: Transport Assessment Note** (Doc. Ref. 6.3))<br><br>**ES Chapter 2: The Scheme** (Doc. Ref. 6.1)<br><br>Section 15.8 of this chapter.<br><br>**ES Figures 15-3, 15-4 and 15-5** (Doc. Ref. 6.2) |

| Consultee | Summary of main matters raised | How has the matter been addressed? | Location of response |
|---|---|---|---|
| | Network and the Delivery of Sustainable Development.<br><br>TA may need to include the following to satisfy NH:<br><br>• Development proposal details– information about the scale of the proposed development including any phasing, parking, access points, hours/days of operation, timescales for the construction period, and anticipated year of opening.<br><br>• Trip generation – information about the anticipated levels of traffic the development would generate. This should include a breakdown of trips generated for the different land uses within the development site. The data should include an hourly breakdown with a separate breakdown for the SRN peak hours and need to demonstrate true network peaks in this location.<br><br>• Trip assignment – information about traffic routings in relation to the SRN.<br><br>• Depending on the scale and distribution of new trips, it may be necessary to indicate how traffic associated with the | distribution and traffic routing pertaining to the Scheme are discussed in section 15.8 of this chapter of the ES. The HGV, AIL and staff trip routing are also shown in **ES Figures 15-3, 15-4 and 15-5** (Doc. Ref. 6.2).<br><br>The Scheme is not expected to generate any impact on the SRN in the SRN AM or PM peak hours identified in the comment (08:00 – 09:00 and 17:00 – 18:00) as all trips to and from the Site are expected to occur outside of these hours. | |

| Consultee | Summary of main matters raised | How has the matter been addressed? | Location of response |
|---|---|---|---|
| | development proposal will impact on the SRN in the peak hours. These impacts should be considered for the site both as a standalone operation, and cumulatively with any wider committed developments.<br>• Where further assessments are deemed necessary, these should be carried out for the development based on the year of opening. This is the opening year assessment and is to comply with DfT Circular 01/2022. Where the development is to be brought forward in phases, an opening year assessment for each phase will be required. | | |
| National Highways | **Construction Traffic Management Plan (CTMP)**<br>The CTMP should identify the period(s) during which construction activities will take place, the number of trips likely or be generated, the types of vehicles involved, and, for heavy construction traffic, an appropriate diversion route or traffic management plan to minimise local impacts. | The **Outline CTMP** (Doc. Ref. 7.13) also sets out details regarding abnormal loads, hours of working, access arrangements and compliance and enforcement measures. An information pack containing details on site contact information and complain procedures will be issues to all contractors once they have been confirmed. | **Outline CTMP** (Doc. Ref. 7.13) |

| Consultee | Summary of main matters raised | How has the matter been addressed? | Location of response |
|---|---|---|---|
| | NH requires further information on the routing, timing and management of any special or abnormal deliveries or vehicular movements. The CTMP should include the following details:<br>• Hours of working, date works will commence and anticipated completion date/ duration.<br>• Anticipated average two-way daily traffic numbers associated with the construction phase of the project.<br>• Confirmation of the intended construction access arrangements to and from the site from the SRN (A47).<br>• The arrangements for routing construction vehicles to and from the site.<br>• Details of any special or abnormal deliveries or vehicular movements.<br>Site Contact Details responsible for ensuring Health & Safety and handling of complaints. | | |
| Lincolnshire County Council | TA which is to be prepared will need to show appropriate mitigation in the form of sufficient passing places such that the | As set out within the **Outline CTMP** (Doc Ref. 7.13), the Applicant anticipates temporary passing | **Outline CTMP** (Doc. Ref. 7.13) |

| Consultee | Summary of main matters raised | How has the matter been addressed? | Location of response |
|---|---|---|---|
| | proposed vehicles can pass safely on these routes. No detailed proposals have been provided.<br><br>Currently, many of these routes have very low traffic flows and the construction traffic would add significant numbers of vehicles. Details of numbers, locations, and schematic layouts of the proposed passing places on all single-track roads will need to be provided in the TA. | places to be required on Martins Road (see **Streets, Rights of Way and Access Plans,** Section A, Sheets 5&6 (Doc Ref. 2.6)) and Langary Gate Road (see **Streets, Rights of Way and Access Plans**, Section A, Sheets 9-12 (Doc Ref. 2.6)). A detailed temporary passing place strategy is to be agreed with LCC. The Order Limits incorporate sufficient space for temporary passing places to be provided. The expected traffic flows on all receptors are outlined in Section 15.8 of this chapter. | Section 15.8 |
| Lincolnshire County Council | Cumulative Effects: More evidence will be required in the TA that other NSIPs (especially Outer Dowsing Offshore Wind (ODOW) which has recently completed its examination) have been considered. ODOW adds significant traffic to main road network and it would be helpful to include an additional column of other committed developments. | The cumulative schemes effects of nearby schemes including neighbouring NSIPs have been considered in section 15.11 of this chapter. | Section 15.11 of this chapter. |

| Consultee | Summary of main matters raised | How has the matter been addressed? | Location of response |
|---|---|---|---|
| Lincolnshire County Council | Accesses will require layout drawings showing visibility splays, swept path details. | Details on the layouts, visibility splays and swept paths required for site accesses are shown in Annex B of the **Outline CTMP** (Doc. Ref. 7.13). | **Outline CTMP** (Doc. Ref. 7.13) |
| Lincolnshire County Council | Existing Walking Facilities: The descriptions are unclear and several walking routes are missing. | Details on local walking facilities are outlined in Section 15.6 of this chapter of the ES. Local PRoW are also shown in **ES Figure 15-2** (Doc. Ref. 6.2). | Section 15.6 of this chapter.<br>**ES Figure 15-2** (Doc. Ref. 6.2). |
| Lincolnshire County Council | Existing Cycling Facilities: The report states 'No formal on or off-road cycling network'. No mention of the bridleway network. | Details on local cycling and equestrian facilities are outlined in Section 15.6 of this chapter. | Section 15.6 of this chapter. |
| Lincolnshire County Council | The advice and suggested changes provided below regarding equestrian facilities listed in the PEIR do not appear to have been included in the published PEIR. | Details on local equestrian facilities are outlined in Section 15.6 of this chapter. | Section 15.6 of this chapter. |
| Peterborough City Council | The survey area does not include the A47/A16 junction and does not include PCC network peak hours. | The traffic and access study area has been updated from the PEIR stage and was presented and agreed at the scoping meeting in September 2025, which was attended by PCC. The study area is shown in **ES Figure 15-1: Traffic** | **ES Figure 15-1** (Doc Ref 6.2);<br>Section 0 of this chapter. |

| Consultee | Summary of main matters raised | How has the matter been addressed? | Location of response |
|---|---|---|---|
| | | **and Access Study Area** (Doc. Ref. 6.2).<br><br>All trips associated with the Scheme will occur outside of the PCC Network peaks and therefore no impacts are expected which will require additional capacity assessments. | |
| Peterborough City Council | Peterborough network peak hours for the morning and evening must be considered when assessing the site's impacts. If the level of impact within the peak hours is less than 30 two-way PCU trips at any single junction then no additional capacity assessments would be required, however if they are above this then further assessments will be required. | All trips associated with the Scheme will occur outside of the PCC Network peaks and therefore no impacts are expected which will require additional capacity assessments. | Section 0 and Section 15.8 of this chapter. |
| Peterborough City Council | The Applicant has advised within Section 13.10.4 that there will be approximately 900 FTE workers during the construction phase. | The construction staff numbers have been updated from the PEIR stage and are presented in Section 0 of this chapter. | Section 0 of this chapter. |
| Peterborough City Council | [The Applicant has] assumed that 5% (45 of 900 workers) of workers will travel by | The mode share assumptions for the ES Chapter have been updated from the PEIR stage and are | Section 15.4 of this chapter. |

| Consultee | Summary of main matters raised | How has the matter been addressed? | Location of response |
|---|---|---|---|
| | alternative modes (bus/walk), with the remaining 90% travelling by car.<br><br>The closest bus service is the No.37 Stagecoach between Peterborough and Spalding. This leaves Peterborough at 5am and is an hourly service. However, if traveling from Spalding to the Site the first bus is at 06:19 which falls outside the staff starting hours.<br><br>A review of the walking distance from the site to the closest bus stop has been undertake and, apart from Gate A5, all other gates are positioned in excess of 500m from the site. Furthermore, the walking routes from the bus stop to the gates will require staff to walk along unlit roads with no footways. The Applicant needs to consider how those using the bus service will safely assess the site and the Applicant needs to reconsider if 5% of staff will travel to the site via bus given the service times | presented in Section 15.4 of this chapter. It has been assumed that no staff will travel to the Scheme by bus or by walking to provide a robust assessment of traffic flow impacts. | |
| Peterborough City Council | The Applicant has also assumed that the remaining 95% of staff, will travel with an average occupancy of 1.5 staff per vehicle | The assumed vehicle occupancy rate has been updated from the PEIR stage to 1.3 for the purposes | Section 15.4 of this chapter. |

| Consultee | Summary of main matters raised | How has the matter been addressed? | Location of response |
|---|---|---|---|
| | resulting in 570 staff vehicles. However, it is unclear how these assumptions have been formed from. The LHA consider that this assumption is too high, and less staff will car share. This ratio will have an impact on the level of traffic on the network and therefore must be reviewed. | of the traffic assessment contained within the ES Chapter. This is detailed in Section 15.4 of this chapter.. | |
| Peterborough City Council | The Applicant has advised that the key junction study area was agreed with LCC highways on the 18th October 2024 and the key junctions have been outlined within Tabel 13-4 of Chapter 13 of the PEIR.<br><br>The LHA note that the A16 junction with the B1443 (west of Newborough) has been included within the study area.<br><br>The Applicant has also advised that "National Highways will also need to be engaged as their closest route is the A47 which intersects the A16 to the south of the Site (approximately 8km)". However, the LHA consider that the A47/A16 junction needs to be included within the study area at this stage. | The traffic and access study area has been updated from the PEIR stage and was presented at the scoping meeting in September 2025, which was attended by PCC. The study area is shown in **ES Figure 15-1: Traffic and Access Study Area** (Doc. Ref. 6.2) | **ES Figure 15-1** (Doc Ref 6.2) |

| Consultee | Summary of main matters raised | How has the matter been addressed? | Location of response |
|---|---|---|---|
| Peterborough City Council | The Applicant should note that their significant highway works proposed to the A47 and A16, including the installation of a new roundabout to serve a residential housing development situated between A16, A47 and Newborough Road. There is not a start date to the proposed works, however there are triggers tied into the planning applications associated with these sites. | The traffic and access study area has been updated from the PEIR stage and was presented at the scoping meeting in September 2025, which was attended by PCC. The study area is shown in **ES Figure 15-1: Traffic and Access Study Area** (Doc. Ref. 6.2) | **ES Figure 15-1** (Doc. Ref. 6.2) |
| Peterborough City Council | The Applicant has advised that site operating hours will be:<br>- Workers will travel to/from site 06:00 to 07:00 and 19:00 to 20:00<br>- HGV movements would be distributed across an 8-hour period (08:00-16:00)<br>The Applicant has advised that following analysis of the survey data the AM and PM peak hours have been determined, and therefore the Traffic Flow Diagrams are based on the following hours:<br>- 06:00 – 07:00<br>- 07:00-08:00<br>- 16:00-17:00 | The proposed working hours, and the hours which have been evaluated as part of the traffic assessment for the ES stage, have been updated from the PEIR stage and are presented in Section 0 of this chapter.<br>The proposed timings of the HGV movements have been adjusted to occur between 09:00 and 17:00 and so will avoid travelling during the PCC network peaks, i.e. there will be no development traffic on the network between 08:00 and 09:00. | Section 0 of this chapter.<br>**Outline CTMP** (Doc Ref. 7.13). |

| Consultee | Summary of main matters raised | How has the matter been addressed? | Location of response |
|---|---|---|---|
| | - 19:00-20:00<br>- 24 hours<br>Whilst these are identified as the peak hours, the hours from 08:00-09:00 and 17:00-18:00 are also significantly higher than the remainder of the day in terms of trip rates. The HGV movements will be on the network between 08:00 and 16:00, and therefore 08:00-09:00 should be included within the Traffic Flow Diagrams. This will assist the LHA in determine what impact the HGV movements will have on the network during these peak periods. | This is set out in the **Outline CTMP** (Doc Ref. 7.13). | |
| Peterborough City Council | Furthermore, the Applicant has not identified PCC's peak network due to the limited scope of the survey area. Peterborough network peak hours for the morning and evening must be considered when assessing the site's impacts. | All trips associated with the development will occur outside of the PCC Network peaks and therefore no impacts are expected which will require additional capacity assessments. | Section 0 and Section 15.8 of this chapter. |
| Peterborough City Council | The Applicant has advised that there will be approximately 200 HGV deliveries per day (400 two-way movements). The Trip Assignment indicated that 93 HGVs (46%) | The number of HGVs associated with the Scheme has been updated from the PEIR stage for the purposes of the traffic assessment | Section 0 and Section 15.8 of this chapter. |

| Consultee | Summary of main matters raised | How has the matter been addressed? | Location of response |
|---|---|---|---|
| | will travel to the site and 93 HGVs will leave the site via A16 towards the A47. Therefore, it is essential that the LHA understand what impact this will have on PCC peak hours. | contained within the ES Chapter. The updated numbers are outlined in Section 0.<br><br>All trips associated with the development will occur outside of the PCC Network peaks and therefore no impacts are expected which will require additional capacity assessments. | |
| Peterborough City Council | For the purpose of this part of the report, the LHA have used the Applicants assumption that 570 staff will drive to the site by car. When comparing to the Development Trip Assignment, this demonstrates that 305 worker vehicles will access the site from the south (A16/A47 junction). This represents 53% of the total worker traffic travelling to the site via PCC network (however following a further assessment as defined within the Worker journey section of this report, this figure could be higher).<br><br>To conclude from the current assessment 46% of the total HGV traffic and 53% of worker traffic will access the site via the | The construction staff numbers have been updated from the PEIR stage and are presented in Section 0.<br><br>Routing to the site for all vehicle types is presented in **ES Figures 15-3, 15-4 and 15-5** (Doc. Ref. 6.2).<br><br>The increase in expected traffic flows associated with the Scheme is presented in Section 15.8.<br><br>The traffic and access study area has been updated from the PEIR stage and was presented at the scoping meeting in September 2025, which was attended by PCC. | **ES Figures 15-3, 15-4 and 15-5** (Doc. Ref. 6.2)<br><br>Section 0 and Section 15.8 of this chapter.<br><br>**ES Figure 15-1** (Doc. Ref. 6.2) |

| Consultee | Summary of main matters raised | How has the matter been addressed? | Location of response |
|---|---|---|---|
| | A16/A47 junction. The LHA therefore object to the proposed development as this junction has not been included within the assessment. The LHA require further assessments to been carried out on PCC network and the A47 junction to understand the impact this development could have on the network and what mitigation measures may be required. | The study area is shown in **ES Figure 15-1: Traffic and Access Study Area** (Doc. Ref. 6.2). | |
| Peterborough City Council | The Applicant has advised that it is estimated that construction of the Scheme would last 24 to 36 months, with construction of the Grid Connection requiring 18 to 24 months of this construction phase.<br><br>The LHA do not consider that the proposed construction period would be short-term, as the works could take up to 3 years to complete. This will impact PCC network for the duration of the construction traffic, and associated developments in this area. Therefore a further assessment of trips to the site, PCC peak network periods, and the Traffic Flow Diagrams needs to be reviewed. | The construction programme has been updated from the PEIR stage for the ES Chapter and is outlined in **ES Chapter 2: The Scheme** (Doc. Ref. 6.1).<br><br>An updated assessment of trips to the site has been undertaken for the ES Chapter. The results of this assessment are presented in Section 15.8 and indicate that no significant impacts are expected. | Section 15.8 of this chapter. |

| Consultee | Summary of main matters raised | How has the matter been addressed? | Location of response |
|---|---|---|---|
| South Holland District Council | The Council would like to have a clear understanding of:<br>• A map of access roads. | **ES Figure 2-5** (Doc. Ref. 6.2) shows the location of all proposed construction, operational and decommission accesses for the Scheme. The designs for each of these accesses are shown in Annex B of the **Outline CTMP** (Doc. Ref. 7.13). | **ES Figure 2-5** (Doc. Ref. 6.2)<br>**Outline CTMP** (Doc. Ref. 7.13) |
| South Holland District Council | The Council would like to have a clear understanding of:<br>• How small local roads will cope with increased volumes and physical weight of traffic, including accommodation of HGVs. | Small local roads will be avoided for traffic routing except where strictly necessary (e.g. those on which a site access is proposed to be located). The proposed routing strategy for HGVs is set out in **ES Figure 15-3** (Doc. Ref. 6.2). and was agreed with LCC and NH in the Transport scoping meeting in September 2025. | **ES Figure 15-3** (Doc. Ref. 6.2) |
| South Holland District Council | The Council would like to have a clear understanding of:<br>• Plan for the roads that will be used in case of closure of primary routes. | Planned road closures are shown in the **Streets, Rights of Way and Access (SRoWA) Plans** (Doc. Ref. 2.6). Diversion routes will be established and agreed with the | **SRoWA Plans** (Doc. Ref. 2.6) |

| Consultee | Summary of main matters raised | How has the matter been addressed? | Location of response |
|---|---|---|---|
| | | relevant LHA at the time of implementation. | |
| South Holland District Council | The Council would like to have a clear understanding of:<br>• Plans for repair and maintenance of roads, during construction, during the lifetime of the project and the decommissioning stage. | Road condition surveys will be carried out prior to, during and after the construction period to identify any defects that arise to highways assets/verges during the construction phase of the Scheme for reinstatement. Details of where these are proposed to be undertaken are found in the **Outline CTMP** (Doc. Ref. 7.13). | **Outline CTMP** (Doc. Ref. 7.13). |
| South Holland District Council | The Council would like to have a clear understanding of:<br>• An independent assessment of the impact of any increase in traffic through Gedney Hill on the roads being used as links to the construction site and re-routing of traffic through the village when roads become too busy due to construction traffic. | As shown in **ES Figures 15-3 and 15-4** (Doc. Ref. 6.2), no HGV or AILs will travel through the Gedney Hill area as part of the routing strategy for the Scheme. In addition, **ES Figure 15-5** (Doc. Ref. 6.2) shows the expected staff trip routing which has been produced using a Gravity Model based on Census data and the Google Maps journey planner. The Gravity Model assessment indicates that staff are | **ES Figures 15-3, 15-4 and 15-5** (Doc. Ref. 6.2) |

| Consultee | Summary of main matters raised | How has the matter been addressed? | Location of response |
|---|---|---|---|
| | | unlikely to travel through the Gedney Hill area to access the Site. | |
| South Holland District Council | The Council would like to have a clear understanding of:<br>• Clarity on the effects of construction, this should include, but not be limited to, working hours, numbers of workers on site, numbers of vehicles using the roads and how long construction would be expected to take. | The expected working hours construction staff numbers and construction period are outlined in Section 0 of this chapter. Details on the number of vehicles associated with the Scheme are contained in section 15.8 of this chapter. | Section 0 and Section 15.8 of this chapter. |
| South Holland District Council | The Council would like to have a clear understanding of:<br>• Further reporting on noise pollution, effects of vibration and changes in air quality in the areas around Gedney Hill | Details on the expected effects on noise pollution, effects of vibration and changes in air quality caused by the Scheme are outlined in **ES Chapter 6: Air Quality** and **ES Chapter 13: Noise and Vibration** (Doc. Ref. 6.1). | **ES Chapter 6: Air Quality** and **ES Chapter 13: Noise and Vibration** (Doc. Ref. 6.1) |
| South Holland District Council | The Council would like to have a clear understanding of:<br>• Extent and requirement of above ground structures, chosen routes and substation connection. | Details on the design of the scheme can be found in **ES Chapter 2: The Scheme** (Doc. Ref. 6.1). Routing for construction vehicles is shown in **ES Figures 15-3, 15-4 and 15-5** (Doc. Ref. 6.2) and discussed in the **Outline CTMP** (Doc. Ref. 7.13). | **ES Chapter 2: The Scheme** (Doc. Ref. 6.1)<br>**ES Figures 15-3, 15-4 and 15-5** (Doc. Ref. 6.2)<br>**Outline CTMP** (Doc. Ref. 7.13). |

| Consultee | Summary of main matters raised | How has the matter been addressed? | Location of response |
|---|---|---|---|
| South Holland District Council | Stakeholder is requesting the following pertaining to Traffic and Transport:<br>• One community liaison person in place for contact with any issues should they arise during construction | A community liaison officer for contact regarding construction issues will be identified once a contractor has been appointed, as set out within the **Outline CEMP** (Doc Ref. 7.10). | **Outline CEMP** (Doc Ref. 7.10). |
| South Holland District Council | Stakeholder is requesting the following pertaining to Traffic and Transport:<br>• Consideration of the effect of mud on roads as well as the impact of HGVs on roads; | Details on how roads will be managed to mitigate impacts such as increase volume of traffic and physical weight, repair and maintenance, muddy roads and potential road closures are set out in the **Outline CTMP** (Doc. Ref. 7.13). | **Outline CTMP** (Doc. Ref. 7.13). |
| South Holland District Council | Stakeholder is requesting the following pertaining to Traffic and Transport:<br>• Consideration of works traffic hours in relation to effects on local transport | Details on the working hours, peak worker numbers on site, peak construction traffic and the duration of the construction period are set out in the **Outline CTMP** (Doc. Ref. 7.13) and in Sections 15.4 and 15.6 of this chapter. | Section 15.4 and Section 15.6 of this chapter.<br>**Outline CTMP** (Doc. Ref. 7.13) |
| South Holland District Council | Stakeholder is requesting the following pertaining to Traffic and Transport: | Details pertaining to remediation and reinstatement after the workers have been undertaken will be | **Outline CTMP** (Doc. Ref. 7.13) |

| Consultee | Summary of main matters raised | How has the matter been addressed? | Location of response |
|---|---|---|---|
| | • A full scheme of remediation and reinstatement after the works have been undertaken. | contained within the Framework CTMP, as set out within the **Outline CTMP** (Doc. Ref. 7.13). | |
| Moulton Parish Council | Concern for the HGVs and equipment on the local roads which are not in a good condition to support large traffic volumes and HGVs. | The ES Traffic and Access Chapter sets out the proposed construction routing (see **ES Figure 15-3** (Doc. Ref. 6.2)).<br><br>The **Outline CTMP** (Doc. Ref. 7.13) provides further information on the proposed construction traffic management during the construction phase. Appropriate routing of vehicles and HGVs will be adopted to minimise the impact on more sensitive and rural roads. This approach was discussed and agreed with the LHAs in the Transport scoping meeting in September 2025. It is assumed that construction traffic will adopt the most appropriate routes to and from the Scheme via the A16 and A151 for the Grid Connection Route, with internal movements undertaken via internal access | **ES Figure 15-3** (Doc. Ref. 6.2)).<br><br>**Outline CTMP** (Doc. Ref. 7.13) |

| Consultee | Summary of main matters raised | How has the matter been addressed? | Location of response |
|---|---|---|---|
| | | tracks to reduce the movements (other than crossing) on more rural/ sensitive roads (where practical). | |
| Fenland District Council | Stakeholder highlights that the proposal is being developed in a wider regional context where a number of nationally significant and major infrastructure projects are already progressing or proposed, including:<br>• The Fens Reservoir (Anglian Water and Cambridge Water)<br>• National Grid's Eastern GREEN links and Grimsby to Walpole projects<br>• Other solar and renewable energy schemes and associated grid infrastructure.<br>The cumulative construction impacts of these developments are likely to place increasing pressure on rural roads and local communities and that Fenland's highway network is sensitive to increased HGV movements. Collaborative work with relevant authorities and infrastructure promoters is encouraged to develop a coordinated traffic management approach, | Details of the approach and assessment of the cumulative effects are included in Section 15.11 of this chapter.<br>The ES includes a cumulative assessment of other proposed developments in the study area. The list of cumulative proposed developments for review has been agreed with the LHAs and includes the proposed developments listed. | Section 15.11 of this chapter. |

| Consultee | Summary of main matters raised | How has the matter been addressed? | Location of response |
|---|---|---|---|
| | including mitigation of overlapping construction periods, defined routing strategies, and effective communication with residents and businesses. | | |
| SHDC | Highways and Infrastructure: There are concerns that sustained HGV movements during construction would place unacceptable pressure on narrow, lightly constructed rural roads that are already sensitive to ground conditions. | HGV flows associated with the Scheme on links within the study area are shown in **ES Appendix 15-3** (Doc. Ref. 6.3), and the assessment of traffic impacts shown in section 15.8 of this chapter indicates that no significant effects are expected as a result of traffic flows, including HGV flows, associated with the Scheme.<br><br>The **Outline CTMP** (Doc. Ref. 7.13) sets out management and mitigation measures relating to HGV movements, which will include timing and routing restrictions to minimise the impacts of HGV traffic on narrow rural roads. Road conditions surveys will be carried out before, during and after the construction phase to identify any impacts to highways assets/verges | **ES Appendix 15-3** (Doc. Ref. 6.3)<br><br>Section 15.8 of this chapter<br><br>**Outline CTMP** (Doc. Ref. 7.13) |

| Consultee | Summary of main matters raised | How has the matter been addressed? | Location of response |
|---|---|---|---|
| | | which occur during the construction phase of the Scheme. A full list of roads at which condition surveys are proposed to be undertaken is contained within the **Outline CTMP** (Doc. Ref. 7.13). | |
| | Infrastructure & Noise: Concerns over the ability of single-track rural roads to handle construction traffic. | The assessment of traffic impacts included in section 15.8 of this chapter indicates that no significant impacts are expected as a result of traffic flows associated with the Scheme on any of the assessed local roads, which includes all single-track rural roads expected to be used as part of the construction routing for the Scheme. The proposed construction routing is shown in **ES Figure 15-3** (Doc. Ref. 6.2). | Section 15.8 of this chapter.<br>**ES Figure 15-3** (Doc. Ref. 6.2). |
| | Although this particular consultation won't directly impact the village of Cowbit, the construction of the project will cause damage to our roads and properties. Spalding Road has been closed for some months now, due to underground movement which has caused long, deep cracks to open up. The | The assessment of traffic impacts included in section 15.8 of this chapter indicates that no significant effects are expected as a result of traffic flows associated with the Scheme on any of the assessed local roads, which includes any roads in | Section 15.8 of this chapter<br>**Outline CTMP** (Doc. Ref. 7.13) |

| Consultee | Summary of main matters raised | How has the matter been addressed? | Location of response |
|---|---|---|---|
| | road is to remain closed for the foreseeable future as the cost of repair is thought to be in excess of £4 million. At last night's meeting, we were advised by County Cllr Thomas Sneath, that when it does eventually reopen, it will likely be with a reduced speed and weight limit. | the vicinity of Cowbit such as Spalding Road (identified as Receptor L21 in this assessment). It is expected that there will be a maximum peak daily movement of 40 HGVs along this receptor during the construction phase, with no HGVs using the road during the AM or PM network peaks.<br><br>Any future changes to the weight and speed limits on local roads, which may be introduced by LCC, will be accounted for in the Framework CTMP(s) which will be prepared post-consent. Road conditions surveys will be carried out before, during and after the construction phase to identify any impacts to highways assets/verges which occur during the construction phase of the Scheme, including on Barrier Bank/Spalding Road. Further details on road condition surveys are provided in the **Outline CTMP** (Doc. Ref. 7.13). | |

15.3.3. Additional consultation has been undertaken with key stakeholders including LCC, NH and PCC during the transport update meeting on 18th September 2025.

15.3.4. This meeting reviewed the statutory consultation comments and how these would be addressed as part of the ES assessment. In addition, an updated approach for the trip distribution and generation for the whole extent of the Scheme and a robust approach to assessing construction peaks was presented.

15.3.5. Table 15-3 provides a summary of further meetings held and key correspondence with relevant stakeholders for Traffic and Access.

**Table 15-3: Stakeholder engagement relating to Traffic and Access**

| Consultee | Date | Format | Summary of Discussion |
|---|---|---|---|
| LCC, Highways | 11/03/2024 | MS Teams | Initial discussion with LCC, Highways on the extent of required assessments and scope of the transport and access section of the ES. |
| LCC, Highways | 06/09/2024 | Email correspondence | Agreement with LCC, Highways on the proposed traffic survey extent for the Solar Development Areas. |
| LCC, Highways | 18/10/2024 | MS Teams | Agreement with LCC, Highways on the updated traffic survey extent to cover both the Solar Development Area, Inter-array Connections and Grid Connection Route. |
| LCC Highways, NH, PCC and SHDC | 18/09/2025 | MS Teams | Set out the proposed methodology and assessment assumptions for the ES stage as well as providing updates on the Scheme since the PEIR stage. |

## 15.4. Assessment Methodology

### Study Area

15.4.1. The Scheme would comprise the construction, operation (including maintenance) and decommissioning of a solar PV electricity generating station with associated infrastructure, including co-located Battery Energy Storage System (BESS), Inter-Array Connections to link the land parcels that form the Solar Development Areas, and an up to 13km overhead line Grid Connection (with one short undergrounded section) which would run north towards a point of connection (PoC) at the proposed Weston Marsh B National Grid Electricity Transmission (NGET) substation, to the north of Weston. The components of the Scheme are shown on **ES Figure 1-1** (Doc Ref. 6.2).

15.4.2. The Traffic and Access Study Area for the Scheme is shown on **ES Figure 15-1** (Doc. Ref. 6.2) and has been discussed and agreed with the local authorities and NH. The Study Area includes the local highway network in the vicinity of the Scheme which will be utilised by construction traffic to/ from the Scheme.

15.4.3. The Study Area has been defined to include areas of the highways and public footpaths (including Public Rights of Way (PRoW) networks and Common Land) which, based on professional judgement and experience of other similar solar Nationally Significant Infrastructure Projects (NSIPs), are considered to be Traffic and Access features which could potentially be impacted by the Scheme.

15.4.4. For the purposes of the traffic assessment, the Grid Connection Route has been divided into four separate zones as shown in **ES Figure 15-7** (Doc Ref. 6.2) to provide a granular assessment of which local roads will be affected by construction traffic travelling to and from the different parts of the Grid Connection Route.

15.4.5. Consideration has been given to a number of links and junctions within the surrounding highway network which could potentially be impacted by trips associated with the Scheme and have therefore been chosen as receptors. Analysis of two-way traffic flows at these receptors has formed the basis of this assessment.

15.4.6. Traffic flow data for each receptor has been taken from one of the following sources:

- Automatic Traffic Count (ATC) surveys conducted in November 2024 / July and September 2025;

- Manual Classified Count (MCC) surveys conducted in November 2024 / July 2025;
- DfT Manual Traffic Counts conducted in 2024 (latest data available).

15.4.7. Table 15-4 and Table 15-5 below list the link and junction receptors which have been considered as part of this assessment. The locations of the respective traffic surveys which provide the traffic flow data for these receptors, as well as the general locations of the receptors themselves, are shown in **ES Figure 15-1** (Doc. Ref. 6.2).

**Table 15-4: Local Link Receptors**

| ID | Link Name/Description | Road Type | Survey Source Date | Survey Source Type | Part of Network |
|---|---|---|---|---|---|
| L1 | A16 Spalding Bypass (North-East of Spalding) | A Road | 2025 | MCC | Grid Connection Route |
| L2 | Cross Gate | Minor | 2025 | ATC | Grid Connection Route |
| L3 | A151 Holbeach Road | A Road | 2025 | ATC | Grid Connection Route |
| L4 | A151 Weston Bypass | A Road | 2025 | MCC | Grid Connection Route |
| L5 | A151 High Road | A Road | 2025 | MCC | Grid Connection Route |
| L6 | Stone Gate | Minor | 2025 | ATC | Grid Connection Route |
| L7 | A16 Spalding Bypass (East of Spalding) | A Road | 2025 | MCC | Grid Connection Route |
| L8 | Broadgate | Minor | 2025 | ATC | Grid Connection Route |
| L9 | Delgate Bank (North) | Minor | 2025 | ATC | Grid Connection Route |
| L10 | Long Lane | Minor | 2025 | ATC | Grid Connection Route |

| ID | Link Name/Description | Road Type | Survey Source Date | Survey Source Type | Part of Network |
|---|---|---|---|---|---|
| L11 | B1165 Austendike Road | Minor | 2025 | ATC | Grid Connection Route |
| L12 | Delgate Bank (Central) | Minor | 2025 | ATC | Grid Connection Route |
| L13 | West Gate | Minor | 2025 | ATC | Grid Connection Route |
| L14 | A16 Spalding Bypass (South-East of Spalding) | A Road | 2025 | MCC | Grid Connection Route |
| L15 | A16 Cowbit Road | A Road | 2025 | MCC | Grid Connection Route |
| L16 | B1357 Moulton Chapel Road | Minor | 2025 | ATC | Grid Connection Route |
| L17 | Delgate Bank (South) | Minor | 2025 | ATC | Grid Connection Route |
| L18 | A16 Crowland Bypass (Near Crowland Airfield) | A Road | 2025 | ATC | Solar Development Area |
| L19 | Queen's Bank | Minor | 2025 | ATC | Solar Development Area |
| L20 | Cloot Drove | Minor | 2025 | ATC | Solar Development Area |
| L21 | Barrier Bank | Minor | 2025 | ATC | Solar Development Area |
| L22 | James Road | Minor | 2025 | MCC | Solar Development Area |

| ID | Link Name/Description | Road Type | Survey Source Date | Survey Source Type | Part of Network |
|---|---|---|---|---|---|
| L23 | Hull's Drove (West) | Minor | 2025 | MCC | Solar Development Area |
| L24 | Martins Road | Minor | 2025 | ATC | Solar Development Area |
| L25 | Hull's Drove (East) | Minor | 2025 | MCC | Solar Development Area |
| L26 | Eaugate Road | Minor | 2025 | ATC | Inter-Array Connections |
| L27 | Chapel Hill | Minor | 2025 | ATC | Inter-Array Connections |
| L28 | Chapel Gate | Minor | 2025 | ATC | Inter-Array Connections |
| L29 | Dog Drove North | Minor | 2025 | ATC | Inter-Array Connections |
| L30 | Holbeach Drove Gate | Minor | 2025 | ATC | Inter-Array Connections |
| L31 | B1166 Long Lane | Minor | 2025 | MCC | Solar Development Area |
| L32 | Langary Gate Road | Minor | 2025 | ATC | Solar Development Area |
| L33 | A16 Crowland Bypass (East of Crowland) | A Road | 2025 | MCC | Solar Development Area |
| L34 | A16 (South of Crowland) | A Road | 2025 | ATC | Solar Development Area |

| ID | Link Name/Description | Road Type | Survey Source Date | Survey Source Type | Part of Network |
|---|---|---|---|---|---|
| L35 | A16 (North of Peterborough) | A Road | 2024 | MCC | Solar Development Area |

**Table 15-5: Local Junction Receptors**

| ID | Junction Name/Description | Road Type | Survey Source Date | Part of Network |
|---|---|---|---|---|
| J1 | A16 / A151 Roundabout | A Road | 2025 | Grid Connection Route |
| J2 | A151 / High Road Roundabout | A Road | 2025 | Grid Connection Route |
| J3 | A151 / High Road / Stone Gate Junction | A Road | 2025 | Grid Connection Route |
| J4 | A16 / B1165 Low Road Roundabout | A Road | 2025 | Grid Connection Route |
| J5 | A16 / A1175 Roundabout | A Road | 2025 | Grid Connection Route |
| J6 | B1168 Raven's Gate / B1165 Raven's Bank | Minor | 2025 | Grid Connection Route |
| J7 | A16 / B1357 Moulton Chapel Road / B1357 Stonegate Roundabout | A Road | 2025 | Grid Connection Route |
| J8 | Barrier Bank / Queen's Bank / Wash Bank Junction | Minor | 2024 | Solar Development Area |
| J9 | B1166 Postland Road / James Road Junction | Minor | 2024 | Solar Development Area |
| J10 | B1166 Spalding Road / B1166 James Road / James Road Junction | Minor | 2024 | Solar Development Area |

| ID | Junction Name/Description | Road Type | Survey Source Date | Part of Network |
|---|---|---|---|---|
| J11 | A16 Crowland Bypass / James Road / Hull's Drove Junction | A Road | 2025 | Solar Development Area |
| J12 | Martins Road / B1166 Hull's Drove Junction | Minor | 2025 | Solar Development Area |
| J13 | B1168 Holbeach Drove Gate / B1166 Drove Road Junction | Minor | 2025 | Solar Development Area |
| J14 | Langary Gate Road / B1166 Mill Lane / B1166 Long Lane Junction | Minor | 2025 | Solar Development Area |
| J15 | A16 Crowland Bypass / B1040 Nene Terrance Road / B1040 Thorney Road South Junction | A Road | 2024 | Solar Development Area |
| J16 | A16 / B1443 Thorney Road Roundabout | A Road | 2024 | Solar Development Area |

## Baseline Methodology

15.4.8. To assess the potential Traffic and Access impacts of the Scheme, it is necessary to determine the baseline conditions. The baseline conditions are the current (at the time of writing the ES) conditions of the Site and surroundings within the defined study area. The current baseline has been determined through desk study, surveys, assessment and other data sources as set out below.

15.4.9. The following sources of information have been used to inform the baseline and assessment presented within this chapter:

- An initial set of traffic counts across the surrounding highway network (2 ATC and 10 MCC locations) was undertaken in November 2024 for the PEIR.
- A further set of traffic counts (26 ATC and 11 MCC locations) was undertaken in July before the summer holiday break and in September after the summer holiday break in 2025 for this ES assessment. **ES Figure 15-1** (Doc. Ref. 6.2) shows the survey locations;
- Traffic growth has been calculated using National Road Traffic Forecast (NRTF) growth factors and by applying National Transport Model (NTM)

adjustments within the Trip Ends Model Program (TEMPro)[2] using National Trip Ends Model (NTEM) dataset v8.1 and the NRTP 2022 Core dataset;

- Local travel and network information gathered from various sources including local rail and bus operators;
- Personal Injury Collision (PIC) data from LCC for the highway network in the Study Area of the Scheme. This Study Area has been reviewed and agreed with LHAs (see above);
- Ordnance Survey (OS) Base Mapping to ascertain an accurate geographical representation of the areas in the Study Area of the Scheme;
- The construction staff distribution has been informed by:
    - 2011 Census data (WU03EW) – Location of usual residence and place of work by method of travel to work (MSOA level) to identify where people who drive to work in the MSOAs in which the study area is located travel from. Although this data is from 2011, it has only been used to inform patterns of travel rather than provide an estimate of how many workers commute to work within the study area.
    - 2021 Census data (TS060 – Industry dataset) to identify the approximate origins of residents who work within the construction industry and live within a 60-minute catchment of the site. Whilst it is acknowledged that this dataset was collected during the COVID-19 pandemic, this represents the latest information currently available and has only been used to identify where construction workers could be expected to travel from rather than other aspects pertaining to their travel patterns;
    - Route planning software, such as Google Maps, to inform the review of the most direct and functional routes to the Scheme, based on the points of origin (above) and the proposed access point locations for the Scheme.

[2] Department for Transport (DfT) (2023). Trip End Model Presentation Program (TEMPro) Version 8.1

## Scheme Assessment Methodology

15.4.10. This section sets out the ES scope and methodology for the Traffic and Access assessment of the Scheme.

15.4.11. The assessment methodology adopted in this ES Report has been informed by the 2023 ISEP Guidelines. The guidelines outline the assessment criteria and the respective changes in volume and composition of traffic which should be considered when assessing potential traffic and transport impacts. The following criteria has been considered in this assessment:

- Severance of communities;
- Pedestrian Delay (incorporating delay to all non-motorised users);
- Non-Motorised User Amenity;
- Fear and Intimidation on and by road users;
- Road vehicle driver and passenger delay;
- Road user and pedestrian safety; and
- Large loads.

15.4.12. There are not expected to be any Hazardous and Dangerous Loads associated with the Scheme e.g. vehicles transporting explosives, oxidising/toxic substances, radioactive material or corrosive substances. Therefore, Hazardous and Dangerous Loads have not been considered further in this assessment.

15.4.13. Through the EIA Scoping process, the Planning Inspectorate has agreed that the potential impacts listed above do not need to be considered in detail during the operation (and maintenance) phase as part of the EIA for the Scheme.

15.4.14. As agreed in the transport scoping meeting (see Table 15-3), an initial screening process of links and junctions has been conducted to identify receptors which record hourly traffic flow increases of less than 30 vehicles per hour as a result of the Scheme. Receptors which do not meet this 30-vehicle threshold have been screened out and have not been further included in this assessment. This threshold has been utilised based on professional judgement and experience, to represent a robust level below which it is highly unlikely that an environmental impact would result.

15.4.15. In addition to this, to avoid potentially misleading percentage impacts being identified as a result of very low baseline flows, a movement rule has been

considered against the baseline hourly flows to allow the magnitude of impact to be downgraded by one category if the following conditions are met:

- A High or Medium magnitude has initially been attributed to the Scheme; and
- At least one of the following applies:
  - Fewer than 100 vehicles use the receptor per hour;
  - Fewer than 600 vehicles use the receptor over 12 hours; or
  - Fewer than 1200 vehicles use the receptor over 24 hours.

15.4.16. These movement limits equate to fewer than two vehicles per minute for the hourly thresholds and fewer than one vehicle per minute for the 12- and 24-hourly thresholds.

15.4.17. Magnitudes which have been manually adjusted in this way for each assessment category are detailed in section 15.8.

15.4.18. In addition to the above, for the development peak hour assessments, where a 'High' or 'Medium' magnitude has initially been identified based on the assessment criteria, this has been downgraded by a single category when total traffic levels including construction traffic for the relevant receptor fall below baseline levels (without construction traffic) at other times of the day i.e. higher traffic levels are already experienced on the network without the Scheme (so the impact as a result of the Scheme is expected to be lower).

15.4.19. The type of traffic which is anticipated to be generated by the Scheme has been categorised as follows: primarily general traffic (construction staff movements), HGVs and Abnormal Indivisible Loads (AILs). The vehicle routing and movements associated with the construction of the Scheme have been considered and discussed through consultation with LCC and National Highways (including as part of the updated transport meeting dated 18th September 2025, where no specific concerns were raised).

15.4.20. The receptors which may be impacted upon have been identified based on the locations and volumes of the proposed construction traffic i.e. the forecast increase in vehicle movements across the network. This has been completed by identifying the percentage increases in vehicular activity along the identified construction routes when compared to recent traffic count data (factored up to the future baseline year of 2031) for road links and junctions within the Traffic and Access Study Area (see **ES Figure 15-1** (Doc. Ref. 6.2)).

15.4.21. Typically, when assessing the impacts of traffic effects, there are a range of particular groups and locations which may be sensitive to changes in traffic conditions compliant with the criteria previously outlined.

15.4.22. These are outlined in the 2023 ISEP Guidance as 'Affected Parties', as follows:

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

15.4.23. As a general rule, the forecast changes to baseline (magnitude of change), the relative value/sensitivity/importance of the affected receptor and the scale, nature and significance of the effect (consequence) should be considered. In addition, the anticipated effect should be classified as short-term, medium-term or long-term, as well as permanent or temporary.

### Sensitivity of Receptors

15.4.24. The general criteria for defining the importance or sensitivity of receptors are set out in Table 15-6, which applies to the assessment of Severance, Pedestrian Delay, Non-Motorised User Amenity, and Fear and Intimidation. These criteria are based on a combination of ISEP Guidelines and professional experience and were established in the ES Scoping and PEIR stage of the Scheme.

**Table 15-6: Sensitivity / Value Criteria for Severance, Pedestrian Delay, Non-Motorised User Amenity, and Fear and Intimidation**

| Sensitivity/ Value | Sensitivity / Value Criteria |
|---|---|
| High | Road Links and Junctions: More than two sensitive users present (e.g. schools, play areas, care/retirement homes, residential streets with properties on both sides of the carriageway, hospitals, places of worship, historic buildings).<br><br>Walk/Cycle Links including PRoW: Heavily trafficked highway with on-road pedestrian/cycle route. |
| Medium | Road Links and Junctions: Two sensitive users present (e.g. schools, play areas, care/retirement homes, residential streets with properties on both sides of the carriageway, hospitals, places of worship, historic buildings).<br><br>Walk/Cycle Links including PRoW: Lightly trafficked highway with on-road pedestrian/cycle route. |
| Low | Road Links and Junctions (no more than one of the following):<br><br>• One sensitive user present (e.g. schools, play areas, care/retirement homes, residential streets with properties on both sides of the carriageway, hospitals, places of worship, historic buildings).<br>• Many residential properties with direct frontage to highway link being used as construction route.<br>• Pedestrians using footways, PRoW and/or crossings on highway links.<br>• Cyclists using on-road designated cycle routes along highway link.<br><br>Walk/Cycle Links including PRoW: Heavily trafficked highway with off-road pedestrian/cycle route. |
| Very Low | Road Links and Junctions: No sensitive users or receptors along link, or any of the following:<br><br>• Few residential properties with direct frontage to the highway link being used as a construction traffic route.<br>• Workplaces with direct frontage to highway link being used as construction route.<br>• Cyclists using off-road designated cycle routes along highway link. |

| Sensitivity/ Value | Sensitivity / Value Criteria |
|---|---|
| | Walk/Cycle Links including PRoW: Pedestrian/cycle route not running alongside highway, or lightly trafficked highway with off-road pedestrian/cycle route. |

15.4.25. The general criteria for defining the importance or sensitivity of receptors for the assessment of Driver Delay are set out in Table 15-7 below.

**Table 15-7: Sensitivity / Value Criteria for Driver Delay**

| Sensitivity/ Value | Sensitivity / Value Criteria |
|---|---|
| High | Road Links: Not applicable.<br>Road Junctions: Roundabout or signalised junction (at least four arms) within a built-up area. Significant queuing (10+ vehicles) on 2+ arms. |
| Medium | Road Links: Key local route within a built-up area.<br>Road Junctions: Roundabout or signalised junction (at least four arms) outside of a built-up area. Significant queuing (10+ vehicles) on 1-2 arms and/ or moderate queuing (5-9 vehicles) on 3-4 arms. |
| Low | Road Links: Strategic route within a built-up area OR a local route outside of a built-up area.<br>Road Junctions: Roundabout or signalised junction (fewer than four arms) outside of a built-up area OR a priority junction within a built-up area. Moderate queuing (5-9 vehicles) on 1-2 arms and/ or low queuing (3-4 vehicles) on 3-4 arms. |
| Very Low | Road Links: Strategic route outside of a built-up area OR a minor/ local no-through route.<br>Road Junctions: Priority junction outside of a built-up area. Low queuing (3-4 vehicles) on 1-2 arms and/ or no queuing at the junction. |

15.4.26. The preliminary criteria for defining the importance or sensitivity of road link and road junction receptors for the assessment of Road Safety and Large Loads are set out in Table 15-8 below.

**Table 15-8: Sensitivity / Value Criteria for Road Safety and Large Loads**

| Sensitivity/ Value | Road Safety | Large Loads |
|---|---|---|
| High | Road Links and Road Junctions: 10+ collisions in five years, or more than three serious and/ or one fatal collision in five years. | Road Links and Road Junctions: 5+ serious/ fatal collisions (or more than one fatal collision) involving a goods vehicle (>3.5 tonnes) in five years. |
| Medium | Road Links and Road Junctions: up to 9 total collisions (with up to 3 serious collisions and/or 1 fatal collision) in five years. | Road Links and Road Junctions: 3-4 serious/ fatal collisions (with up to one fatal collision) involving a goods vehicle (>3.5 tonnes) in five years. |
| Low | Road Links and Road Junctions: up to 4 total collisions in five years (with a maximum of 1 serious collision and no fatal collisions) in five years. | Road Links and Road Junctions: 1-2 serious collisions (with no fatal collisions) involving a goods vehicle (>3.5 tonnes) in five years. |
| Very Low | Road Links and Road Junctions: Two or fewer total collisions (with no serious or fatal collisions) in five years. | Road Links and Road Junctions: No serious or fatal collisions involving a goods vehicle (>3.5 tonnes) in five years. |

15.4.27. The collision rate for road links has also been calculated and compared with national road safety statistics provided within Road Casualties for Great Britain[3]. Receptors which recorded collision rates much higher than the national average have been subjected to a manual review to determine whether their sensitivity value requires adjustment.

15.4.28. The levels of sensitivity which have been attributed to the receptors based on the information presented above are presented in Section 15.8.

[3] Department for Transport (DfT) (2025). Road safety statistics: data tables. Available at https://www.gov.uk/government/statistical-data-sets/reported-road-accidents-vehicles-and-casualties-tables-for-great-britain [Accessed 09/10/2025]

### Magnitude of Impact

15.4.29. As identified within the 2023 ISEP guidelines, the magnitude of each impact represents the level of change from the baseline conditions.

15.4.30. This assessment considers a range of potential effects that could be experienced during the construction stage of the Scheme and this section identifies how magnitude will be considered for each.

15.4.31. **Severance** is defined in the ISEP Guidelines as the "perceived division that can occur within a community when it becomes separated by major traffic infrastructure. The term is used to describe a complex series of factors that separate people from places and other people. Severance may result from the difficulty of crossing a heavily trafficked road or a physical barrier created by infrastructure".[4] The guidelines state that changes in traffic flow of 30%, 60% and 90% are regarded as producing 'slight', 'moderate' and 'substantial' changes in severance respectively. However, caution should be observed when applying these thresholds to very low baseline flows which are unlikely to experience severance impacts even with high percentage changes in traffic.

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

15.4.33. **Non-Motorised User Amenity** is broadly defined as "the relative pleasantness of a journey, and is considered to be affected by traffic flow, traffic composition and pavement width/separation from traffic". The guidance suggests that a tentative threshold for judging the significance of changes in non-motorised user amenity would be where the traffic flow (or HGV component) is halved or doubled.

15.4.34. **Fear and Intimidation** occurs through a combination of traffic flow, speed, proportion of HGVs and the proximity of traffic to people. These indicators are often heightened by a perceived lack of protection or buffers from the highway or through narrow or non-existent footways. The assessment considers each

[4] ISEP Guidelines (2023). Environmental Assessment of Traffic and Movement, p. 16

road on a case-by-case basis, however there are thresholds provided in the 2023 ISEP Guidelines which are presented in Table 15-10.

15.4.35. **Driver Delay** is an effect cited in the 2023 ISEP Guidelines and relates to incremental increases in traffic (as outlined in Table 15-9). However, traffic delays are only likely to be significant when the traffic on the network surrounding the development is already at, or close to, the capacity of the system. As a further consideration, where any temporary road closures or traffic management is likely to be in place to enable the construction of the Scheme, any additional potential delay caused by these resultant diversion routes has been reported.

15.4.36. **Road Safety** considers Personal Injury Collision (PIC) data obtained for the most recent five-year period available at identified junctions and links along the proposed construction traffic routes in the Study Area. The sensitivity of discrete areas of the highway network can then be determined following a detailed review of the baseline characteristics including the collision rate and any collision clusters.

15.4.37. With regard to **Large Loads**, the guidance states that appropriate routes for abnormal load movements should be considered, with mitigation strategies to secure safe passage. As part of the Scheme, there will be the requirement for abnormal loads which are categorised as Large Loads.

15.4.38. In view of the above, the impacts of Large Loads have been considered, in the form of a qualitative risk assessment to establish the likelihood and extent of such effects. The projected impacts of the Scheme have been measured separately, dependent upon the receptor, for the construction period. The **Outline CTMP** (Doc. Ref. 7.13) includes details of measures which will be employed to ensure the safe vehicular transport of components to and from the Scheme.

15.4.39. Table 15-9 and Table 15-10 summarise the criteria that have been used to assess the magnitude of effect (based on increases i.e. 'adverse' effects), along with the thresholds that have been used to determine whether effects are considered high, medium, low or very low. Depending on the baseline information available, the various thresholds identified for the proportional increases in traffic flow relate to peak hour flows and daily flows (whichever is highest). Within these tables, neither the sensitivity of receptors, nor the duration of effects, is taken into consideration. These tables have been informed by 2023 ISEP Guidelines and professional experience in order to build on the information presented by the guidelines to allow a more thorough

assessment to be carried out, and were set out at the ES Scoping and PEIR stage of the Scheme.

15.4.40. In terms of magnitude of change for receptors, receptors where there are projected to be fewer than 30 additional vehicle trips in both the AM and PM development peak hours have been screened out, irrespective of the proportional increase in traffic flows given that these are unlikely to experience impacts even with potentially high percentage changes in traffic.

**Table 15-9: Magnitude Criteria for Transport and Access (All Assessment Criteria)**

| Impact | Very Low | Low | Medium | High |
|---|---|---|---|---|
| Severance | Increase in total traffic flows of below 30% (or increase in HGV flows of below 10%). | Increase in total traffic flows of 30-59% (or increase in HGV flows of 10-39%). | Increase in total traffic flows of 60-89% (or increase in HGV flows of 40-89%). | Increase in total traffic flows or HGV flows of 90% and above. |
| Pedestrian Delay | The severity of the impact will be determined based on the thresholds identified above for severance. | | | |
| Non-Motorised User Amenity | Increase in total traffic flows of below 50%. | Increase in total traffic flows of 50-69%. | Increase in total traffic flows of 70-99%. | Increase in total traffic flows of 100% or above. |
| Fear and Intimidation | No change in degree of hazard level for daily traffic flows, HGV flows and vehicle speeds (see Table 15-10 below). | One step change in degree of hazard level (see Table 15-10 below), but with <400 daily vehicle increase or <500 daily HGV increase. | One step change in degree of hazard level (see Table 15-10 below), but with >400 daily vehicle increase or >500 daily HGV increase. | Two step changes in degree of hazard level based on the degree of hazard scores for daily traffic flows, HGV flows and vehicle speeds (see Table 15-10 below). |
| Driver Delay | Increase in total traffic | Increase in total traffic | Increase in total traffic | Increase in total traffic |

| Impact | Very Low | Low | Medium | High |
|---|---|---|---|---|
| | flows of below 30%. | flows of 30-59%. | flows of 60-89%. | flows of 90% and above. |
| Road Safety | Increase in total traffic flows of below 30% / increase in HGV flows of below 10%). | All links estimated to experience increases in total traffic flows of at least 30% or increases in HGV flows of at least 10% are analysed further on a case-by-case basis. | | |
| Large Loads | Based on the probability of a personal injury accident, categorised as fatal or serious, involving a large load, occurring. | | | |

15.4.41. Further details relating to Fear and Intimidation, in terms of calculating magnitude of impact based on the 2023 ISEP Guidelines, are provided in Table 15-10 below.

**Table 15-10: Additional Magnitude Criteria for Fear and Intimidation**

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

15.4.42. Table 15-9 and Table 15-10 above set out the proposed magnitude thresholds for the respective environmental effects that are considered in this assessment. All effects have a proposed magnitude that does not, initially, consider the duration over which an effect is likely to be experienced.

15.4.43. Duration is considered when assessing the overall significance of residual effects, noting that the ISEP Guidelines state in Paragraph 1.27 that: "*The EIA*

*Regulations also require consideration of whether the anticipated effect is short-term, medium-term or long-term and whether it is permanent or temporary.*"[5]

15.4.44. All of the Traffic and Access effects associated with the construction of the Scheme would be temporary effects.

### Significance of Effect

15.4.45. The significance of effect in relation to Traffic and Access has been assessed in accordance with the criteria provided in **ES Chapter 4: Overview of the EIA Process** (Doc Ref. 6.1), the significance of effect is determined through the consideration of two elements: the magnitude of the impact; and the sensitivity of the receptor as outlined above. Table 15-11 below shows the matrix that has been used to determine the effect category. Effects which are classified as major or moderate are considered to be significant (shown in bold). Where the matrix includes multiple significance levels, professional judgement has been used to determine the most likely outcome.

**Table 15-11: Significance Criteria**

| Sensitivity or Value of Resource / Receptor | Magnitude of Change | | | |
|---|---|---|---|---|
| | High | Medium | Low | Very Low |
| High | **Major** | **Major** | **Moderate** | Minor |
| Medium | **Major** | **Moderate** | Minor | Negligible |
| Low | **Moderate** | Minor | Negligible | Negligible |
| Very Low | Minor | Negligible | Negligible | Negligible |

### Forecast Construction Staff Mode Share

15.4.46. For the purposes of the traffic assessment, all vehicles associated with the Scheme have been classified into the following categories:

- Private Car (for Construction Staff);
- Shuttle Bus (for Construction Staff);
- HGV; and
- LGV.

[5] ISEP Guidelines (2023). Environmental Assessment of Traffic and Movement, p. 5

15.4.47. It has been assumed that construction staff will travel to the Site either via private vehicle or via shuttle bus. It is expected that the contractor will implement a shuttle bus strategy, with details to be determined closer to the start of the construction phase when more information is available on the locations of staff. It is likely that shuttle bus pick up and drop off locations would be planned around centres of staff accommodation to maximise uptake. Shuttle buses have been assumed to have a maximum capacity of 25 people for the purpose of a robust assessment, although in practice capacity may be higher where there is demand.

15.4.48. The construction staff vehicle split between private vehicle and shuttle bus has been modelled on assumptions used for similar solar schemes of comparable size within Lincolnshire, including the Cottam Solar Project [EN010133] and Tillbridge Solar [EN010142], which received development consent in September 2024 and October 2025 respectively. The proposed modal split is set out in Table 15-12 below.

**Table 15-12: Construction Staff Modal Split**

| Mode | Staff Mode Share Percentage |
|---|---|
| Shuttle-bus | 55% |
| Car driver | 45% |
| **Total** | **100%** |

15.4.49. Applying the modal split shown in Table 15-12 to the daily peak figures of 650 workers for the Solar Development Area (including Inter-Array Connections) and 205 workers for the Grid Connection Route (which are set out in section 0) results in the staff trip breakdown shown in Table 15-13. It should be noted that the values in table have been subject to rounding.

**Table 15-13: Daily Peak Construction Staff travelling to and from the Site (One-Way Trips)**

| Mode | Solar Development Areas Staff | Grid Connection Route Staff | Total |
|---|---|---|---|
| Shuttle-bus | 358 | 113 | 471 |
| Car | 293 | 92 | 385 |
| **Total** | **650** | **205** | **855** |

15.4.50. In addition to the modal split, a vehicle occupancy rate of 1.3 has been adopted for private vehicles travelling to and from site. This is a conservative

assumption as it is considered more likely that the occupancy would be c.1.5 staff per vehicle as a result of car share promotion that will be implemented through the **Outline CTMP** (Doc. Ref. 7.13).

15.4.51. Applying the vehicle occupancy rate and shuttle bus capacity outlined above to the modal split of staff travelling to and from the Site shown in Table 15-13 produces the staff one-way trip generation figures shown in Table 15-14 below. It should be noted that the values in table have been subject to rounding.

**Table 15-14: Construction Staff Trip Generation (One-Way Trips)**

| Mode | Solar Development Area Staff Vehicle Trips | Grid Connection Route Staff Vehicle Trips | Total |
|---|---|---|---|
| Shuttle-bus (non-local staff) | 15 | 5 | 20 |
| Car | 225 | 71 | 296 |
| **Total** | **240** | **76** | **316** |

### Gravity Model

15.4.52. To calculate the trip distribution of private staff vehicles and LGVs (including crew buses transporting tools to/from the site and welfare vans transporting necessary amenities for Overhead Line (OHL) work gangs) travelling to and from the proposed construction compounds each day, a gravity model has been developed based on 2021 Census dataset TS060, which shows the number of people employed in the construction industry in each Middle Super Output Area (MSOA). The 2021 Census represents the latest information currently available. All MSOAs within a 60-minute drive of the Site were weighted by their geographical proximity to estimate the proportion of workers likely to travel to the site from each MSOA. The Google journey planner has then been used to determine the most likely routing for workers from each of these MSOAs to travel to the Site.

15.4.53. Private vehicles and LGVs associated with the Scheme have been distributed onto the local highway network according to the results of the gravity model and journey planner to calculate the resultant traffic increases on each link and junction receptor, forming the basis of the assessment outlined in Section 15.8.

15.4.54. Table 15-15 shows the routes used in the Gravity Model and the proportions of workers likely to use them to travel to the Site. These routes are also shown in **ES Figure 15-5** (Doc. Ref. 6.2).

**Table 15-15: Gravity Model Routing**

| Route Name | Worker private vehicle trip percentage | Approximate Direction of Approach |
|---|---|---|
| A16 North | 21% | North |
| A151 | 8% | North-east |
| B1165 | 8% | East |
| A47/B1040 | 11% | South-east |
| A16 South | 29% | South |
| A1175 | 23% | South-west |
| Total | 100% | - |

### Routing of Other Vehicles

15.4.55. Since suppliers have not been identified at this stage of the Application, and it is therefore not known where vehicles would be travelling from to reach the Site, it has been assumed that all other vehicles (HGVs and Shuttles) would travel to the Site using the A16, with 50% travelling north from the direction of Peterborough and the other 50% travelling south from the direction of Boston. This split has been assumed for all areas of the Site with the exception of Grid Connection Route Zones 1 and 2, where it has been assumed that 20% of vehicles would approach from the A151 to the east, whilst 40% would approach from the A16 to the north and 40% would approach from the A16 to the south. The assumed HGV routing will be secured through the **Outline CTMP** (Doc Ref. 7.13) and is shown in **ES Figure 15-3** (Doc Ref. 6.2). Exact shuttle routing will be dependent on the optimal routes based on staff locations, but the principle of utilising the routes above to access the Site is established through the **Outline CTMP** (Doc Ref. 7.13).

### Trip Distribution Scenarios

15.4.56. To ensure that the worst-case impacts on each link and junction receptor have been assessed, the trip distribution has been evaluated for four separate scenarios which collectively assess the maximum traffic flows at each receptor within the Traffic and Access study area during the entirety of the construction programme. These scenarios have been chosen to ensure that receptors which record their highest traffic flows outside of the overall construction peak month are accurately represented with their highest expected traffic flows (i.e.

worst-case impacts) so that the maximum peak construction flows at each receptor across all four scenarios is used to inform the assessment.

15.4.57. The four trip distribution scenarios are summarised below in Table 15-16.

**Table 15-16: Trip Distribution Scenarios**

| Scenario | Forecast Peak Month | Solar Development Area and Inter-Array Connections | Further Comments |
|---|---|---|---|
| 1 | Q3 2031 | Land parcel A<br>Underground Inter-Array Connection | Highest peak trips to Solar Development Area land parcel A are expected in July 2031. The routing for Solar Development Area land parcel A and Underground Inter-Array Connection will be the same and this scenario therefore accounts for trips made to both. |
| 2 | Q3 2031 | Land parcels B & C | Highest combined peak trips to Solar Development Area land parcels B & C are expected in Q3 2031. These two parcels have been evaluated as part of the same scenario since the journey to each is identical in that it passes all the same receptors, before deviating at the final site access. |
| 3 | Q1 2032 | Land parcel D | Highest peak trips to Solar Development Area land parcel D are expected in Q1 2032. |
| 4 | N/A | Overground Inter-Array (between Land Parcels C and D) | Highest peak trips to the Overground Inter-Array are not ascribed to a particular peak month, however since the routing to them differs slightly from the Solar Development Area parcels they have been evaluated separately and subsequently recombined to determine the |

| Scenario | Forecast Peak Month | Solar Development Area and Inter-Array Connections | Further Comments |
|---|---|---|---|
| | | | maximum impact on affected receptors. |

## 15.5. Assessment Assumptions and Limitations

15.5.1. The assessment is based on the Scheme design set out in **ES Chapter 2: The Scheme** (Doc Ref. 6.1) and shown on **ES Figure 15-1** (Doc Ref. 6.3).

15.5.2. The assessment of the Scheme is based on a daily peak of 855 construction workers which is a maximum daily figure and includes total workers associated with the Solar Development Area, Inter-Array Connections and the Grid Connection Route (which will connect the Solar Development Area to the NGET Weston Marsh B Substation).

15.5.3. A Transport Assessment Note (TAN) (**ES Appendix 15-4** (Doc. Ref. 6.3)) and **Outline CTMP** (Doc. Ref. 7.13) have also been prepared as part of the DCO submission. This chapter has been informed by the consultation responses to the EIA Scoping Opinion and the PEI Report during statutory consultation (see Table 15-1 and Table 15-2), as well as a transport meetings which were held with the local authorities and NH (see Table 15-3).

### Assessment Scenarios

15.5.4. It is currently anticipated that construction work will commence in 2029. The construction phase is anticipated to be approximately three to four years. The peak construction year for the purpose of the EIA is anticipated to be 2031 for the Solar Development Area and Inter-Array Connections, and 2030 for the Grid Connection Route; this assumes commencement of construction in 2029 and that the Scheme is built out over a three-year period, with all sites constructed concurrently. To ensure that a worst-case assessment is undertaken with regards to potential effects from temporary construction traffic, the peak number of construction vehicles from all elements of the Scheme will be considered to occur concurrently for the purposes of the assessments which consider construction traffic. This approach was agreed with NH and the LHAs at the scoping meeting which took place on 18th September 2025.

15.5.5. In order to determine the potential effects of the Scheme, and in view of the above, the following scenarios have been considered:

- Baseline (2024 & 2025) – AM, PM and Daily; and
- Peak Construction Year (2031) With and Without Development – AM, PM and Daily.

15.5.6. The baseline reporting sets out the existing conditions within the Study Area against which the construction impacts have then been assessed.

15.5.7. It is not considered that the conclusions of this ES Chapter would change in the instance that the start of construction is delayed or lasts longer than the three-year construction programme shown in Plate 2-13 of **ES Chapter 2: The Scheme** (Doc. Ref. 6.1). For example, other cumulative developments may have been completed by the time the Scheme construction begins, which would elevate the trips on the local road network in the future baseline. As the assessment criteria is predominantly based on a percentage change of vehicle numbers, higher baseline flows which would occur as a result of a delayed start date would reduce the proportional impact that the Scheme has on the road network. This would therefore reduce or maintain the levels of significant effects presented in this chapter.

15.5.8. Similarly, should the construction period occur later and last longer than what is outlined above, the total construction phase traffic would be spread over a longer period resulting in lower daily flows and lower impacts.

15.5.9. The decommissioning assessment year is assumed to be 2073 (40 years from commissioning) which is considered to be too far into the future to accurately predict traffic flows or junction forms. Therefore, the assessment of the construction phase has been used to determine the anticipated impact of the Scheme during its decommissioning phase. This is likely to overestimate decommissioning impacts, which is expected to be shorter in duration and to have fewer vehicle trips than during construction.

15.5.10. Two cumulative assessment scenarios are set out in **ES Chapter 4: Overview of the EIA Process** (Doc Ref. 6.1) which are considered to capture the worst-case cumulative effects. For this chapter, the below scenario is considered in relation to the cumulative schemes assessment:

- Scenario 1: Construction periods and the peak construction of the Scheme and the Grimsby to Walpole DCO, Outer Dowsing Offshore Wind Farm DCO, the Weston Marsh to East Leicestershire Project (WMEL) DCO and Ossian Wind Farm DCO overlap in 2031.

### Construction Programme, Working Hours and Assessment Parameters

15.5.11. To ensure that a worst-case assessment is undertaken with regards to potential effects from temporary construction traffic, the peak number of construction vehicles from all elements of the Scheme have been assessed as occurring concurrently for the purpose of a worst-case assessment. In practice, the peaks of individual elements of the Scheme will likely occur at different times in the overall construction programme.

15.5.12. The core construction working hours will be Monday to Friday (07:00-19:00) and Saturday (08:00-13:30) with no Sunday or Bank Holiday working unless crucial for construction. Typically traffic flows are lower on Saturdays than Monday-Friday, so a Monday-Friday peak has been carried out to provide a worst-case assessment of the peak construction phase.

15.5.13. The peak hours for staff development trips will be 06:00-07:00 for arrivals and 19:00-20:00 for departures. Construction worker travel patterns have been based on the proposed working hours to generate the AM and PM Development peak hour flows. These are outside of the local network peak hours of 08:00 – 09:00 and 16:00 – 17:00.

15.5.14. HGV movements have been distributed across an eight-hour window, arriving and departing between 09:00-17:00. HGV movements will, in practice, be limited as far as possible so as not to travel during the traditional peak hours of 08:00-09:00 and 17:00-18:00 through the measures set out within Section 7.4 of the **Outline CTMP** (Doc. Ref. 7.13).

### Construction Trips

15.5.15. As set out in **ES Chapter 2: The Scheme** (Doc. Ref. 6.1), there is expected to be a daily peak of 855 construction workers associated with the Scheme, including 650 construction workers for the Solar Development Area and Inter-Array Connections and 205 construction workers for the Grid Connection Route. It has been assumed that all 855 construction workers will travel to/from Site at the start and end of the working day according to the proposed working hours outlined later in this section.

15.5.16. In addition to the above, there will be a daily peak of 64 HGVs travelling to and from the Solar Development Area and Inter-Array Connections as well as 75 HGVs and 75 LGVs travelling to and from the Grid Connection Route during the AM and PM Construction peaks respectively. These numbers are considered robust as they were calculated by dividing monthly HGV estimations by 20 working days per month, whereas, as noted above, the core construction work hours are expected to include Saturdays between 08:00-13:30 which would result in 24 working days per month.

15.5.17. The associated vehicle trips will mainly use various routes set out within **ES Figure 15-3** (Doc. Ref. 6.2).

15.5.18. Although the Scheme is located close to Cowbit and Crowland, no trips are expected to either originate from or pass through these settlements during the construction, operation, or the decommissioning phases. The **Outline CTMP**

(Doc. Ref. 7.13) will restrict HGVs to routes which avoid these settlements when travelling to/from the construction compounds as illustrated by HGV routing plan shown in **ES Figure 15-3** (Doc. Ref. 6.2).

15.5.19. Whilst some staff may originate from larger settlements nearby (e.g. Spalding or Crowland) and may travel by public transport or bicycle (the distance is considered too far to walk) these modes are not expected to constitute a significant proportion of trips to the Scheme and have therefore been excluded to ensure robustness in the assessment of the highway network impacts.

15.5.20. Further details relating to the assumptions that have been adopted in support of the assessment work (e.g. relating to access points, working hours and trip generation) are set out within Section 15.8.

## 15.6. Baseline Conditions

15.6.1. This section describes the baseline environmental characteristics for the Scheme and surrounding areas with specific reference to Traffic and Access.

### Current Baseline

15.6.2. This section describes the baseline environmental characteristics for the Scheme and surrounding areas with specific reference to Traffic and Access.

#### Local Highway Network

15.6.3. The A16 is the main strategic route in the vicinity of the Scheme and runs in a north/south direction to the east of land parcel A and to the west of land parcel B. It connects to Peterborough to the south of the Scheme and Boston to the north and also passes the settlements of Spalding and Crowland to the west of the Scheme. Managed by LCC as the LHA, it is generally a single-carriageway and is subject to a varying speed limit of 50mph and 60mph. There are limited crossing points along the route.

15.6.4. The A151 runs in an east/west direction through the Grid Connection Route and connects with the A16 to the west and the settlements of Weston and Holbeach to the east. It has a speed limit of 40mph in the vicinity of the site.

15.6.5. The A47 is the closest road in the SRN to the Scheme and is located approximately 8km south of the Solar Development Areas. It connects with the A16 via the B1040 and B1443 to the south of the Scheme.

15.6.6. The vast majority of other roads in the vicinity of the scheme are local and rural in nature. Notable other roads in the vicinity of the Scheme include:

- B1165 Austendyke Road – a single-carriageway road which runs in an east/west direction through the Grid Connection route and has a varying speed limit of 40mph and 50mph.
- B1357 Moulton Chapel Road – a single-carriageway road which runs in an east/west direction through the Grid Connection route and has a varying speed limit of 40mph and 60mph.
- B1166 Hull's Drove – a single-carriageway road which runs in an east/west direction to the south of the Solar Development Areas and has a varying speed limit of 50mph and 60mph.
- Barrier Bank – a single carriageway road which contains the proposed site accesses to Solar Development Area land parcel A. It is a single-

carriageway road with a speed limit of 50mph. It is noted that the road is subject to an HGV restriction (except for access).

- Martins Road – a single carriageway road which contains the proposed site access to Solar Development Area land parcels B and C. It is a single-carriageway road with a speed limit of 50mph.
- Langary Gate Road – a single carriageway road which contains the proposed site accesses to Solar Development Area land parcel D. It is a single-carriageway road with a speed limit of 60mph.

### Existing Walking Facilities

15.6.7. The majority of roads in the vicinity of the Scheme have either no or very limited footways present alongside the carriageways. A number of PRoW pass through or in the vicinity of the Site, and the locations are shown in **ES Figure 15-2** (Doc. Ref. 6.2). All PRoW which intersect with the Site boundary are listed in Table 15-17 and described further in the **Outline PRoW-MP** (Doc. Ref. 7.15).

**Table 15-17: PRoW within the Order Limits**

| PRoW ID | PRoW Type |
|---|---|
| PROW Crow/7/1 | Footpath |
| PROW Crow/17/1 | Bridleway |
| PROW Crow/17/2 | Bridleway |
| PROW Crow/11/1 | Bridleway |
| PROW Flee/6/1 | Bridleway |
| PROW Flee/7/1 | Bridleway |
| PROW Flee/8/1 | Bridleway |
| PROW Flee/8/2 | Bridleway |
| PROW Holb/14/1 | Bridleway |
| PROW Holb/15/1 | Bridleway |
| PROW Crow/12/1 | Footpath |
| PROW Whap/1/1 | Footpath |
| PROW Wstn/3/1 | Footpath |

15.6.8. A strip of registered Common Land runs along the eastern verge of Martins Road and is presumed to provide a public access way between Queen's Bank and B1166 Hull's Drove. The Common Land is registered on the Lincolnshire County Council register as unit No. CL54. It seems likely, due to its location and layout, that this strip of Common Land was originally designated for the purpose of accessing Postland Railway Station (which is now decommissioned) and therefore there would be a common right to access and walk over the Common Land. Since it performs a similar function to a PRoW, it has been included in the **Outline PRoW-MP** (Doc. Ref. 7.15) and is also shown in **ES Figure 15-2** (Doc Ref. 6.2).

### Existing Cycling Facilities

15.6.9. There are very few formal on- or off-road cycling facilities within the immediate vicinity of the Site. The Deepings cycle route is a circular cycle route between Market Deeping and Crowland which passes near to the western side of Solar Development Area Land Parcel A, on the other side of the River Welland. The existing cycling routes and facilities in the vicinity of the Scheme are shown in **ES Figure 15-2** (Doc. Ref. 6.2).

### Equestrian Routes

15.6.10. There are several PRoWs designated as Bridleways passing through or in the vicinity of the Site (see Table 15-17). These are shown in **ES Figure 15-2** (Doc. Ref. 6.2). and are described further within the **Outline PRoW-MP** (Doc. Ref. 7.15).

### Bus

15.6.11. At present, there are no public transport services or bus stops located on the A16. The nearest served bus stops are located on Barrier Bank, Moulton Chapel Road and Farrow Road in the vicinity of the Site. The following bus routes serve these bus stops:

- Barrier Bank – Bus service 37 – Spalding to Peterborough – Three services in the AM peak, three services in the PM peak and otherwise hourly service during the inter-peak from Mondays to Saturdays; Five services during the day on Sundays.
- Moulton Chapel Road and Farrow Road – Bus service 43 – Spalding to Sutton St James – One AM service and one PM service from Mondays to Fridays only; and
- Farrow Road – Bus service S137S – Spalding to Sutton St Edmund – One AM service and one PM service from Mondays to Fridays only.

### Rail

15.6.12. Spalding Station is the closest station to the Site and is located approximately 3.6km to the west of the Site and is managed by East Midlands Rail and Northern Rail, running services between Peterborough and Doncaster. The only passenger services calling at the station during a weekday are three services in both AM and PM peaks and otherwise hourly service during the inter-peak. On Saturdays there are also three services in both AM and PM peaks but bi-hourly services during the inter-peak period. There are no services on Sundays.

### Baseline Traffic Flows

15.6.13. ATC and MCC Surveys were undertaken in July 2025 at the link and junction receptors within the Traffic and Access study area to determine the baseline traffic flows. Some survey results from the surveys conducted at the PEIR stage in 2024 have also been used to model traffic flows for some receptors which were not expected to incur any development flows as a result of the updated Scheme design and routing strategy at the ES stage.

15.6.14. Analysis of the survey data undertaken for the ES has determined that the weekday AM and PM peak hours for the local highway network are 08:00-09:00 and 16:00-17:00, respectively. It should be noted that this AM Peak differs from what was identified at the PEIR stage (07:00 – 08:00).

15.6.15. Table 15-18 below shows the baseline construction peak traffic flows for 2025 that have been used as the basis for this assessment. A full set of traffic flows for all assessed time periods, including the construction peaks, network peaks, 18-hour and 24-hour flows are shown in **ES Appendix 15-3: Receptor Traffic Flow Tables** (Doc. Ref. 6.3). It should be noted that shown values may be rounded.

### Table 15-18: Baseline Traffic Flows

| Ref | Link | AM Construction Peak (06:00-07:00) | | | PM Construction Peak (19:00-20:00) | | | 24hr Daily | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Total | HGVs | HGVs (%) | Total | HGVs | HGVs (%) | Total | HGVs | HGVs (%) |
| L1 | A16 Spalding Bypass (North-East of Spalding) | 1,118 | 190 | 17.0% | 782 | 76 | 9.7% | 26,155 | 4,048 | 15.5% |
| L2 | Cross Gate | 7 | 0 | 0.0% | 6 | 0 | 6.7% | 159 | 18 | 11.1% |
| L3 | A151 Holbeach Road | 654 | 58 | 8.9% | 683 | 31 | 4.6% | 17,661 | 1,308 | 7.4% |
| L4 | A151 Weston Bypass | 596 | 63 | 10.6% | 585 | 25 | 4.3% | 16,666 | 1,265 | 7.6% |
| L5 | A151 High Road | 590 | 65 | 11.0% | 575 | 21 | 3.7% | 16,440 | 1,232 | 7.5% |
| L6 | Stone Gate | 9 | 1 | 7.0% | 5 | 0 | 7.4% | 183 | 16 | 9.0% |
| L7 | A16 Spalding Bypass (East of Spalding) | 1,061 | 176 | 16.6% | 845 | 68 | 8.0% | 24,373 | 3,588 | 14.7% |
| L8 | Broadgate | 17 | 0 | 2.4% | 26 | 0 | 1.6% | 724 | 32 | 4.5% |
| L9 | Delgate Bank (North) | 6 | 0 | 0.0% | 2 | 0 | 0.0% | 115 | 7 | 5.9% |
| L10 | Long Lane | 63 | 3 | 4.1% | 34 | 2 | 6.5% | 1,013 | 80 | 7.9% |
| L11 | B1165 Austendike Road | 101 | 7 | 7.1% | 72 | 3 | 3.9% | 2,645 | 204 | 7.7% |
| L12 | Delgate Bank (Central) | 9 | 1 | 11.1% | 4 | 0 | 4.5% | 195 | 13 | 6.8% |
| L13 | West Gate | 11 | 1 | 5.4% | 6 | 0 | 3.1% | 211 | 15 | 7.0% |

| Ref | Link | AM Construction Peak (06:00-07:00) | | | PM Construction Peak (19:00-20:00) | | | 24hr Daily | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Total | HGVs | HGVs (%) | Total | HGVs | HGVs (%) | Total | HGVs | HGVs (%) |
| L14 | A16 Spalding Bypass (South-East of Spalding) | 658 | 161 | 24.5% | 559 | 58 | 10.4% | 16,342 | 3,242 | 19.8% |
| L15 | A16 Cowbit Road | 1,099 | 137 | 12.5% | 813 | 52 | 6.4% | 23,568 | 2,954 | 12.5% |
| L16 | B1357 Moulton Chapel Road | 162 | 12 | 7.4% | 158 | 6 | 4.1% | 3,958 | 318 | 8.0% |
| L17 | Delgate Bank (South) | 5 | 1 | 17.4% | 3 | 0 | 7.1% | 104 | 7 | 6.3% |
| L18 | A16 Crowland Bypass (Near Crowland Airfield) | 1,087 | 148 | 13.7% | 783 | 65 | 8.2% | 20,715 | 2,834 | 13.7% |
| L19 | Queen's Bank | 3 | 0 | 0.0% | 5 | 1 | 20.0% | 155 | 17 | 11.2% |
| L20 | Cloot Drove | 2 | 0 | 9.1% | 3 | 0 | 0.0% | 89 | 3 | 3.2% |
| L21 | Barrier Bank | 81 | 8 | 9.4% | 82 | 4 | 4.9% | 2,079 | 130 | 6.2% |
| L22 | James Road | 74 | 6 | 8.1% | 107 | 1 | 0.9% | 2,755 | 164 | 5.9% |
| L23 | Hull's Drove (West) | 261 | 7 | 2.7% | 209 | 3 | 1.4% | 6,323 | 309 | 4.9% |
| L24 | Martins Road | 6 | 1 | 10.0% | 9 | 0 | 4.7% | 223 | 15 | 6.8% |
| L25 | Hull's Drove (East) | 245 | 8 | 3.3% | 185 | 3 | 1.6% | 5,189 | 216 | 4.2% |
| L26 | Eaugate Road | 6 | 0 | 6.3% | 15 | 0 | 1.4% | 312 | 31 | 10.0% |
| L27 | Chapel Hill | 14 | 1 | 4.2% | 8 | 0 | 2.4% | 297 | 35 | 11.9% |

| Ref | Link | AM Construction Peak (06:00-07:00) | | | PM Construction Peak (19:00-20:00) | | | 24hr Daily | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Total | HGVs | HGVs (%) | Total | HGVs | HGVs (%) | Total | HGVs | HGVs (%) |
| L28 | Chapel Gate | 5 | 0 | 0.0% | 6 | 0 | 7.1% | 115 | 6 | 5.5% |
| L29 | Dog Drove North | 1 | 0 | 0.0% | 3 | 0 | 0.0% | 83 | 8 | 9.9% |
| L30 | Holbeach Drove Gate | 226 | 11 | 4.7% | 163 | 6 | 3.4% | 3,915 | 233 | 6.0% |
| L31 | B1166 Long Lane | 86 | 2 | 2.3% | 88 | 0 | 0.0% | 2,255 | 114 | 5.1% |
| L32 | Langary Gate Road | 1 | 0 | 0.0% | 4 | 0 | 5.0% | 92 | 5 | 5.9% |
| L33 | A16 Crowland Bypass (East of Crowland) | 1,269 | 143 | 11.3% | 784 | 52 | 6.6% | 24,758 | 3,032 | 12.2% |
| L34 | A16 (South of Crowland) | 1,118 | 164 | 14.7% | 919 | 68 | 7.4% | 22,444 | 2,972 | 13.2% |
| L35 | A16 (North of Peterborough) | 1,107 | 151 | 13.6% | 818 | 63 | 7.7% | 21,291 | 2,684 | 12.6% |
| J1 | A16 / A151 Roundabout | 1,647 | 227 | 13.8% | 1,477 | 94 | 6.4% | 41,456 | 4,956 | 12.0% |
| J2 | A151 / High Road Roundabout | 677 | 67 | 9.9% | 676 | 28 | 4.1% | 19,299 | 1,460 | 7.6% |
| J3 | A151 / High Road / Stone Gate Junction | 636 | 66 | 10.4% | 591 | 26 | 4.4% | 17,148 | 1,308 | 7.6% |
| J4 | A16 / B1165 Low Road Roundabout | 1,209 | 180 | 14.9% | 1,005 | 72 | 7.2% | 29,504 | 3,781 | 12.8% |
| J5 | A16 / A1175 Roundabout | 1,101 | 172 | 15.6% | 1,025 | 59 | 5.8% | 27,870 | 3,551 | 12.7% |

| Ref | Link | AM Construction Peak (06:00-07:00) | | | PM Construction Peak (19:00-20:00) | | | 24hr Daily | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Total | HGVs | HGVs (%) | Total | HGVs | HGVs (%) | Total | HGVs | HGVs (%) |
| J6 | B1168 Raven's Gate / B1165 Raven's Bank | 337 | 7 | 2.1% | 262 | 3 | 1.1% | 7,666 | 283 | 3.7% |
| J7 | A16 / B1357 Moulton Chapel Road / B1357 Stonegate Roundabout | 1,260 | 150 | 11.9% | 916 | 52 | 5.7% | 27,202 | 3,147 | 11.6% |
| J8 | Barrier Bank / Queen's Bank / Wash Bank Junction | 83 | 3 | 3.6% | 82 | 2 | 2.4% | 2,079 | 122 | 5.9% |
| J9 | B1166 Postland Road / James Road Junction | 201 | 8 | 4.0% | 204 | 2 | 1.0% | 5,434 | 182 | 3.3% |
| J10 | B1166 Spalding Road / B1166 James Road / James Road Junction | 155 | 7 | 4.5% | 152 | 2 | 1.3% | 4,292 | 211 | 4.9% |
| J11 | A16 Crowland Bypass / James Road / Hull's Drove Junction | 1,377 | 150 | 10.9% | 913 | 53 | 5.8% | 28,286 | 3,246 | 11.5% |
| J12 | Martins Road / B1166 Hull's Drove Junction | 249 | 9 | 3.6% | 190 | 3 | 1.6% | 5,301 | 220 | 4.1% |
| J13 | B1168 Holbeach Drove Gate / B1166 Drove Road Junction | 277 | 8 | 2.9% | 203 | 3 | 1.5% | 5,713 | 211 | 3.7% |

| Ref | Link | AM Construction Peak (06:00-07:00) | | | PM Construction Peak (19:00-20:00) | | | 24hr Daily | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Total | HGVs | HGVs (%) | Total | HGVs | HGVs (%) | Total | HGVs | HGVs (%) |
| J14 | Langary Gate Road / B1166 Mill Lane / B1166 Long Lane Junction | 76 | 2 | 2.6% | 85 | 0 | 0.0% | 2,170 | 106 | 4.9% |
| J15 | A16 Crowland Bypass / B1040 Nene Terrance Road / B1040 Thorney Road South Junction | 1,209 | 147 | 12.2% | 742 | 66 | 8.9% | 21,519 | 2,762 | 12.8% |
| J16 | A16 / B1443 Thorney Road Roundabout | 1,252 | 161 | 12.9% | 946 | 63 | 6.7% | 25,529 | 2,803 | 11.0% |

## Future Baseline

15.6.16. In the absence of the Scheme, traffic flows on the surrounding highway network would be expected to increase as a result of housing and employment growth. Therefore, projected background traffic growth has been applied to the traffic flows derived from the traffic surveys conducted in 2024 and 2025 to represent conditions during the future baseline (and construction peak assessment year) of 2031. As previously mentioned, the decommissioning assessment year is assumed to be 2073 which is considered to be too far into the future to be able to accurately predict traffic flows.

15.6.17. Traffic growth has been calculated using National Road Traffic Forecast (NRTF) growth factors, reflecting projected increases in annual vehicle mileage on roads within England and Wales. National Transport Model (NTM) adjustments have then been applied within the Trip Ends Model Programme (TEMPro) using National Trip Ends Model (NTEM) dataset v8.1 and the NRTP 2022 Core dataset. These reflect local factors for the appropriate road types, to determine the forecast increases in baseline car driver trips during each period.

15.6.18. TEMPro v8.1 has been used as it is the latest version of the software available at the time of writing.

15.6.19. Since the Scheme falls within several MSOAs in South Holland and will attract trips from other neighbouring MSOAs within the district, the area definition has been defined to include the entirety of the South Holland district rather than specific MSOAs.

15.6.20. A summary of the growth factors is set out in Table 15-19 below.

**Table 15-19: Traffic Growth Factors (Future Baseline)**

| Growth Period | Road Type | Traffic Growth Factors (South Holland) | | | |
|---|---|---|---|---|---|
| | | AM Peak | PM Peak | Average Weekday | Average Day |
| 2024 to 2031 (Traffic Counts) | Trunk | 1.0858 | 1.0885 | 1.0922 | 1.0928 |
| | A Road | 1.0594 | 1.062 | 1.0656 | 1.0662 |
| | Minor | 1.0571 | 1.0597 | 1.0633 | 1.0639 |
| | All | 1.0708 | 1.0735 | 1.0771 | 1.0777 |
| 2025 to 2031 (Traffic Counts) | Trunk | 1.0784 | 1.0809 | 1.084 | 1.0844 |
| | A Road | 1.0558 | 1.0582 | 1.0613 | 1.0617 |

| Growth Period | Road Type | Traffic Growth Factors (South Holland) | | | |
|---|---|---|---|---|---|
| | | AM Peak | PM Peak | Average Weekday | Average Day |
| | Minor | 1.0536 | 1.0561 | 1.0591 | 1.0595 |
| | All | 1.0659 | 1.0683 | 1.0714 | 1.0718 |

15.6.21. It should be noted that the TEMPro factors have been recalculated following the PEIR stage following feedback received from the statutory consultation. These recalculated growth factors have been agreed with LCC and PCC during the traffic and access meeting held on the 18th September 2025.

15.6.22. Since no roads within the study area are part of the trunk network, all receptors have been defined as classed as either A Roads or Minor roads for the purposes of simulating traffic growth.

15.6.23. The anticipated future baseline flows of the surrounding highway network are set out in Table 15-20. The results have been presented for the development peak hours and 24-hour daily flows for all link and junction receptors. It should be noted that shown values may be rounded.

### Table 15-20: Future Baseline Traffic Flows (2031)

| Ref | Link | AM Construction Peak (06:00-07:00) | | | PM Construction Peak (19:00-20:00) | | | 24hr Daily | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Total | HGVs | HGVs (%) | Total | HGVs | HGVs (%) | Total | HGVs | HGVs (%) |
| L1 | A16 Spalding Bypass (North-East of Spalding) | 1,180 | 201 | 17% | 828 | 80 | 10% | 27,769 | 4,297 | 15% |
| L2 | Cross Gate | 7 | 0 | 0% | 6 | 0 | 7% | 168 | 19 | 11% |
| L3 | A151 Holbeach Road | 690 | 62 | 9% | 723 | 33 | 5% | 18,751 | 1,388 | 7% |
| L4 | A151 Weston Bypass | 629 | 67 | 11% | 619 | 26 | 4% | 17,694 | 1,343 | 8% |
| L5 | A151 High Road | 623 | 69 | 11% | 608 | 22 | 4% | 17,454 | 1,308 | 7% |
| L6 | Stone Gate | 9 | 1 | 7% | 6 | 0 | 7% | 194 | 17 | 9% |
| L7 | A16 Spalding Bypass (East of Spalding) | 1,120 | 186 | 17% | 894 | 72 | 8% | 25,877 | 3,810 | 15% |
| L8 | Broadgate | 18 | 0 | 2% | 27 | 0 | 2% | 767 | 34 | 4% |
| L9 | Delgate Bank (North) | 6 | 0 | 0% | 2 | 0 | 0% | 122 | 7 | 6% |
| L10 | Long Lane | 67 | 3 | 4% | 36 | 2 | 7% | 1,074 | 85 | 8% |
| L11 | B1165 Austendike Road | 106 | 8 | 7% | 76 | 3 | 4% | 2,802 | 216 | 8% |
| L12 | Delgate Bank (Central) | 9 | 1 | 11% | 5 | 0 | 5% | 207 | 14 | 7% |
| L13 | West Gate | 12 | 1 | 5% | 7 | 0 | 3% | 224 | 16 | 7% |
| L14 | A16 Spalding Bypass (South-East of Spalding) | 695 | 170 | 24% | 592 | 61 | 10% | 17,351 | 3,442 | 20% |

| Ref | Link | AM Construction Peak (06:00-07:00) | | | PM Construction Peak (19:00-20:00) | | | 24hr Daily | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Total | HGVs | HGVs (%) | Total | HGVs | HGVs (%) | Total | HGVs | HGVs (%) |
| L15 | A16 Cowbit Road | 1,160 | 145 | 12% | 860 | 55 | 6% | 25,022 | 3,137 | 13% |
| L16 | B1357 Moulton Chapel Road | 170 | 13 | 7% | 166 | 7 | 4% | 4,193 | 337 | 8% |
| L17 | Delgate Bank (South) | 5 | 1 | 17% | 3 | 0 | 7% | 111 | 7 | 6% |
| L18 | A16 Crowland Bypass (Near Crowland Airfield) | 1,147 | 157 | 14% | 829 | 68 | 8% | 21,993 | 3,009 | 14% |
| L19 | Queen's Bank | 3 | 0 | 0% | 5 | 1 | 20% | 164 | 18 | 11% |
| L20 | Cloot Drove | 2 | 0 | 9% | 3 | 0 | 0% | 94 | 3 | 3% |
| L21 | Barrier Bank | 86 | 8 | 9% | 86 | 4 | 5% | 2,202 | 137 | 6% |
| L22 | James Road | 78 | 6 | 8% | 113 | 1 | 1% | 2,918 | 173 | 6% |
| L23 | Hull's Drove (West) | 275 | 7 | 3% | 221 | 3 | 1% | 6,699 | 327 | 5% |
| L24 | Martins Road | 6 | 1 | 10% | 9 | 0 | 5% | 237 | 16 | 7% |
| L25 | Hull's Drove (East) | 258 | 8 | 3% | 195 | 3 | 2% | 5,497 | 229 | 4% |
| L26 | Eaugate Road | 7 | 0 | 6% | 15 | 0 | 1% | 330 | 33 | 10% |
| L27 | Chapel Hill | 15 | 1 | 4% | 9 | 0 | 2% | 315 | 38 | 12% |
| L28 | Chapel Gate | 5 | 0 | 0% | 6 | 0 | 7% | 122 | 7 | 6% |
| L29 | Dog Drove North | 1 | 0 | 0% | 3 | 0 | 0% | 88 | 9 | 10% |
| L30 | Holbeach Drove Gate | 238 | 11 | 5% | 172 | 6 | 3% | 4,148 | 247 | 6% |

| Ref | Link | AM Construction Peak (06:00-07:00) | | | PM Construction Peak (19:00-20:00) | | | 24hr Daily | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Total | HGVs | HGVs (%) | Total | HGVs | HGVs (%) | Total | HGVs | HGVs (%) |
| L31 | B1166 Long Lane | 91 | 2 | 2% | 93 | 0 | 0% | 2,389 | 121 | 5% |
| L32 | Langary Gate Road | 1 | 0 | 0% | 4 | 0 | 5% | 97 | 6 | 6% |
| L33 | A16 Crowland Bypass (East of Crowland) | 1,340 | 151 | 11% | 830 | 55 | 7% | 26,286 | 3,220 | 12% |
| L34 | A16 (South of Crowland) | 1,180 | 173 | 15% | 972 | 72 | 7% | 23,829 | 3,155 | 13% |
| L35 | A16 (North of Peterborough) | 1,173 | 160 | 14% | 869 | 67 | 8% | 22,700 | 2,862 | 13% |
| J1 | A16 / A151 Roundabout | 1,739 | 240 | 14% | 1,563 | 99 | 6% | 44,014 | 5,262 | 12% |
| J2 | A151 / High Road Roundabout | 715 | 71 | 10% | 715 | 30 | 4% | 20,489 | 1,550 | 8% |
| J3 | A151 / High Road / Stone Gate Junction | 671 | 70 | 10% | 625 | 28 | 4% | 18,206 | 1,388 | 8% |
| J4 | A16 / B1165 Low Road Roundabout | 1,276 | 190 | 15% | 1,063 | 76 | 7% | 31,325 | 4,014 | 13% |
| J5 | A16 / A1175 Roundabout | 1,162 | 182 | 16% | 1,085 | 62 | 6% | 29,590 | 3,770 | 13% |
| J6 | B1168 Raven's Gate / B1165 Raven's Bank | 355 | 7 | 2% | 277 | 3 | 1% | 8,122 | 300 | 4% |
| J7 | A16 / B1357 Moulton Chapel Road / B1357 Stonegate Roundabout | 1,330 | 158 | 12% | 969 | 55 | 6% | 28,880 | 3,341 | 12% |

| Ref | Link | AM Construction Peak (06:00-07:00) | | | PM Construction Peak (19:00-20:00) | | | 24hr Daily | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Total | HGVs | HGVs (%) | Total | HGVs | HGVs (%) | Total | HGVs | HGVs (%) |
| J8 | Barrier Bank / Queen's Bank / Wash Bank Junction | 88 | 3 | 4% | 87 | 2 | 2% | 2,212 | 130 | 6% |
| J9 | B1166 Postland Road / James Road Junction | 212 | 8 | 4% | 216 | 2 | 1% | 5,781 | 194 | 3% |
| J10 | B1166 Spalding Road / B1166 James Road / James Road Junction | 164 | 7 | 5% | 161 | 2 | 1% | 4,566 | 224 | 5% |
| J11 | A16 Crowland Bypass / James Road / Hull's Drove Junction | 1,454 | 158 | 11% | 966 | 56 | 6% | 30,031 | 3,446 | 11% |
| J12 | Martins Road / B1166 Hull's Drove Junction | 262 | 9 | 4% | 201 | 3 | 2% | 5,616 | 233 | 4% |
| J13 | B1168 Holbeach Drove Gate / B1166 Drove Road Junction | 292 | 8 | 3% | 214 | 3 | 1% | 6,053 | 224 | 4% |
| J14 | Langary Gate Road / B1166 Mill Lane / B1166 Long Lane Junction | 80 | 2 | 3% | 90 | 0 | 0% | 2,299 | 112 | 5% |
| J15 | A16 Crowland Bypass / B1040 Nene Terrance Road / B1040 Thorney Road South Junction | 1,281 | 156 | 12% | 788 | 70 | 9% | 22,944 | 2,945 | 13% |
| J16 | A16 / B1443 Thorney Road Roundabout | 1,326 | 171 | 13% | 1,005 | 67 | 7% | 27,219 | 2,989 | 11% |

## 15.7. Embedded Mitigation

15.7.1. This section contains the mitigation measures relevant to this chapter that are already incorporated into the Scheme design and the management plans submitted with the DCO Application, as described in **ES Chapter 2: The Scheme** (Doc Ref. 6.1).

15.7.2. Embedded mitigation measures form an integral, committed and deliverable part of the scheme design or comprise standard construction practices. They are assumed to be implemented and are therefore factored into the determination of significant residual effects.

15.7.3. The transport mitigation measures are primarily set out within the **Outline CTMP** (Doc. Ref. 7.13), with measures concerning PRoW set out in the **Outline PRoW MP** (Doc. Ref. 7.15).

### Construction and Decommissioning

15.7.4. The Scheme will minimise construction and decommissioning impacts through the following measures, secured by the **Outline CTMP** (Doc. Ref. 7.13), **Outline CEMP** (Doc. Ref. 7.10), and the **Outline PRoW-MP** (Doc. Ref. 7.15) during the construction phase (as well as an **Outline DEMP** (Doc. Ref. 7.12) during the decommissioning phase) and the **Outline PRoW-MP** (Doc. Ref. 7.15). These documents will be secured as part of the DCO, to detail and formalise the measures that will mitigate construction-related and decommissioning-related effects.

15.7.5. The following measures will be secured by the **Outline CTMP** (Doc. Ref. 7.13):

- Providing suitable points of access for construction vehicles to accommodate swept paths and designed with adequate visibility, with any supporting improvements (e.g. vegetation clearance) to take place within the highway boundary and/ or the Order Limits if required;
- Delivering internal construction routes through the Solar Development Area, to allow vehicles to access all areas via the site access points;
- Providing an internal access track to facilitate the construction of the Grid Connection Route;
- Restricting HGV movements and abnormal loads to certain routes (see HGV Routing Plan in **ES Figure 15-3** and Abnormal Load Routing Plan in **ES Figure 15-4** (Doc. Ref. 6.2));

- Minimising HGV movements during certain times of the day (e.g. between 07:00 and 09:00, as well as between 17:00 and 19:00), to avoid increasing traffic levels on the surrounding highway network during the SRN network peak hours (defined by National Highways as 08:00 – 09:00 and 17:00 – 18:00);
- Shuttle service providing transport between local settlements and the Scheme;
- Implementing a Delivery Management System to control the bookings of HGV deliveries from the start of the construction period. This will be used to regulate the arrival times of HGVs via timed delivery slots, as well as to monitor compliance of HGV routing;
- Implementing a monitoring system to record the route of all HGVs travelling to and from the Scheme, to record any non-compliance with the agreed routing plan/ delivery hours and to communicate any issues to the relevant suppliers to ensure the correct routes and times are followed;
- Developing a communications strategy including regular meetings with contractors to review and address any issues associated with travel to/ from the Scheme, as well as to relay information including any restrictions and requirements which should be followed;
- Encouraging local construction staff to car share to reduce single occupancy car trips, by promoting the benefits of car sharing such as reduced fuel costs and by providing dedicated parking spaces for those car sharing within the compounds. A Car Share Scheme will be implemented to match potential sharers and to help staff identify any colleagues who could potentially be collected along their route to/ from site;
- Providing sufficient (but limited) on-site car parking within the construction compounds to accommodate the expected peak parking demand of construction staff within the site;
- Implementing local off-site highway improvements to accommodate construction vehicles and abnormal loads travelling to the Scheme e.g. carriageway widening, pavement protection, removal of street furniture, vegetation clearance including overhanging trees and lifting overheard cables if required (**Outline CTMP** (Doc. Ref. 7.13));
- Positioning of suitably qualified banksmen at the proposed accesses for the Scheme and at internal crossing points, to allow all vehicle arrivals and departures to be safely controlled during the construction period;

- Vegetation clearance at the proposed access points where required to achieve appropriate levels of visibility at these locations. Drawings showing the proposed access points, visibility splays and swept paths are held within **Outline CTMP** (Doc. Ref. 7.13);
- Providing sufficient cycle parking spaces within the site to encourage construction staff to travel by bicycle where viable. The number of spaces provided will be dependent on the compound design;
- Should it be necessary, access for emergency vehicles will be achievable via all proposed construction and operational accesses;
- A specialised haulage service will be employed to allow abnormal loads to transfer components with the necessary escort, permits and traffic management, with the Applicant consulting with the relevant highways authorities to ensure the correct permits are obtained. The Police will also be given advanced notification under the Road Vehicle Authorisation of Special Types Order 2003; and
- The opportunity to combine mitigation (including some of the above measures) with any relevant cumulative schemes, such as the Grimsby to Walpole Project and Weston Marsh to East Leicestershire Project (see Section 15.11), will be explored in order to reduce cumulative impacts during the construction phase. This could include sharing the shuttle service to transport construction workers to/ from multiple sites or sharing construction compounds to consolidate trips.

15.7.6. As above, the above measures will be secured as part of the **Outline CTMP** (Doc. Ref. 7.13) and **Outline CEMP (**Doc. Ref. 7.10) during the construction phase, as well as an **Outline DEMP** (Doc. Ref. 7.12) during the decommissioning phase. In addition, these measures will be secured as part of the Framework CTMP(s) which will be prepared post-consent.

15.7.7. The following measures will be secured by the **Outline CEMP** (Doc. Ref. 7.10):

- Core construction working hours of 07:00-19:00 from Monday to Friday and 08:00-13:30 on Saturdays, with no Sunday or Bank Holiday working unless crucial for construction.

15.7.8. The following measures will be secured by the **Outline PRoW-MP** (Doc. Ref. 7.15):

- Maintaining access to/ along PRoWs and Common Land or otherwise providing temporary diversion routes where necessary to seek to avoid any closures or potential conflicts with the Scheme (e.g. for the Grid

Connection Route) where reasonably practicable. The diversion routes will be agreed with the local authorities prior to construction. It should be noted that in two cases (Crow/12/1 and Wstn/3/1), a temporary PRoW closure is unavoidable, and in these instances the duration of the closure will be minimised;

- Providing sufficient protection/separation between existing PRoW/ Common Land and construction routes where necessary;
- Managing areas where the proposed construction route crosses any existing PRoW / Common Land (where these are unable to be diverted) or local access roads, by maximising visibility between construction vehicles and other users (pedestrians and road users), implementing traffic management with a default priority that construction traffic will give-way to other users. This includes several PRoW/ Common Land crossing points as detailed within the **Outline PRoW-MP** (Doc. Ref. 7.15).

### Operation

15.7.9. Mitigation measures for the operational phase of the Scheme are set out in the Outline OEMP (Doc. Ref. 7.11), with measures relating to PRoW during the operational phase also set out in the Outline PRoW-MP (Doc. Ref. 7.15).

15.7.10. Measures which relate to traffic and access include the following:

- Providing suitable points of access for operational vehicles at all accesses marked as operational accesses in **ES Figure 2-5** (Doc Ref. 6.2);
- Converting the internal construction routes within the Solar Development Area into maintenance routes, to allow operational vehicles to access all areas of the Solar Development Area via the proposed access points during the operational phase;
- Utilising existing field access locations to facilitate access for periodic inspection and maintenance along the Grid Connection Route;
- Maintaining access to all existing PRoWs within the Order Limits;
- Maintaining access to the Common Land adjacent to Martin's Road; and
- Controlling areas where the internal maintenance route crosses any existing PRoW or local access roads (such as providing gates), permitting only operational traffic to utilise these internal routes within the Scheme. Operational traffic will give-way to other users (including pedestrians and road users) when utilising the crossing points. Visibility will be maximised

between operational vehicles and other users, with warning signage provided if required.

## 15.8. Assessment of Potential Impacts and Likely Significant Effects

15.8.1. The Scheme as outlined in **ES Chapter 2: The Scheme** (Doc Ref. 6.1) has been considered in assessing the potential impacts and likely significant effects of the Scheme, whilst considering the embedded mitigation described within Section 15.7.

15.8.2. Taking into account the embedded mitigation measures as detailed in Section 15.7 above, the potential impacts and effects of the Scheme have been assessed using the methodology as detailed in Section 15.4 of this chapter.

### Forecast Construction Traffic Impact

15.8.3. The forecast increases in two-way vehicle movements during the development peak hours and across the day (18 hours, Monday–Friday), both in terms of actual increases and percentage increases relative to the future baseline traffic flows, are presented in Table 15-21 below. The assessments for these three time periods have been reproduced here to show the worst-case traffic impacts of the Scheme. Full traffic flow tables showing these time periods, as well as the network peak hour flows and 24-hour flows can be found in **ES Appendix 15-3** (Doc. Ref. 6.3).

15.8.4. Temporary partial or full road closures may be required in some locations to complete the highway works. Any partial or full road closures are expected to be for a short duration to minimise impacts on the local highway network. The impact of traffic management on driver and passenger delay is also considered in the assessment.

### Table 15-21: Construction Traffic Impact – Development Peak Hours

| Ref | Location | AM Development Peak (06:00-07:00) | | | PM Development Peak (19:00-20:00) | | | 18-Hour Weekday (06:00-00:00) | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Base Flows | Dev. Flows | % Increase | Base Flows | Dev. Flows | % Increase | Base Flows | Dev. Flows | % Increase |
| L1 | A16 Spalding Bypass (North-East of Spalding) | 1,180 | 67 | 5.7% | 828 | 67 | 8.1% | 24,736 | 255 | 1.0% |
| L2 | Cross Gate | 7 | 0 | 0.0% | 6 | 0 | 0.0% | 165 | 0 | 0.0% |
| L3 | A151 Holbeach Road | 690 | 65 | 9.5% | 723 | 65 | 9.1% | 18,008 | 173 | 1.0% |
| L4 | A151 Weston Bypass | 629 | 57 | 9.1% | 619 | 57 | 9.2% | 16,011 | 144 | 0.9% |
| L5 | A151 High Road | 623 | 22 | 3.6% | 608 | 22 | 3.6% | 15,795 | 55 | 0.3% |
| L6 | Stone Gate | 9 | 0 | 0.0% | 6 | 0 | 0.0% | 183 | 0 | 0.0% |
| L7 | A16 Spalding Bypass (East of Spalding) | 1,120 | 109 | 9.7% | 894 | 109 | 12.2% | 23,051 | 339 | 1.5% |
| L8 | Broadgate | 18 | 0 | 0.0% | 27 | 0 | 0.0% | 751 | 0 | 0.0% |
| L9 | Delgate Bank (North) | 6 | 0 | 0.0% | 2 | 0 | 0.0% | 117 | 0 | 0.0% |
| L10 | Long Lane | 67 | 0 | 0.0% | 36 | 0 | 0.0% | 1,028 | 0 | 0.0% |
| L11 | B1165 Austendike Road | 106 | 23 | 21.6% | 76 | 23 | 30.4% | 2,728 | 59 | 2.2% |
| L12 | Delgate Bank (Central) | 9 | 0 | 0.0% | 5 | 0 | 0.0% | 200 | 0 | 0.0% |
| L13 | West Gate | 12 | 0 | 0.0% | 7 | 0 | 0.0% | 221 | 0 | 0.0% |

| Ref | Location | AM Development Peak (06:00-07:00) | | | PM Development Peak (19:00-20:00) | | | 18-Hour Weekday (06:00-00:00) | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Base Flows | Dev. Flows | % Increase | Base Flows | Dev. Flows | % Increase | Base Flows | Dev. Flows | % Increase |
| L14 | A16 Spalding Bypass (South-East of Spalding) | 695 | 91 | 13.1% | 592 | 91 | 15.4% | 15,456 | 289 | 1.9% |
| L15 | A16 Cowbit Road | 1,160 | 129 | 11.1% | 860 | 129 | 15.0% | 22,289 | 365 | 1.6% |
| L16 | B1357 Moulton Chapel Road | 170 | 12 | 7.0% | 166 | 12 | 7.2% | 4,052 | 24 | 0.6% |
| L17 | Delgate Bank (South) | 5 | 0 | 0.0% | 3 | 0 | 0.0% | 107 | 0 | 0.0% |
| L18 | A16 Crowland Bypass (Near Crowland Airfield) | 1,147 | 140 | 12.2% | 829 | 140 | 16.8% | 20,513 | 400 | 1.9% |
| L19 | Queen's Bank | 3 | 0 | 0.0% | 5 | 0 | 0.0% | 162 | 0 | 0.0% |
| L20 | Cloot Drove | 2 | 0 | 0.0% | 3 | 0 | 0.0% | 93 | 0 | 0.0% |
| L21 | Barrier Bank | 86 | 85 | 99.8% | 86 | 85 | 98.8% | 2,145 | 190 | 8.9% |
| L22 | James Road | 78 | 85 | 110% | 113 | 85 | 75.5% | 2,577 | 190 | 7.4% |
| L23 | Hull's Drove (West) | 275 | 131 | 47.7% | 221 | 131 | 59.4% | 5,915 | 364 | 6.1% |
| L24 | Martins Road | 6 | 127 | 2007% | 9 | 127 | 1397% | 230 | 351 | 152.6% |
| L25 | Hull's Drove (East) | 258 | 90 | 35.0% | 195 | 90 | 46.2% | 4,904 | 249 | 5.1% |
| L26 | Eaugate Road | 7 | 4 | 62.3% | 15 | 4 | 27.2% | 326 | 13 | 4.0% |
| L27 | Chapel Hill | 15 | 4 | 28.1% | 9 | 4 | 47.4% | 312 | 13 | 4.2% |

| Ref | Location | AM Development Peak (06:00-07:00) | | | PM Development Peak (19:00-20:00) | | | 18-Hour Weekday (06:00-00:00) | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Base Flows | Dev. Flows | % Increase | Base Flows | Dev. Flows | % Increase | Base Flows | Dev. Flows | % Increase |
| L28 | Chapel Gate | 5 | 0 | 0.0% | 6 | 0 | 0.0% | 119 | 0 | 0.0% |
| L29 | Dog Drove North | 1 | 0 | 0.0% | 3 | 0 | 0.0% | 87 | 0 | 0.0% |
| L30 | Holbeach Drove Gate | 238 | 4 | 1.8% | 172 | 4 | 2.4% | 3,949 | 13 | 0.3% |
| L31 | B1166 Long Lane | 91 | 86 | 95.0% | 93 | 86 | 92.7% | 2,132 | 236 | 11.1% |
| L32 | Langary Gate Road | 1 | 86 | 13624% | 4 | 86 | 2039% | 97 | 236 | 243.2% |
| L33 | A16 Crowland Bypass (East of Crowland) | 1,340 | 115 | 8.6% | 830 | 115 | 13.9% | 23,211 | 351 | 1.5% |
| L34 | A16 (South of Crowland) | 1,180 | 88 | 7.4% | 972 | 88 | 9.0% | 22,298 | 296 | 1.3% |
| L35 | A16 (North of Peterborough) | 1,173 | 88 | 7.5% | 869 | 88 | 10.1% | 21,439 | 296 | 1.4% |
| J1 | A16 / A151 Roundabout | 1,739 | 121 | 6.9% | 1,563 | 121 | 7.7% | 39,207 | 383 | 1.0% |
| J2 | A151 / High Road Roundabout | 715 | 65 | 9.2% | 715 | 65 | 9.2% | 18,541 | 173 | 0.9% |
| J3 | A151 / High Road / Stone Gate Junction | 671 | 22 | 3.3% | 625 | 22 | 3.5% | 16,475 | 55 | 0.3% |
| J4 | A16 / B1165 Low Road Roundabout | 1,276 | 109 | 8.6% | 1,063 | 109 | 10.3% | 27,904 | 339 | 1.2% |
| J5 | A16 / A1175 Roundabout | 1,162 | 140 | 12.1% | 1,085 | 140 | 12.9% | 26,358 | 388 | 1.5% |

| Ref | Location | AM Development Peak (06:00-07:00) | | | PM Development Peak (19:00-20:00) | | | 18-Hour Weekday (06:00-00:00) | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Base Flows | Dev. Flows | % Increase | Base Flows | Dev. Flows | % Increase | Base Flows | Dev. Flows | % Increase |
| J6 | B1168 Raven's Gate / B1165 Raven's Bank | 355 | 21 | 5.9% | 277 | 21 | 7.6% | 7,246 | 42 | 0.6% |
| J7 | A16 / B1357 Moulton Chapel Road / B1357 Stonegate Roundabout | 1,330 | 141 | 10.6% | 969 | 141 | 14.5% | 25,726 | 389 | 1.5% |
| J8 | Barrier Bank / Queen's Bank / Wash Bank Junction | 88 | 0 | 0.0% | 87 | 0 | 0.0% | 2,167 | 0 | 0.0% |
| J9 | B1166 Postland Road / James Road Junction | 212 | 0 | 0.0% | 216 | 0 | 0.0% | 5,644 | 0 | 0.0% |
| J10 | B1166 Spalding Road / B1166 James Road / James Road Junction | 164 | 85 | 52.1% | 161 | 85 | 53.0% | 4,471 | 190 | 4.3% |
| J11 | A16 Crowland Bypass / James Road / Hull's Drove Junction | 1,454 | 193 | 13.3% | 966 | 193 | 20.0% | 26,518 | 557 | 2.1% |
| J12 | Martins Road / B1166 Hull's Drove Junction | 262 | 131 | 50.0% | 201 | 131 | 65.3% | 5,010 | 364 | 7.3% |
| J13 | B1168 Holbeach Drove Gate / B1166 Drove Road Junction | 292 | 90 | 30.9% | 214 | 90 | 42.1% | 5,400 | 249 | 4.6% |

| Ref | Location | AM Development Peak (06:00-07:00) | | | PM Development Peak (19:00-20:00) | | | 18-Hour Weekday (06:00-00:00) | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Base Flows | Dev. Flows | % Increase | Base Flows | Dev. Flows | % Increase | Base Flows | Dev. Flows | % Increase |
| J14 | Langary Gate Road / B1166 Mill Lane / B1166 Long Lane Junction | 80 | 86 | 107.6% | 90 | 86 | 95.9% | 2,051 | 236 | 11.5% |
| J15 | A16 Crowland Bypass / B1040 Nene Terrance Road / B1040 Thorney Road South Junction | 1,281 | 115 | 9.0% | 788 | 115 | 14.6% | 21,503 | 351 | 1.6% |
| J16 | A16 / B1443 Thorney Road Roundabout | 1,326 | 88 | 6.6% | 1,005 | 88 | 8.7% | 25,862 | 296 | 1.1% |

### Screening

15.8.5. The results shown in Table 15-21 have been used to inform the screening assessment of road links and road junctions. It should be noted that all PRoW and Common Land receptors have been screened in by default and are therefore not included in the table.

15.8.6. As stated in the screening criteria outlined in Section 15.4, receptors which experience increases of fewer than 30 additional vehicle trips during the development peak and network peak hours have been screened out on the basis that any high percentage increase would be due to a very low baseline level of traffic, and impact would be negligible and therefore there will not be any potential for significant effects to arise.

15.8.7. The link and junction receptors which have been screened in for the traffic assessment are shown in Table 15-22.

**Table 15-22: Screened-in Traffic Receptors**

| Ref | Receptor |
|---|---|
| L1 | A16 Spalding Bypass (North-East of Spalding) |
| L3 | A151 Holbeach Road |
| L4 | A151 Weston Bypass |
| L7 | A16 Spalding Bypass (East of Spalding) |
| L14 | A16 Spalding Bypass (South-East of Spalding) |
| L15 | A16 Cowbit Road |
| L18 | A16 Crowland Bypass (Near Crowland Airfield) |
| L21 | Barrier Bank |
| L22 | James Road |
| L23 | Hull's Drove (West) |
| L24 | Martins Road |
| L25 | Hull's Drove (East) |
| L31 | B1166 Long Lane |
| L32 | Langary Gate Road |
| L33 | A16 Crowland Bypass (East of Crowland) |
| L34 | A16 (South of Crowland) |

| Ref | Receptor |
|---|---|
| L35 | A16 (North of Peterborough) |
| J1 | A16 / A151 Roundabout |
| J2 | A151 / High Road Roundabout |
| J4 | A16 / B1165 Low Road Roundabout |
| J5 | A16 / A1175 Roundabout |
| J7 | A16 / B1357 Moulton Chapel Road / B1357 Stonegate Roundabout |
| J10 | B1166 Spalding Road / B1166 James Road / James Road Junction |
| J11 | A16 Crowland Bypass / James Road / Hull's Drove Junction |
| J12 | Martins Road / B1166 Hull's Drove Junction |
| J13 | B1168 Holbeach Drove Gate / B1166 Drove Road Junction |
| J14 | Langary Gate Road / B1166 Mill Lane / B1166 Long Lane Junction |
| J15 | A16 Crowland Bypass / B1040 Nene Terrance Road / B1040 Thorney Road South Junction |
| J16 | A16 / B1443 Thorney Road Roundabout |

15.8.8. Following the above, the anticipated impacts for each of the assessment criteria at each screened-in receptor are set out below.

15.8.9. Impacts on road link and road junction receptors during the construction and decommissioning of the Scheme have been determined for the following categories:

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

15.8.10. Impacts on PRoW receptors during the construction and decommissioning of the Scheme have been determined for the following categories:

- Severance;
- Pedestrian delay;
- Pedestrian and cyclist amenity; and
- Fear and intimidation.

### Sensitivity

15.8.11. Different criteria for sensitivity have been used for each assessment category as follows:

- Severance, Pedestrian Delay, Non-Motorised User Amenity, Fear and Intimidation;
- Driver Delay;
- Road Safety; and
- Large Loads.

15.8.12. Details of receptor sensitivity for Severance, Pedestrian Delay, Non-Motorised User Amenity and Fear and Intimidation for "screened-in" links are set out in Table 15-23 below.

**Table 15-23: Receptor Sensitivity for Severance, Pedestrian Delay, Non-Motorised User Amenity and Fear & Intimidation**

| Receptor Ref | Receptor | Sensitivity | Justification |
|---|---|---|---|
| L1 | A16 Spalding Bypass (North-East of Spalding) | Very Low | No sensitive users or receptors present |
| L3 | A151 Holbeach Road | Low | Footpath present on northern side of road |
| L4 | A151 Weston Bypass | Very Low | No sensitive users or receptors present |
| L7 | A16 Spalding Bypass (East of Spalding) | Very Low | No sensitive users or receptors present |
| L14 | A16 Spalding Bypass (South-East of Spalding) | Very Low | No sensitive users or receptors present |
| L15 | A16 Cowbit Road | Very Low | No sensitive users or receptors present |
| L18 | A16 Crowland Bypass (Near Crowland Airfield) | Very Low | No sensitive users or receptors present |

| Receptor Ref | Receptor | Sensitivity | Justification |
|---|---|---|---|
| L21 | Barrier Bank | Very Low | Rural setting with limited pedestrian/ cycle facilities |
| L22 | James Road | Very Low | Rural setting with limited pedestrian/ cycle facilities |
| L23 | Hull's Drove (West) | Very Low | Rural setting with limited pedestrian/ cycle facilities |
| L24 | Martins Road | Very Low | Rural setting with limited pedestrian/ cycle facilities |
| L25 | Hull's Drove (East) | Very Low | Rural setting with limited pedestrian/ cycle facilities |
| L31 | B1166 Long Lane | Very Low | Rural setting with limited pedestrian/ cycle facilities |
| L32 | Langary Gate Road | Very Low | Rural setting with limited pedestrian/ cycle facilities |
| L33 | A16 Crowland Bypass (East of Crowland) | Very Low | No sensitive users or receptors present |
| L34 | A16 (South of Crowland) | Very Low | No sensitive users or receptors present |
| L35 | A16 (North of Peterborough) | Very Low | No sensitive users or receptors present |
| J1 | A16 / A151 Roundabout | Low | Footway present around roundabout |
| J2 | A151 / High Road Roundabout | Low | Footway present around roundabout |
| J4 | A16 / B1165 Low Road Roundabout | Low | Footway present around roundabout |
| J5 | A16 / A1175 Roundabout | Very Low | No pedestrian or cycle facilities present |
| J7 | A16 / B1357 Moulton Chapel Road / B1357 Stonegate Roundabout | Low | Footway present around roundabout |
| J10 | B1166 Spalding Road / B1166 James Road / James Road Junction | Very Low | No pedestrian or cycle facilities present |

| Receptor Ref | Receptor | Sensitivity | Justification |
|---|---|---|---|
| J11 | A16 Crowland Bypass / James Road / Hull's Drove Junction | Very Low | No pedestrian or cycle facilities present |
| J12 | Martins Road / B1166 Hull's Drove Junction | Low | Residential properties with direct frontage onto roads at junction |
| J13 | B1168 Holbeach Drove Gate / B1166 Drove Road Junction | Low | Rural setting with some pedestrian facilities and residential frontages |
| J14 | Langary Gate Road / B1166 Mill Lane / B1166 Long Lane Junction | Low | Rural setting with some pedestrian facilities and residential frontages |
| J15 | A16 Crowland Bypass / B1040 Nene Terrance Road / B1040 Thorney Road South Junction | Very Low | No pedestrian or cycle facilities present |
| J16 | A16 / B1443 Thorney Road Roundabout | Very Low | No pedestrian or cycle facilities present |
| P1 | Crow/11/1 | Very Low | Pedestrian/cycle route not running alongside highway |
| P2 | Crow/12/1 | Very Low | Pedestrian/cycle route not running alongside highway |
| P3 | Crow/17/1 | Very Low | Pedestrian/cycle route not running alongside highway |
| P4 | Crow/17/2 | Very Low | Pedestrian/cycle route not running alongside highway |
| P5 | Flee/6/1 | Very Low | Pedestrian/cycle route not running alongside highway |
| P6 | Flee/7/1 | Very Low | Pedestrian/cycle route not running alongside highway |
| P7 | Flee/8/1 | Very Low | Pedestrian/cycle route not running alongside highway |
| P8 | Flee/8/2 | Very Low | Pedestrian/cycle route not running alongside highway |
| P9 | Holb/14/1 | Very Low | Pedestrian/cycle route not running alongside highway |

| Receptor Ref | Receptor | Sensitivity | Justification |
|---|---|---|---|
| P10 | Holb/15/1 | Very Low | Pedestrian/cycle route not running alongside highway |
| P11 | Whap/1/1 | Very Low | Pedestrian/cycle route not running alongside highway |
| P12 | Wstn/3/1 | Very Low | Pedestrian/cycle route not running alongside highway |
| P13 | Common Land on Martins Road | Very Low | Lightly trafficked highway with off-road pedestrian/cycle route |

15.8.13. Link sensitivity for Driver Delay has been assessed with reference to queue length data obtained from traffic surveys for junction receptors and route type for link receptors, as per the criteria outlined in Table 15-7.

15.8.14. Details of receptor sensitivity for Driver Delay are set out in Table 15-24 below.

**Table 15-24: Receptor Sensitivity for Driver Delay**

| Receptor Ref | Receptor | Sensitivity | Justification |
|---|---|---|---|
| L1 | A16 Spalding Bypass (North-East of Spalding) | Very Low | Strategic route outside of built-up area |
| L3 | A151 Holbeach Road | Very Low | Strategic route outside of built-up area |
| L4 | A151 Weston Bypass | Very Low | Strategic route outside of built-up area |
| L7 | A16 Spalding Bypass (East of Spalding) | Very Low | Strategic route outside of built-up area |
| L14 | A16 Spalding Bypass (South-East of Spalding) | Very Low | Strategic route outside of built-up area |
| L15 | A16 Cowbit Road | Very Low | Strategic route outside of built-up area |
| L18 | A16 Crowland Bypass (Near Crowland Airfield) | Very Low | Strategic route outside of built-up area |
| L21 | Barrier Bank | Low | Local route outside of built-up area |

| Receptor Ref | Receptor | Sensitivity | Justification |
|---|---|---|---|
| L22 | James Road | Low | Local route outside of built-up area |
| L23 | Hull's Drove (West) | Low | Local route outside of built-up area |
| L24 | Martins Road | Low | Local route outside of built-up area |
| L25 | Hull's Drove (East) | Low | Local route outside of built-up area |
| L31 | B1166 Long Lane | Low | Local route outside of built-up area |
| L32 | Langary Gate Road | Low | Local route outside of built-up area |
| L33 | A16 Crowland Bypass (East of Crowland) | Very Low | Strategic route outside of built-up area |
| L34 | A16 (South of Crowland) | Very Low | Strategic route outside of built-up area |
| L35 | A16 (North of Peterborough) | Very Low | Strategic route outside of built-up area |
| J1 | A16 / A151 Roundabout | Medium | Max queues of 29 vehicles on one arm in the PM as well as 16 vehicles in the AM. Outside of a built-up area. |
| J2 | A151 / High Road Roundabout | Low | Max queue of 6 vehicles in the AM peak, moderate queueing on 1-2 arms. |
| J4 | A16 / B1165 Low Road Roundabout | Medium | Max queue of 25 vehicles on one arm in both the AM and PM peaks. Outside of a built-up area. |
| J5 | A16 / A1175 Roundabout | Medium | Max queue of 11 and 21 vehicles in the AM and PM peaks respectively. Moderate queueing on three arms. |
| J7 | A16 / B1357 Moulton Chapel Road / B1357 Stonegate Roundabout | Medium | Max queue of 13 and 20 vehicles in the AM and PM |

| Receptor Ref | Receptor | Sensitivity | Justification |
|---|---|---|---|
| | | | peaks respectively. Moderate queueing on four arms. |
| J10 | B1166 Spalding Road / B1166 James Road / James Road Junction | Low | No queue data available. J10 is a priority junction located very close to J11, which is a Medium sensitivity junction. However, J11 is located on the A16 and has approximately six times as many daily flows through junction as J10. J10 has therefore been assigned Low Sensitivity since it has lower traffic flows and is not located on an A-Road. |
| J11 | A16 Crowland Bypass / James Road / Hull's Drove Junction | Medium | Max queue of 17 and 10 vehicles in the AM and PM peaks respectively. Moderate queueing on four arms. |
| J12 | Martins Road / B1166 Hull's Drove Junction | Very Low | Max queue of 1 vehicle across both peaks |
| J13 | B1168 Holbeach Drove Gate / B1166 Drove Road Junction | Low | Max Queue of 6 vehicles in PM peak, low queueing on six other arms, |
| J14 | Langary Gate Road / B1166 Mill Lane / B1166 Long Lane Junction | Very Low | Max queue of 1 vehicle across both peaks |
| J15 | A16 Crowland Bypass / B1040 Nene Terrance Road / B1040 Thorney Road South Junction | Medium | No queue data available. Since J15 is located on A16, it has been assigned same sensitivity as nearest junction on A16 with queue data, which is J11. It therefore has been assigned Medium Sensitivity. |
| J16 | A16 / B1443 Thorney Road Roundabout | Medium | No queue data available. Since J16 is located on A16, it has been assigned same |

| Receptor Ref | Receptor | Sensitivity | Justification |
|---|---|---|---|
| | | | sensitivity as nearest junction on A16 with queue data, which is J11. It therefore has been assigned Medium Sensitivity. |

15.8.15. A review of PIC data obtained from LCC and PCC for the Traffic and Traffic and access study area shown in **ES Figure 15-1** (Doc. Ref. 6.2) for the most recently available five-year period has been undertaken to assess the road safety sensitivity of the link and junction receptors within the Scheme area using the criteria outlined in **Table 15-8**.

15.8.16. Details of receptor sensitivity for Road Safety are summarised in Table 15-25 below. An analysis of collision rates for each link receptor has also been carried out against national average road collision rates to determine whether any links recorded abnormally high collision rates which might require an increase in sensitivity classification. Receptors whose sensitivities have been increased in this way are noted in Table 15-25. The details of this analysis are summarised in **ES Appendix 15-4: Transport Assessment Note** (Doc. Ref. 6.3).

**Table 15-25: Receptor Sensitivity for Road Safety**

| Receptor Ref | Receptor | Sensitivity | Justification |
|---|---|---|---|
| L1 | A16 Spalding Bypass (North-East of Spalding) | Medium | 4 Total Collisions, 1 Serious, 1 Fatal |
| L3 | A151 Holbeach Road | High (upgraded from Medium due to high collision rate) | 9 Total Collisions, 1 Serious |
| L4 | A151 Weston Bypass | Very Low | 1 Total Collision, No Serious |
| L7 | A16 Spalding Bypass (East of Spalding) | Low | 3 Total Collisions, No Serious |
| L14 | A16 Spalding Bypass (South-East of Spalding) | Medium | 6 Total Collisions, 2 Serious |
| L15 | A16 Cowbit Road | Medium | 6 Total Collisions, 2 Serious, 1 Fatal |

| Receptor Ref | Receptor | Sensitivity | Justification |
|---|---|---|---|
| L18 | A16 Crowland Bypass (Near Crowland Airfield) | Low | 4 Collisions, No Serious |
| L21 | Barrier Bank | Low | 3 Collisions, 1 Serious |
| L22 | James Road | Very Low | 1 Total Collision, No Serious |
| L23 | Hull's Drove (West) | Very Low | 2 Total Collisions, No Serious |
| L24 | Martins Road | Very Low | No Collisions |
| L25 | Hull's Drove (East) | High (upgraded from Medium due to high collision rate) | 9 Total Collisions, 1 Serious |
| L31 | B1166 Long Lane | Very Low | No Collisions |
| L32 | Langary Gate Road | Very Low | No Collisions |
| L33 | A16 Crowland Bypass (East of Crowland) | Medium | 6 Total Collisions, 1 Serious, 1 Fatal |
| L34 | A16 (South of Crowland) | High | 16 Total Collisions, 2 Serious and 2 Fatal |
| L35 | A16 (North of Peterborough) | High | 13 Total Collisions, 4 Serious and 4 Fatal |
| J1 | A16 / A151 Roundabout | Low | 2 Total Collisions and 1 Serious |
| J2 | A151 / High Road Roundabout | Very Low | 1 Total Collision, No Serious |
| J4 | A16 / B1165 Low Road Roundabout | Very Low | No Collisions |
| J5 | A16 / A1175 Roundabout | Medium | 3 Total Collisions, 2 Serious |
| J7 | A16 / B1357 Moulton Chapel Road / B1357 Stonegate Roundabout | Low | 3 Total Collisions, No Serious |
| J10 | B1166 Spalding Road / B1166 James Road / James Road Junction | Very Low | No Collisions |

| Receptor Ref | Receptor | Sensitivity | Justification |
|---|---|---|---|
| J11 | A16 Crowland Bypass / James Road / Hull's Drove Junction | Medium | 7 Total Collisions, 1 Serious |
| J12 | Martins Road / B1166 Hull's Drove Junction | Low | 3 Total Collisions, No Serious |
| J13 | B1168 Holbeach Drove Gate / B1166 Drove Road Junction | Very Low | No Collisions |
| J14 | Langary Gate Road / B1166 Mill Lane / B1166 Long Lane Junction | Very Low | No Collisions |
| J15 | A16 Crowland Bypass / B1040 Nene Terrance Road / B1040 Thorney Road South Junction | Very Low | 2 Total Collisions, No Serious |
| J16 | A16 / B1443 Thorney Road Roundabout | Low | 2 Total Collisions, 1 Serious |

15.8.17. As with the Road Safety assessment, the sensitivities for Large Loads have been assessed with reference to the PIC data provided by LCC and PCC.

15.8.18. Details of receptor sensitivity for Large Loads are set out in Table 15-26 below.

**Table 15-26: Receptor Sensitivity for Large Loads**

| Receptor Ref | Receptor | Sensitivity | Justification |
|---|---|---|---|
| L1 | A16 Spalding Bypass (North-East of Spalding) | Medium | One fatal accident involving HGV, no serious accidents involving HGVs |
| L3 | A151 Holbeach Road | Low | One serious accident involving HGVs |
| L4 | A151 Weston Bypass | Very Low | No serious or fatal collisions involving HGVs |
| L7 | A16 Spalding Bypass (East of Spalding) | Very Low | No serious or fatal collisions involving HGVs |

| Receptor Ref | Receptor | Sensitivity | Justification |
|---|---|---|---|
| L14 | A16 Spalding Bypass (South-East of Spalding) | Very Low | No serious or fatal collisions involving HGVs |
| L15 | A16 Cowbit Road | Very Low | No serious or fatal collisions involving HGVs |
| L18 | A16 Crowland Bypass (Near Crowland Airfield) | Very Low | No serious or fatal collisions involving HGVs |
| L21 | Barrier Bank | Very Low | No serious or fatal collisions involving HGVs |
| L22 | James Road | Very Low | No serious or fatal collisions involving HGVs |
| L23 | Hull's Drove (West) | Very Low | No serious or fatal collisions involving HGVs |
| L24 | Martins Road | Very Low | No serious or fatal collisions involving HGVs |
| L25 | Hull's Drove (East) | Very Low | No serious or fatal collisions involving HGVs |
| L31 | B1166 Long Lane | Very Low | No serious or fatal collisions involving HGVs |
| L32 | Langary Gate Road | Very Low | No serious or fatal collisions involving HGVs |
| L33 | A16 Crowland Bypass (East of Crowland) | Medium | One fatal accident involving HGV, no serious accidents involving HGVs |
| L34 | A16 (South of Crowland) | Medium | One fatal accident involving HGV, no serious accidents involving HGVs |
| L35 | A16 (North of Peterborough) | Medium | One fatal accident involving HGV, no serious accidents involving HGVs |
| J1 | A16 / A151 Roundabout | Very Low | No serious or fatal collisions involving HGVs |

| Receptor Ref | Receptor | Sensitivity | Justification |
|---|---|---|---|
| J2 | A151 / High Road Roundabout | Very Low | No serious or fatal collisions involving HGVs |
| J4 | A16 / B1165 Low Road Roundabout | Very Low | No serious or fatal collisions involving HGVs |
| J5 | A16 / A1175 Roundabout | Very Low | No serious or fatal collisions involving HGVs |
| J7 | A16 / B1357 Moulton Chapel Road / B1357 Stonegate Roundabout | Very Low | No serious or fatal collisions involving HGVs |
| J10 | B1166 Spalding Road / B1166 James Road / James Road Junction | Very Low | No serious or fatal collisions involving HGVs |
| J11 | A16 Crowland Bypass / James Road / Hull's Drove Junction | Very Low | No serious or fatal collisions involving HGVs |
| J12 | Martins Road / B1166 Hull's Drove Junction | Very Low | No serious or fatal collisions involving HGVs |
| J13 | B1168 Holbeach Drove Gate / B1166 Drove Road Junction | Very Low | No serious or fatal collisions involving HGVs |
| J14 | Langary Gate Road / B1166 Mill Lane / B1166 Long Lane Junction | Very Low | No serious or fatal collisions involving HGVs |
| J15 | A16 Crowland Bypass / B1040 Nene Terrance Road / B1040 Thorney Road South Junction | Very Low | No serious or fatal collisions involving HGVs |
| J16 | A16 / B1443 Thorney Road Roundabout | Very Low | No serious or fatal collisions involving HGVs |

### Severance & Pedestrian Delay

15.8.19. ISEP Guidelines state that 30%, 60% and 90% increases in total traffic flows or 10%, 40% and 90% increases in HGV traffic flows would result in slight, moderate and substantial changes in magnitude with respect to Severance, respectively. The ISEP guidance also states that the magnitude of change for Pedestrian Delay can be assessed using the same assessment criteria as Severance. Since the sensitivities for Severance and Pedestrian Delay have also been classified using shared criteria, the methodology and results of each category's assessment are identical and have therefore been combined into one section for analysis.

15.8.20. As discussed in Section 15.4, Receptors which have initially been assigned either Medium or High magnitudes which would result in Moderate or Major effects, i.e. a "significant" effect, have been considered qualitatively and in greater depth to determine whether their magnitudes are considered accurate.

15.8.21. The results of the Severance & Pedestrian Delay assessments are shown in Table 15-27.

**Table 15-27: Severance & Pedestrian Delay Assessment for Link and Junction Receptors**

| Receptor ID | Receptor Name | Sensitivity | Initial Magnitude | Scale of Effect |
|---|---|---|---|---|
| L1 | A16 Spalding Bypass (North-East of Spalding) | Very Low | Low | Negligible |
| L3 | A151 Holbeach Road | Low | Very Low | Negligible |
| L4 | A151 Weston Bypass | Very Low | High | Minor |
| L7 | A16 Spalding Bypass (East of Spalding) | Very Low | Low | Negligible |
| L14 | A16 Spalding Bypass (South-East of Spalding) | Very Low | Low | Negligible |
| L15 | A16 Cowbit Road | Very Low | Low | Negligible |
| L18 | A16 Crowland Bypass (Near Crowland Airfield) | Very Low | Low | Negligible |
| L21 | Barrier Bank | Very Low | High | Minor |
| L22 | James Road | Very Low | High | Minor |

| Receptor ID | Receptor Name | Sensitivity | Initial Magnitude | Scale of Effect |
|---|---|---|---|---|
| L23 | Hull's Drove (West) | Very Low | High | Minor |
| L24 | Martins Road | Very Low | High | Minor |
| L25 | Hull's Drove (East) | Very Low | High | Minor |
| L31 | B1166 Long Lane | Very Low | High | Minor |
| L32 | Langary Gate Road | Very Low | High | Minor |
| L33 | A16 Crowland Bypass (East of Crowland) | Very Low | Low | Negligible |
| L34 | A16 (South of Crowland) | Very Low | Low | Negligible |
| L35 | A16 (North of Peterborough) | Very Low | Low | Negligible |
| J1 | A16 / A151 Roundabout | Low | Low | Negligible |
| J2 | A151 / High Road Roundabout | Low | Very Low | Negligible |
| J4 | A16 / B1165 Low Road Roundabout | Low | Low | Negligible |
| J5 | A16 / A1175 Roundabout | Very Low | Low | Negligible |
| J7 | A16 / B1357 Moulton Chapel Road / B1357 Stonegate Roundabout | Low | Low | Negligible |
| J10 | B1166 Spalding Road / B1166 James Road / James Road Junction | Very Low | High | Minor |
| J11 | A16 Crowland Bypass / James Road / Hull's Drove Junction | Very Low | Low | Negligible |
| J12 | Martins Road / B1166 Hull's Drove Junction | Low | Medium | Minor |
| J13 | B1168 Holbeach Drove Gate / B1166 Drove Road Junction | Low | Medium | Minor |

| Receptor ID | Receptor Name | Sensitivity | Initial Magnitude | Scale of Effect |
|---|---|---|---|---|
| J14 | Langary Gate Road / B1166 Mill Lane / B1166 Long Lane Junction | Low | Medium (Downgraded from High) | Minor |
| J15 | A16 Crowland Bypass / B1040 Nene Terrance Road / B1040 Thorney Road South Junction | Very Low | Low | Negligible |
| J16 | A16 / B1443 Thorney Road Roundabout | Very Low | Low | Negligible |

15.8.22. For J14, the initial identification of a High magnitude of change was based on the total vehicle flow increase in the AM and PM Development peaks. However, as per the manual assessment criteria outlined in Section 15.4, on further examination it was determined that the sum of each development peak hour baseline flow and their respective total development trips were smaller than the AM and PM Baseline Network Peak flows observed in the 2025 traffic surveys (i.e. before applying traffic growth factors to estimate 2031 flows), indicating that the receptor has sufficient capacity to accommodate development trips in the construction peak periods. The magnitude of impact at this receptor has therefore been reclassified as 'Medium', and the effect is classified as Minor.

15.8.23. Consequently, the impact on Severance & Pedestrian Delay for all link and junction receptors has been classified as either Minor or Negligible. Thus there are no significant effects reported in terms of Severance and Pedestrian Delay.

15.8.24. The impact on Severance and Pedestrian Delay for PRoW receptors is detailed in the PRoW section later in this chapter.

15.8.25. A summary of the results (non-significant effects) for link and junction receptors is set out within **ES Appendix 15-2** (Doc. Ref. 6.3).

### Driver Delay

15.8.26. ISEP Guidelines suggest that 30%, 60% and 90% increases in total traffic flows would result in low, medium and high changes in magnitude with respect to driver delay, respectively.

15.8.27. As discussed in Section 15.4, Receptors which have initially been assigned either Medium or High magnitudes which would result in Moderate or Major

effects, i.e. a "significant" effect, have been considered qualitatively and in greater depth to determine whether their magnitudes are considered accurate.

15.8.28. The results of the Driver Delay assessment are shown in Table 15-28 below.

**Table 15-28: Driver Delay Assessment for Link and Junction Receptors**

| Receptor ID | Receptor Name | Sensitivity | Initial Magnitude | Adjusted Magnitude | Scale of Effect |
|---|---|---|---|---|---|
| L1 | A16 Spalding Bypass (North-East of Spalding) | Very Low | Very Low | - | Negligible |
| L3 | A151 Holbeach Road | Very Low | Very Low | - | Negligible |
| L4 | A151 Weston Bypass | Very Low | Very Low | - | Negligible |
| L7 | A16 Spalding Bypass (East of Spalding) | Very Low | Very Low | - | Negligible |
| L14 | A16 Spalding Bypass (South-East of Spalding) | Very Low | Very Low | - | Negligible |
| L15 | A16 Cowbit Road | Very Low | Very Low | - | Negligible |
| L18 | A16 Crowland Bypass (Near Crowland Airfield) | Very Low | Very Low | - | Negligible |
| L21 | Barrier Bank | Low | High | Medium | Minor |
| L22 | James Road | Low | High | Medium | Minor |
| L23 | Hull's Drove (West) | Low | Low | - | Negligible |
| L24 | Martins Road | Low | High | Medium | Minor |
| L25 | Hull's Drove (East) | Low | Low | - | Negligible |
| L31 | B1166 Long Lane | Low | High | Medium | Minor |
| L32 | Langary Gate Road | Low | High | Medium | Minor |
| L33 | A16 Crowland Bypass (East of Crowland) | Very Low | Very Low | - | Negligible |
| L34 | A16 (South of Crowland) | Very Low | Very Low | - | Negligible |
| L35 | A16 (North of Peterborough) | Very Low | Very Low | - | Negligible |
| J1 | A16 / A151 Roundabout | Medium | Very Low | - | Negligible |

| Receptor ID | Receptor Name | Sensitivity | Initial Magnitude | Adjusted Magnitude | Scale of Effect |
|---|---|---|---|---|---|
| J2 | A151 / High Road Roundabout | Low | Very Low | - | Negligible |
| J4 | A16 / B1165 Low Road Roundabout | Medium | Very Low | - | Negligible |
| J5 | A16 / A1175 Roundabout | Medium | Very Low | - | Negligible |
| J7 | A16 / B1357 Moulton Chapel Road / B1357 Stonegate Roundabout | Medium | Very Low | - | Negligible |
| J10 | B1166 Spalding Road / B1166 James Road / James Road Junction | Low | Low | - | Negligible |
| J11 | A16 Crowland Bypass / James Road / Hull's Drove Junction | Medium | Very Low | - | Negligible |
| J12 | Martins Road / B1166 Hull's Drove Junction | Very Low | Medium | - | Negligible |
| J13 | B1168 Holbeach Drove Gate / B1166 Drove Road Junction | Low | Low | - | Negligible |
| J14 | Langary Gate Road / B1166 Mill Lane / B1166 Long Lane Junction | Very Low | High | - | Minor |
| J15 | A16 Crowland Bypass / B1040 Nene Terrance Road / B1040 Thorney Road South Junction | Medium | Very Low | - | Negligible |
| J16 | A16 / B1443 Thorney Road Roundabout | Medium | Very Low | - | Negligible |

15.8.29. For L21 and L22, it was observed that the sums of the baseline AM and PM peak flows and development trips were lower than the total vehicle trips in the AM and PM shoulder Peaks (07:00 – 08:00 and 17:00 – 18:00 respectively) recorded in the 2025 traffic surveys (i.e. before traffic growth factors were applied to estimate 2031 flows), indicating that the link currently has sufficient capacity to accommodate the development trips in the construction peaks.

15.8.30. For L31, it was observed that the sums of the baseline AM and PM peak flows and development trips were lower than the total vehicle trips in the PM Network and Shoulder Peaks (17:00-18:00 and 16:00 – 17:00 respectively) recorded in the 2025 traffic surveys (i.e. before traffic growth factors were applied to estimate 2031 flows), indicating that the link currently has sufficient capacity to accommodate the development trips in the Construction Peaks.

15.8.31. For L24 and L32, the high initial magnitudes were determined to be caused by very low baseline total vehicle flows (<10 total vehicles) in the AM and PM Construction and network peak hours which resulted in very high percentage increases when adding development trips. As per the criteria outlined in paragraph 15.4.15, the initial magnitudes of change identified at these receptors have been classified as misleading and have been subject to manual adjustment.

15.8.32. The magnitudes at the five receptors discussed above have therefore each been downgraded from 'High' as 'Medium'.

15.8.33. Consequently, the effect on Driver Delay for all link and junction receptors has been classified as either Minor or Negligible, which is not significant.

15.8.34. A summary of the results (non-significant effects) for link and junction receptors is set out within **ES Appendix 15-2** (Doc. Ref. 6.3).

15.8.35. The details of this analysis are summarised in **ES Appendix 15-4: Transport Assessment Note** (Doc. Ref. 6.3).

### Temporary Traffic Management Impacts

15.8.36. Temporary partial or full road closures may be required in some locations to complete the works associated with the Scheme, including construction of new access points, improvements to existing accesses, highway improvements such as passing bays and installation of the cable where it crosses existing roads.

15.8.37. Any partial or full road closures are expected to be for a short duration to minimise impacts on the local highway network. Full closures would only be required where and when necessary on narrow roads where options for retaining public access through the use of two-way traffic signals is not

feasible. In addition, wherever possible access for emergency vehicles, pedestrians and cyclists will be maintained during the temporary closures. Advance warning will be provided in line with local highway authority guidance and diversion routes will be put in place. No permanent road closures will be required. Management measures will be set out in accordance with the **Outline CTMP** (Doc Ref. 7.13).

15.8.38. Where a full closure is required, the works will be carefully planned to ensure that the durations of any closures are minimised, and any full closure will include consideration of the continued access of any local residents or commercial businesses that fall within the area of the closure. The exact duration of any partial or full closure would be secured in accordance with the **Outline CTMP** (Doc Ref. 7.13).

15.8.39. Below is a summary of the anticipated type of closures and durations by location. The closure durations noted in the table below are the estimated worst case duration required for any unique identified work. The durations represent the anticipated length of time required to complete the associated works, but the actual road closures may not be required for the full length of time.

**Table 15-29: Potential Road Closures**

| Street | Closure Type | Anticipated Maximum Duration |
|---|---|---|
| Cloot Drove | Temporary full closure to all traffic save for traffic under the direction of the undertaker for the width of the street to facilitate the alteration of layout and street works for the length coloured in solid green and patterned hatching on Sheets 1A and 2A of the **Streets, Rights of Way and Access Plans** (Doc Ref. 2.6). | 4 weeks (numerous closures, each for a maximum of 4 weeks) |
| Queen's Bank | Temporary full closure to all traffic save for traffic under the direction of the undertaker for the width of the street to facilitate the alteration of layout and street works for the length coloured in solid green and patterned hatching on Sheet 3A of the **Streets, Rights of Way and Access Plans** (Doc Ref. 2.6). | 4 weeks (numerous closures, each for a maximum of 4 weeks) |

| Street | Closure Type | Anticipated Maximum Duration |
|---|---|---|
| Spalding Road | Temporary partial closure (i.e. one lane closed, two-way movements retained but managed), save for traffic under the direction of the undertaker for the width of the street to facilitate the alteration of layout and street works for the length coloured in solid yellow and green patterned hatching on Sheet 4A of the **Streets, Rights of Way and Access Plans** (Doc Ref. 2.6). | 4-6 weeks |
| Martins Road | Temporary partial closure (i.e. one lane closed, two-way movements retained but managed), save for traffic under the direction of the undertaker for the width of the street to facilitate the alteration of layout and street works for the length coloured in solid green and patterned hatching on Sheets 5A and 6A of the **Streets, Rights of Way and Access Plans** (Doc Ref. 2.6). | 6 weeks (numerous closures, each for a maximum closure of 6 weeks) |
| Back Bank / Green Bank | Temporary partial closure (i.e. one lane closed, two-way movements retained but managed), save for traffic under the direction of the undertaker for the width of the street to facilitate the alteration of layout for the length coloured in solid yellow hatching on Sheet 7A of the **Streets, Rights of Way and Access Plan**s (Doc Ref. 2.6). | 4 weeks |
| Chapel Hill | Temporary full closure to all traffic save for traffic under the direction of the undertaker for the width of the street to facilitate the alteration of layout and street works for the length coloured in solid yellow and green patterned hatching on Sheet 7A of the **Streets, Rights of Way and Access Plans** (Doc Ref. 2.6). | 4 weeks (numerous closures each for a maximum of 4 weeks) |
| Eaugate Road | Temporary full closure to all traffic save for traffic under the direction of the undertaker for the width of the street to facilitate the alteration of layout and street works for the length coloured in | 4 weeks |

| Street | Closure Type | Anticipated Maximum Duration |
|---|---|---|
| | solid yellow and green patterned hatching on Sheet 7A of the **Streets, Rights of Way and Access Plans** (Doc Ref. 2.6). | |
| Chapel Gate | Temporary full closure to all traffic save for traffic under the direction of the undertaker for the width of the street to facilitate the alteration of layout and street works for the length coloured in solid yellow and green patterned hatching on Sheet 7A of the **Streets, Rights of Way and Access Plans** (Doc Ref. 2.6). | 4 weeks (numerous closures each for a maximum of 4 weeks) |
| Dog Drove | Temporary full closure to all traffic save for traffic under the direction of the undertaker for the width of the street to facilitate the alteration of layout and street works for the length coloured in solid yellow and green patterned hatching on Sheets 7A and 9A of the **Streets, Rights of Way and Access Plans** (Doc Ref. 2.6). | 4 weeks (numerous closures each for a maximum of 4 weeks) |
| Holbeach Drove Gate | Temporary partial closure (i.e. one lane closed, two-way movements retained but managed) save for traffic under the direction of the undertaker for the width of the street to facilitate the street works for the length coloured in solid yellow and green patterned hatching on Sheet 9A of the **Streets, Rights of Way and Access Plans** (Doc Ref. 2.6). | 4 weeks (numerous closures each for a maximum of 4 weeks) |
| Langary Gate Road | Temporary partial closure (i.e. one lane closed, two-way movements retained but managed) save for traffic under the direction of the undertaker for the width of the street to facilitate the alteration of layout and street works for the length coloured in solid green and patterned hatching on Sheets 8A, 9A, 10A, 11A and 12A of the **Streets, Rights of Way and Access Plans** (Doc Ref. 2.6). | 6 weeks (numerous closures, each for a maximum of 6 weeks) |

| Street | Closure Type | Anticipated Maximum Duration |
|---|---|---|
| A16 Spalding Bypass | Temporary partial closure (i.e. one lane closed, two-way movements retained but managed) save for traffic under the direction of the undertaker for the width of the street to facilitate the alteration of layout and street works for the length coloured in solid green and patterned hatching on Sheet 1B of the **Streets, Rights of Way and Access Plans** (Doc Ref. 2.6). | 8-12 weeks |
| Moulton Chapel Road | Temporary partial closure (i.e. one lane closed, two-way movements retained but managed) save for traffic under the direction of the undertaker for the width of the street to facilitate the alteration of layout and street works for the length coloured in solid yellow and green patterned hatching on Sheets 1B and 2B of the **Streets, Rights of Way and Access Plans** (Doc Ref. 2.6). | 6 weeks (numerous closures each for a maximum of 6 weeks) |
| Delgate Bank | Temporary full closure to all traffic save for traffic under the direction of the undertaker for the width of the street to facilitate the alteration of layout and street works for the length coloured in solid yellow, solid green and green patterned hatching on Sheet 2B of the **Streets, Rights of Way and Access Plans** (Doc Ref. 2.6). | 4 weeks (numerous closures, each for a maximum of 4 weeks) |
| West Gate | Temporary full closure to all traffic save for traffic under the direction of the undertaker for the width of the street to facilitate the alteration of layout and street works for the length coloured in solid green and patterned hatching on Sheet 2B of the **Streets, Rights of Way and Access Plans** (Doc Ref. 2.6). | 4 weeks (numerous closures, each for a maximum of 4 weeks) |
| Whirl Gate | Temporary full closure to all traffic save for traffic under the direction of the undertaker for the width of the street to facilitate the alteration of | 4 weeks (numerous closures, each for a |

| Street | Closure Type | Anticipated Maximum Duration |
|---|---|---|
| | layout and street works for the length coloured in solid yellow and green patterned hatching on Sheet 3B of the **Streets, Rights of Way and Access Plans** (Doc Ref. 2.6). | maximum of 4 weeks) |
| Austendike Road | Temporary partial closure (i.e. one lane closed, two-way movements retained but managed) save for traffic under the direction of the undertaker for the width of the street to facilitate the alteration of layout and street works for the length coloured in solid yellow and green patterned hatching on Sheet 3B of the **Streets, Rights of Way and Access Plans** (Doc Ref. 2.6). | 6 weeks (numerous closures, each for a maximum of 6 weeks) |
| Delgate Bank | Temporary full closure to all traffic save for traffic under the direction of the undertaker for the width of the street to facilitate the alteration of layout and street works for the length coloured in solid yellow and green patterned hatching on Sheet 3B of the **Streets, Rights of Way and Access Plans** (Doc Ref. 2.6). | 4 weeks (numerous closures, each for a maximum of 4 weeks) |
| Broad Gate | Temporary full closure to all traffic save for traffic under the direction of the undertaker for the width of the street to facilitate the alteration of layout and street works for the length coloured in solid yellow and green patterned hatching on Sheets 3B and 4B of the **Streets, Rights of Way and Access Plans** (Doc Ref. 2.6). | 4 weeks (numerous closures, each for a maximum of 4 weeks) |
| A151 High Road | Temporary partial closure (i.e. one lane closed, two-way movements retained but managed) save for traffic under the direction of the undertaker for the width of the street to facilitate the alteration of layout and street works for the length coloured in solid yellow and green patterned hatching on Sheets 4B and 5B of the | 6 weeks (numerous closures, each for a maximum of 6 weeks) |

| Street | Closure Type | Anticipated Maximum Duration |
|---|---|---|
| | **Streets, Rights of Way and Access Plans** (Doc Ref. 2.6). | |
| A151 | Temporary partial closure (i.e. one lane closed, two-way movements retained but managed) save for traffic under the direction of the undertaker for the width of the street to facilitate the alteration of layout and street works for the length coloured in solid green and patterned hatching on Sheet 4B and 5B of the Streets, Rights of Way and Access Plans (Doc Ref. 2.6). | 4-6 weeks |
| Wiseman's Gate | Temporary partial closure (i.e. one lane closed, two-way movements retained but managed) save for traffic under the direction of the undertaker for the width of the street to facilitate the alteration of layout and street works for the length coloured in solid yellow and green patterned hatching on Sheet 5B of the **Streets, Rights of Way and Access Plans** (Doc Ref. 2.6). | 4-6 weeks |
| The Runway | Temporary partial closure (i.e. one lane closed, two-way movements retained but managed) save for traffic under the direction of the undertaker for the width of the street to facilitate the alteration of layout and street works for the length coloured in solid yellow and green patterned hatching on Sheet 5B of the **Streets, Rights of Way and Access Plans** (Doc Ref. 2.6). | 4-6 weeks |
| Stone Gate | Temporary partial closure (i.e. one lane closed, two-way movements retained but managed), save for traffic under the direction of the undertaker for the width of the street to facilitate the alteration of layout and street works for the length coloured in solid yellow and green patterned hatching on **S**heet 5B of the **Streets, Rights of Way and Access Plans** (Doc Ref. 2.6). | 4-6 weeks |

15.8.40. Temporary full closures are only anticipated to be required on minor unclassified roads with relatively low traffic flows, and it is not expected that there would be multiple closures at the same time or in close proximity to each other. As the temporary closures will be for very short periods within the construction phase and alternative routes will be provided the effects on driver and passenger delay and severance are considered not significant.

### Non-motorised User Amenity

15.8.41. ISEP Guidelines suggest that 50%, 70% and 100% increases in total traffic flows would result in slight, moderate and substantial changes in magnitude respectively.

15.8.42. As discussed in Section 15.4, receptors which have initially been assigned either Medium or High magnitudes which would result in Moderate or Major effects, i.e. a "significant" effect, have been considered qualitatively and in greater depth to determine whether their magnitudes are considered accurate.

15.8.43. The results of this assessment are shown in Table 15-30 below.

**Table 15-30: Non-motorised User Amenity Assessment for Link and Junction Receptors**

| Receptor ID | Receptor Name | Sensitivity | Magnitude | Scale of Effect |
|---|---|---|---|---|
| L1 | A16 Spalding Bypass (North-East of Spalding) | Very Low | Very Low | Negligible |
| L3 | A151 Holbeach Road | Low | Very Low | Negligible |
| L4 | A151 Weston Bypass | Very Low | Very Low | Negligible |
| L7 | A16 Spalding Bypass (East of Spalding) | Very Low | Very Low | Negligible |
| L14 | A16 Spalding Bypass (South-East of Spalding) | Very Low | Very Low | Negligible |
| L15 | A16 Cowbit Road | Very Low | Very Low | Negligible |
| L18 | A16 Crowland Bypass (Near Crowland Airfield) | Very Low | Very Low | Negligible |
| L21 | Barrier Bank | Very Low | High | Minor |
| L22 | James Road | Very Low | High | Minor |

| Receptor ID | Receptor Name | Sensitivity | Magnitude | Scale of Effect |
|---|---|---|---|---|
| L23 | Hull's Drove (West) | Very Low | Low | Negligible |
| L24 | Martins Road | Very Low | High | Minor |
| L25 | Hull's Drove (East) | Very Low | Low | Negligible |
| L31 | B1166 Long Lane | Very Low | High | Minor |
| L32 | Langary Gate Road | Very Low | High | Minor |
| L33 | A16 Crowland Bypass (East of Crowland) | Very Low | Very Low | Negligible |
| L34 | A16 (South of Crowland) | Very Low | Very Low | Negligible |
| L35 | A16 (North of Peterborough) | Very Low | Very Low | Negligible |
| J1 | A16 / A151 Roundabout | Low | Very Low | Negligible |
| J2 | A151 / High Road Roundabout | Low | Very Low | Negligible |
| J4 | A16 / B1165 Low Road Roundabout | Low | Very Low | Negligible |
| J5 | A16 / A1175 Roundabout | Very Low | Very Low | Negligible |
| J7 | A16 / B1357 Moulton Chapel Road / B1357 Stonegate Roundabout | Low | Very Low | Negligible |
| J10 | B1166 Spalding Road / B1166 James Road / James Road Junction | Very Low | Low | Negligible |
| J11 | A16 Crowland Bypass / James Road / Hull's Drove Junction | Very Low | Very Low | Negligible |
| J12 | Martins Road / B1166 Hull's Drove Junction | Low | Medium | Minor |
| J13 | B1168 Holbeach Drove Gate / B1166 Drove Road Junction | Low | Low | Negligible |

| Receptor ID | Receptor Name | Sensitivity | Magnitude | Scale of Effect |
|---|---|---|---|---|
| J14 | Langary Gate Road / B1166 Mill Lane / B1166 Long Lane Junction | Low | Medium (Downgraded from High) | Minor |
| J15 | A16 Crowland Bypass / B1040 Nene Terrance Road / B1040 Thorney Road South Junction | Very Low | Very Low | Negligible |
| J16 | A16 / B1443 Thorney Road Roundabout | Very Low | Very Low | Negligible |

15.8.44. For J14, the initial identification of a High magnitude of change was based on the total vehicle flow increase in the AM and PM Development peaks. However, as per the manual assessment criteria outlined in Section 15.4, on further examination it was determined that the sum of each development peak hour baseline flows and their respective total development trips were smaller than the AM and PM baseline Network Peak flows observed in the 2025 traffic surveys (i.e. before applying traffic growth factors to estimate 2031 flows), indicating that the receptor has sufficient capacity to accommodate development trips in the construction peak periods. The magnitude of impact at this receptor has therefore been reclassified as 'Medium', resulting in a "Minor" effect, which is not significant.

15.8.45. Consequently, the impact on Non-motorised User Amenity for all link and junction receptors has been classified as either Minor or Negligible, which are not significant.

15.8.46. The impact of Non-motorised User Amenity for PRoW receptors is detailed in the PRoW section later in this chapter.

15.8.47. A summary of the results (non-significant effects) for link and junction receptors is set out within **ES Appendix 15-2** (Doc. Ref. 6.3).

### Fear and Intimidation

15.8.48. As stated in Table 15-10, ISEP Guidelines recommend that the three factors need to be considered when assessing the impacts of a development on fear and intimidation caused by traffic are Average Hourly Traffic Flow, Daily HGV flow and Average Speed.

15.8.49. No changes in average speed are expected as a result of the Scheme, so this parameter has not affected the assessment for Fear and Intimidation.

15.8.50. The results of the Fear and Intimidation assessment are shown in Table 15-31.

**Table 15-31: Fear and Intimidation Assessment for Link and Junction Receptors**

| Receptor ID | Receptor Name | Sensitivity | Future Baseline Degree of Hazard | Future Baseline + Development Degree of Hazard | Initial Magnitude | Scale of Effect |
|---|---|---|---|---|---|---|
| L1 | A16 Spalding Bypass (North-East of Spalding) | Very Low | 40 | 40 | Very Low | Negligible |
| L3 | A151 Holbeach Road | Low | 30 | 30 | Very Low | Negligible |
| L4 | A151 Weston Bypass | Very Low | 60 | 60 | Very Low | Negligible |
| L7 | A16 Spalding Bypass (East of Spalding) | Very Low | 40 | 40 | Very Low | Negligible |
| L14 | A16 Spalding Bypass (South-East of Spalding) | Very Low | 40 | 40 | Very Low | Negligible |
| L15 | A16 Cowbit Road | Very Low | 40 | 40 | Very Low | Negligible |
| L18 | A16 Crowland Bypass (Near Crowland Airfield) | Very Low | 40 | 40 | Very Low | Negligible |
| L21 | Barrier Bank | Very Low | 30 | 30 | Very Low | Negligible |
| L22 | James Road | Very Low | 30 | 30 | Very Low | Negligible |
| L23 | Hull's Drove (West) | Very Low | 30 | 30 | Very Low | Negligible |
| L24 | Martins Road | Very Low | 20 | 20 | Very Low | Negligible |
| L25 | Hull's Drove (East) | Very Low | 30 | 30 | Very Low | Negligible |

| Receptor ID | Receptor Name | Sensitivity | Future Baseline Degree of Hazard | Future Baseline + Development Degree of Hazard | Initial Magnitude | Scale of Effect |
|---|---|---|---|---|---|---|
| L31 | B1166 Long Lane | Very Low | 30 | 30 | Very Low | Negligible |
| L32 | Langary Gate Road | Very Low | 20 | 20 | Very Low | Negligible |
| L33 | A16 Crowland Bypass (East of Crowland) | Very Low | 40 | 40 | Very Low | Negligible |
| L34 | A16 (South of Crowland) | Very Low | 40 | 40 | Very Low | Negligible |
| L35 | A16 (North of Peterborough) | Very Low | 40 | 40 | Very Low | Negligible |
| J1 | A16 / A151 Roundabout | Low | 30 | 30 | Very Low | Negligible |
| J2 | A151 / High Road Roundabout | Low | 10 | 10 | Very Low | Negligible |
| J4 | A16 / B1165 Low Road Roundabout | Low | 20 | 20 | Very Low | Negligible |
| J5 | A16 / A1175 Roundabout | Very Low | 20 | 20 | Very Low | Negligible |
| J7 | A16 / B1357 Moulton Chapel Road / B1357 Stonegate Roundabout | Low | 20 | 20 | Very Low | Negligible |
| J10 | B1166 Spalding Road / B1166 James Road / James Road Junction | Very Low | 0 | 0 | Very Low | Negligible |
| J11 | A16 Crowland Bypass / James Road / Hull's Drove Junction | Very Low | 20 | 20 | Very Low | Negligible |

| Receptor ID | Receptor Name | Sensitivity | Future Baseline Degree of Hazard | Future Baseline + Development Degree of Hazard | Initial Magnitude | Scale of Effect |
|---|---|---|---|---|---|---|
| J12 | Martins Road / B1166 Hull's Drove Junction | Low | 0 | 0 | Very Low | Negligible |
| J13 | B1168 Holbeach Drove Gate / B1166 Drove Road Junction | Low | 0 | 0 | Very Low | Negligible |
| J14 | Langary Gate Road / B1166 Mill Lane / B1166 Long Lane Junction | Low | 0 | 0 | Very Low | Negligible |
| J15 | A16 Crowland Bypass / B1040 Nene Terrance Road / B1040 Thorney Road South Junction | Very Low | 10 | 10 | Very Low | Negligible |
| J16 | A16 / B1443 Thorney Road Roundabout | Very Low | 10 | 10 | Very Low | Negligible |

15.8.51. The assessment of changes in Average Hourly Traffic Flow and Daily HGV Flow between the Future Baseline and Future Baseline + Development scenarios showed that none of the link or junction receptors recorded an increase in their Degree of Hazard as a result of the additional traffic associated with the Scheme. All traffic receptors were therefore assessed as having very low magnitudes of change.

15.8.52. Consequently, the impact on Fear and Intimidation for all link and junction receptors has been classified as Negligible, which is not significant.

15.8.53. The impact of Fear and Intimidation on PRoW receptors is detailed in the PRoW section later in this chapter.

15.8.54. A summary of the results (non-significant effects) for link and junction receptors is set out within **ES Appendix 15-2** (Doc. Ref. 6.3).

### Road Safety

15.8.55. ISEP Guidelines suggest that receptors which record an increase of 30% or above in total traffic flows or of 10% or above in HGV flows should be analysed on a case-by-case basis to determine whether their magnitude should be rated low, medium or high. For the purpose of this assessment, receptors which meet either of these thresholds have been evaluated using the same criteria used to evaluate Severance and Pedestrian Delay.

15.8.56. As discussed in Section 15.4, receptors which have initially been assigned either Medium or High magnitudes which would result in Moderate or Major effects, i.e. a "significant" effect, have been considered qualitatively and in greater depth to determine whether their magnitudes are considered accurate.

15.8.57. The results of this assessment are shown in Table 15-32.

**Table 15-32: Road Safety Assessment for Link and Junction Receptors**

| Receptor ID | Receptor Name | Sensitivity | Initial Magnitude | Adjusted Magnitude | Significance |
|---|---|---|---|---|---|
| L1 | A16 Spalding Bypass (North-East of Spalding) | Medium | Very Low | - | Negligible |
| L3 | A151 Holbeach Road | High | Very Low | - | Minor |
| L4 | A151 Weston Bypass | Very Low | High | - | Minor |

| Receptor ID | Receptor Name | Sensitivity | Initial Magnitude | Adjusted Magnitude | Significance |
|---|---|---|---|---|---|
| L7 | A16 Spalding Bypass (East of Spalding) | Low | Low | - | Negligible |
| L14 | A16 Spalding Bypass (South-East of Spalding) | Medium | Low | - | Minor |
| L15 | A16 Cowbit Road | Medium | Low | - | Minor |
| L18 | A16 Crowland Bypass (Near Crowland Airfield) | Low | Low | - | Negligible |
| L21 | Barrier Bank | Low | High | Medium | Minor |
| L22 | James Road | Very Low | High | - | Minor |
| L23 | Hull's Drove (West) | Very Low | Medium | - | Negligible |
| L24 | Martins Road | Very Low | High | - | Minor |
| L25 | Hull's Drove (East) | High | Low | Very Low | Minor |
| L31 | B1166 Long Lane | Very Low | High | - | Minor |
| L32 | Langary Gate Road | Very Low | High | - | Minor |
| L33 | A16 Crowland Bypass (East of Crowland) | Medium | Low | - | Minor |
| L34 | A16 (South of Crowland) | High | Very Low | - | Minor |
| L35 | A16 (North of Peterborough) | High | Low | Very Low | Minor |
| J1 | A16 / A151 Roundabout | Low | Very Low | - | Negligible |
| J2 | A151 / High Road Roundabout | Very Low | Very Low | - | Negligible |

| Receptor ID | Receptor Name | Sensitivity | Initial Magnitude | Adjusted Magnitude | Significance |
|---|---|---|---|---|---|
| J4 | A16 / B1165 Low Road Roundabout | Very Low | Low | - | Negligible |
| J5 | A16 / A1175 Roundabout | Medium | Very Low | - | Negligible |
| J7 | A16 / B1357 Moulton Chapel Road / B1357 Stonegate Roundabout | Low | Low | - | Negligible |
| J10 | B1166 Spalding Road / B1166 James Road / James Road Junction | Very Low | Low | - | Negligible |
| J11 | A16 Crowland Bypass / James Road / Hull's Drove Junction | Medium | Low | - | Minor |
| J12 | Martins Road / B1166 Hull's Drove Junction | Low | Medium | - | Minor |
| J13 | B1168 Holbeach Drove Gate / B1166 Drove Road Junction | Very Low | Medium | - | Negligible |
| J14 | Langary Gate Road / B1166 Mill Lane / B1166 Long Lane Junction | Very Low | High | - | Minor |
| J15 | A16 Crowland Bypass / B1040 Nene Terrance Road / B1040 Thorney Road South Junction | Very Low | Low | - | Negligible |
| J16 | A16 / B1443 Thorney Road Roundabout | Low | Low | - | Negligible |

15.8.58. For L21, it was observed that the sum of the baseline Development AM and PM peak flows and the AM and PM development trips were smaller than the total vehicle trips in the AM and PM shoulder Peaks (07:00 – 08:00 and 17:00 – 18:00 respectively) recorded in the 2025 traffic surveys (i.e. before traffic growth factors were applied to estimate 2031 flows), indicating that the Scheme would not result in the link carrying greater volumes of traffic than it does at present, and thus the level of increased road safety risk is lessened. The magnitude at this receptor has therefore been downgraded from High to Medium.

15.8.59. For L25, it was observed that the sum of the baseline Development AM and PM peak flows and the AM and PM development trips were smaller than the total vehicle trips in the AM and PM shoulder Peaks (07:00 – 08:00 and 17:00 – 18:00 respectively) recorded in the 2025 traffic surveys (i.e. before traffic growth factors were applied to estimate 2031 flows), indicating that development would not result in the link carrying greater volumes of traffic than it does at present, and thus the level of increased road safety risk is lessened. The magnitude at this receptor has therefore been downgraded from Low to Very Low.

15.8.60. For L35, the initial magnitude assessment of 'Low' was caused by >10% increases in HGV flows in the PM Network peak. Since the magnitude on this receptor was assessed as 'Very Low' in the AM and PM Construction peaks, the AM Network Peak, and across the 18-hour and 24-hour time periods, it has been determined that an assessment of 'Very Low' is more appropriate for this receptors to reflect the overall impact of development trips on the safety of the link.

15.8.61. Consequently, the impact on Road Safety for all link and junction receptors has been classified as either Minor or Negligible, i.e. not significant. This conclusion is supported by the collision rate analysis presented in the **ES Appendix 15-4: Transport Assessment Note** (Doc. Ref. 6.3) which shows that the majority of receptors in the study area recorded collision rates below the national average for their respective road types.

15.8.62. A summary of the results (non-significant effects) for link and junction receptors is set out within **ES Appendix 15-2** (Doc. Ref. 6.3).

### Large Loads

15.8.63. The evaluation of Large Loads is based on the probability of a serious or fatal personal injury accident involving a large load occurring.

15.8.64. The results of the Large Loads assessment are shown in Table 15-33.

**Table 15-33: Large Loads Assessment for Link and Junction Receptors**

| Receptor ID | Receptor Name | Sensitivity | Magnitude | Significance |
|---|---|---|---|---|
| L1 | A16 Spalding Bypass (North-East of Spalding) | Medium | Low | Minor |
| L3 | A151 Holbeach Road | Low | Low | Negligible |
| L4 | A151 Weston Bypass | Very Low | Low | Negligible |
| L7 | A16 Spalding Bypass (East of Spalding) | Very Low | Low | Negligible |
| L14 | A16 Spalding Bypass (South-East of Spalding) | Very Low | Low | Negligible |
| L15 | A16 Cowbit Road | Very Low | Low | Negligible |
| L18 | A16 Crowland Bypass (Near Crowland Airfield) | Very Low | Low | Negligible |
| L21 | Barrier Bank | Very Low | Low | Negligible |
| L22 | James Road | Very Low | Low | Negligible |
| L23 | Hull's Drove (West) | Very Low | Low | Negligible |
| L24 | Martins Road | Very Low | Low | Negligible |
| L25 | Hull's Drove (East) | Very Low | Low | Negligible |
| L31 | B1166 Long Lane | Very Low | Very Low | Negligible |
| L32 | Langary Gate Road | Very Low | Low | Negligible |
| L33 | A16 Crowland Bypass (East of Crowland) | Medium | Low | Minor |
| L34 | A16 (South of Crowland) | Medium | Low | Minor |
| L35 | A16 (North of Peterborough) | Medium | Low | Minor |
| J1 | A16 / A151 Roundabout | Very Low | Low | Negligible |
| J2 | A151 / High Road Roundabout | Very Low | Low | Negligible |
| J4 | A16 / B1165 Low Road Roundabout | Very Low | Low | Negligible |
| J5 | A16 / A1175 Roundabout | Very Low | Low | Negligible |

| Receptor ID | Receptor Name | Sensitivity | Magnitude | Significance |
|---|---|---|---|---|
| J7 | A16 / B1357 Moulton Chapel Road / B1357 Stonegate Roundabout | Very Low | Low | Negligible |
| J10 | B1166 Spalding Road / B1166 James Road / James Road Junction | Very Low | Very Low | Negligible |
| J11 | A16 Crowland Bypass / James Road / Hull's Drove Junction | Very Low | Low | Negligible |
| J12 | Martins Road / B1166 Hull's Drove Junction | Very Low | Low | Negligible |
| J13 | B1168 Holbeach Drove Gate / B1166 Drove Road Junction | Very Low | Low | Negligible |
| J14 | Langary Gate Road / B1166 Mill Lane / B1166 Long Lane Junction | Very Low | Low | Negligible |
| J15 | A16 Crowland Bypass / B1040 Nene Terrance Road / B1040 Thorney Road South Junction | Very Low | Low | Negligible |
| J16 | A16 / B1443 Thorney Road Roundabout | Very Low | Low | Negligible |

15.8.65. Since all receptors which were screened in were judged to have limited large load usage based on HGV flows as a result of the construction of the development, all receptors were assessed as having 'Very Low' or 'Low' magnitudes.

15.8.66. Consequently, the effect of Large Loads for all link and junction receptors has been classified as either Minor or Negligible, which is not significant.

15.8.67. A summary of the results (non-significant effects) for link and junction receptors is set out within **ES Appendix 15-2** (Doc. Ref. 6.3).

### PRoW

15.8.68. As noted above, all PRoW receptors have been assessed for Severance, Pedestrian Delay, Amenity, and Fear and Intimidation. Since the assessment of

these use the same criteria, their impacts have been summarised collectively in this section of the document.

15.8.69. It should also be noted that the Common Land on Martins Road has been included within this assessment due to an assumed similar function of PRoW and Common Land and has therefore been assessed using the same criteria as those used to assess PRoW. Details on this strip of Common Land are discussed in the **Outline PRoW-MP** (Doc. Ref. 7.15).

15.8.70. The magnitude of change for these assessment categories for the PRoW and Common Land receptors has been categorised as follows based on professional judgement and experience:

- Very Low:
  - No closures or diversions required, or temporary (short-term, one to five days) closures are only required to install safety measures to retain PRoW access throughout construction;
- Low:
  - Either one, or combination, of the following:
    - Up to two temporary (short-term, one to four weeks) localised diversions;
    - Up to two construction route crossing points; or
    - One permanent diversion of less than 400m is required and will result in no change in connectivity with other local PRoW;
- Medium:
  - Either one, or combination, of the following:
    - More than two temporary (short-term, one to four weeks) localised diversions;
    - Up to two temporary (long-term, more than four weeks in any 12-month period) diversions construction route crossing points (inclusive) are required;
    - Up to three temporary construction route crossing points;
    - A temporary closure of up to eight weeks; or
    - One permanent diversion of more than 400m is required and will result in no change in connectivity with other local PRoW;
- High:

- Either one, or combination, of the following:
  - Three or more temporary (long-term, more than four weeks in any 12-month period) diversions;
  - A temporary closure of more than eight weeks;
  - Four or more construction route crossing points; or
  - At least one permanent closure without a diversion is required, or a diversion which is greater than 400m and results in reduced connectivity with other PRoW in the area is required.

15.8.71. A full summary of the proposed temporary management measures for PRoW, including possible diversions and crossing points, is included in the **Outline PRoW-MP** (Doc. Ref. 7.15). It should be noted that the PRoW-MP assesses a worst-case scenario for PRoW management measures. The worst-case impact expected on the Common land on Martins Road will be the presence of vehicles crossing the receptor, which would be managed appropriately to ensure pedestrians retain priority.

15.8.72. In addition to the above, it should be noted that no permanent diversions or closures are proposed as part of the Scheme.

15.8.73. The assessment of PRoW and Common Land receptors is shown in Table 15-34.

**Table 15-34: Assessment of PRoW/Common Land**

| Receptor ID | Receptor Name | Sensitivity | Summary of Impact | Magnitude | Significance |
|---|---|---|---|---|---|
| P1 | Crow/11/1 | Very Low | None | Very Low | Negligible |
| P2 | Crow/12/1 | Very Low | Temporary closure of less than eight weeks | Medium | Negligible |
| P3 | Crow/17/1 | Very Low | None | Very Low | Negligible |
| P4 | Crow/17/2 | Very Low | None | Very Low | Negligible |
| P5 | Flee/6/1 | Very Low | None | Very Low | Negligible |

| Receptor ID | Receptor Name | Sensitivity | Summary of Impact | Magnitude | Significance |
|---|---|---|---|---|---|
| P6 | Flee/7/1 | Very Low | None | Very Low | Negligible |
| P7 | Flee/8/1 | Very Low | None | Very Low | Negligible |
| P8 | Flee/8/2 | Very Low | None | Very Low | Negligible |
| P9 | Holb/14/1 | Very Low | None | Very Low | Negligible |
| P10 | Holb/15/1 | Very Low | None | Very Low | Negligible |
| P11 | Whap/1/1 | Very Low | None | Very Low | Negligible |
| P12 | Wstn/3/1 | Very Low | Temporary closure of less than eight weeks | Medium | Negligible |
| P13 | Common Land on Martins Road | Very Low | One construction route crossing point (managed so that drivers give way to pedestrians) | Low | Negligible |

15.8.74. As shown in Table 15-34, the impacts for all PRoW receptors have been assessed as Negligible. These are not significant.

15.8.75. The Common Land on Martins Road will be managed, ensuring that pedestrians will continue to have right of way and therefore use of this receptor will be no less advantageous to users than it is without the Scheme.

### Operational Phase

15.8.76. During general operation and maintenance, the Scheme is expected to generate a low level of vehicle trips. As a reasonable worst-case scenario, the Scheme will be serviced by a nominal number of staff (up to 10 permanent staff per day), predominantly undertaking day-to-day maintenance tasks. In addition, there are expected to be around five visitors per week (equating to 1 per day). As a worst-case scenario, this would generate up to 11 vehicles (22

two-way movements) per day. Staff vehicles and those used for maintenance will primarily be four-wheel drive vehicles and vans, with HGVs rarely accessing the Site during the majority of the operational phase.

15.8.77. During the proposed 40-year operational life of the Scheme, site-wide replacement of the solar PV panels, inverters, batteries and other equipment may be required in line with the design life of these components, as explained in **ES Chapter 2: The Scheme** (Doc. Ref. 6.1). Site-wide replacement of these components will be planned to occur in stages, which means that replacement activities will be of much lower intensity compared to the construction phase.

15.8.78. Full replacement of infrastructure is expected to generate up to a maximum of 40 HGVs (or 80 two-way HGV movements) per day, and up to 75 staff car trips (150 two-way movements) per day. AIL's would only be needed in the unlikely scenario of a complete transformer failure, where whole replacement would be required. This is much lower than the vehicle trips generated during the peak construction phase, representing approximately 20% of the HGV and car/LGV movements generated during the peak construction of the Scheme.

15.8.79. Accordingly, since this will result in much fewer movements than during the construction period, with fewer than 10 vehicle movements for any given hour, the effects of these trips will have a negligible magnitude of change for all assessment categories, with no potential for significant effects expected.

### Decommissioning Phase

15.8.80. As stated in Section 0, the decommissioning assessment year is assumed to be 2073 which is considered to be too far into the future to accurately predict traffic flows or junction forms. Therefore, the assessment of the construction phase has been used to determine the anticipated impact of the Scheme during its decommissioning phase. This is likely to overestimate decommissioning impacts, which is expected to be shorter in duration and to have fewer road trips than during construction.

15.8.81. The **Outline DEMP** (Doc Ref. 7.12) demonstrates how environmental mitigation and management measures will be implemented during decommissioning.

## 15.9. Additional Monitoring, Mitigation and Enhancement Measures

15.9.1. Additional mitigation or enhancement measures are required where significant adverse effects are identified after considering the embedded mitigation measures.

### Construction and Decommissioning Phase

15.9.2. No additional mitigation measures are proposed for the construction phase following the above embedded measures, given that there are not expected to be any significant Traffic and Access effects as a result of the Scheme as discussed in Section 15.8.

15.9.3. As previously mentioned, the decommissioning period is expected to be similar in duration and nature to the construction phase, albeit with fewer vehicle trips over a slightly shorter duration. In addition, this scenario 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 (qualitatively assess) that the traffic flows 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 to be broadly accurate and robust. Therefore, no additional mitigation measures are proposed for the decommissioning phase following the above embedded measures (as set out for the construction phase), given that there are not expected to be any significant Traffic and Access effects as a result of the Scheme in the construction phase and therefore in the decommissioning phase.

### Operational Phase

15.9.4. No additional mitigation measures are proposed for the operational phase following the above embedded measures, given that there are not expected to be any significant Traffic and Access effects as a result of the Scheme.

15.9.5. No enhancement measures (relevant to Traffic and Access) are currently proposed for the operational phase following the above embedded measures.

## 15.10. Residual Effects

15.10.1. As highlighted in Section 15.8 and **ES Appendix 15-2** (Doc. Ref. 6.3), there are no residual significant effects of the Scheme on any of the Traffic and Transport receptors in the construction, operational and decommissioning phase. All effects are minor or negligible (not significant).

## 15.11. Cumulative Effects

### Introduction

15.11.1. This section presents an assessment of cumulative effects between the Scheme during the peak construction phase (anticipated to be 2031) and other proposed and committed plans, projects and developments.

15.11.2. Cumulative effects are defined as the combined effects of several development schemes (in conjunction with the Scheme) which may, on an individual basis be insignificant but, cumulatively, have a significant effect based on their geographical proximity to the Scheme and the temporal overlap of either their construction or operational phases with the construction phase of the Scheme.

15.11.3. This assessment has been made with reference to the methodology and guidance set out in **ES Chapter 4: Overview of the EIA Process** (Doc. Ref. 6.1). The Zone of Influence (ZoI) for the consideration of cumulative effects for Traffic and Access is considered to be the Traffic and Access Study Area, which is shown on **ES Figure 15-1: Traffic and Access Study Area** (Doc. Ref. 6.2).

15.11.4. Table 15-35 shows the list of cumulative schemes which have been screened in for the Traffic and Access Cumulative Assessment, with cumulative schemes ID05, ID06 and ID07, as well as all operational traffic for ID21 screened into the cumulative traffic modelling. The geographical proximities of these cumulative schemes to the Scheme are also shown in **ES Figure 15-6: Cumulative Schemes** (Doc Ref. 6.2).

15.11.5. A full list of potential cumulative schemes, including those which have been scoped out of the traffic assessment, is provided in **ES Appendix 15-5** (Doc. Ref. 6.3).

**Table 15-35: Screened in Cumulative Schemes**

| ID | Application Reference | Application for 'other development' and brief description | Distance from Scheme | Status | Further Information |
|---|---|---|---|---|---|
| 5 | EN020036 | **Grimsby to Walpole**: The project will be a new 140km long 400kv overhead line and 5 new substations stretching from a new substation to the west of Grimsby in the north to a new substation at Walpole near Wisbech in the south. Three further substations will be built, two to the south west of Mablethorpe and one to the north east of Spalding. | Directly adjacent (Weston Marsh) | Pre-Application in progress | Based on the information set out within the PEIR for the cumulative scheme, it is anticipated that construction of the cumulative scheme would commence in 2029 and continue through to 2033, meaning that it has a temporal overlap with Meridian Solar's construction period.<br>Section 5 of the PEIR provides details on the cumulative scheme, which includes two new substations in the vicinity of Spalding that will have a geographic overlap with the Meridian Solar Scheme. |
| 6 | EN010130 | **Outer Dowsing Offshore Wind**: The Outer Dowsing Offshore Wind project comprises an offshore wind farm and associated offshore and onshore infrastructure including offshore and onshore high voltage electricity cables, onshore and offshore | Directly adjacent (Weston Marsh) | Approved | Based on the information set out within the ES Traffic and Transport Chapter as well as the corresponding TA (February 2025), the cumulative scheme is expected to be operational by 2031, with a |

| ID | Application Reference | Application for 'other development' and brief description | Distance from Scheme | Status | Further Information |
|---|---|---|---|---|---|
| | | electricity substation(s), connection(s) to the National Grid and ancillary and temporary works. | | | peak construction year of 2027 (in month 20, of the 42-month construction programme). The southern extent of the cumulative scheme is located just to the north of the study area for the Meridian Solar Scheme.<br><br>The TA indicates that the expected number of vehicle movements during the operational phase would be negligible, therefore these have not been considered for this assessment. |
| 7 | EN0210003 | **Eastern Green Link 3 and 4**: Eastern Green Link 3 (EGL3) comprises a converter station in the Walpole area of Norfolk along with associated development.<br><br>**Eastern Green Link 4**: EGL4 comprises a converter station in the Walpole area of Norfolk alone or together with a switching station and a converter station in the East | Approx. 5-6km from Meridian Solar Land Parcel D at closest point to Scheme | Pre-Application in progress | Based on the information set out within the PEIR Traffic and Transport Chapter and Appendix 2.12.C, Preliminary Construction Phase Traffic flows (May 2025), the cumulative scheme is expected to be under construction between 2028 to 2033. |

| ID | Application Reference | Application for 'other development' and brief description | Distance from Scheme | Status | Further Information |
|---|---|---|---|---|---|
| | | Lindsey area of Lincolnshire, along with associated development. | | | The cumulative scheme has the potential to have both temporal and geographical overlap with the Meridian Solar Scheme during the peak construction phase (2031) along the following roads within the study area: A16, A151 and B1165 Austendyke Road. |
| 9 | EN0210006 | **Ossian Wind Farm**: Ossian Offshore Wind Farm Ltd is intending to develop transmission infrastructure to connect the Ossian Offshore Wind Farm Array (located in Scottish waters and subject to application for consent under section 36 of the Electricity Act 1989) to National Grid at substations in Lincolnshire. The Proposed Development comprises the installation of high voltage direct current offshore export cables (to the extent that these are located in English waters), landfall structures, HVDC onshore export cables and onshore converter stations, and all other | Directly adjacent (Weston Marsh) | Pre-Application in progress | Based on the information set out within the EIA Scoping Report (February 2025), the cumulative scheme is expected to be under construction for a period of 4 years, with the finalised timescale of the proposed construction programme to be clarified at the ES stage. There is limited information in the Scoping Report regarding the geographical overlap with the Meridian Solar Scheme, however the onshore export cable corridor is proposed to connect to the Weston Marsh |

| ID | Application Reference | Application for 'other development' and brief description | Distance from Scheme | Status | Further Information |
|---|---|---|---|---|---|
| | | development integral to the construction, operation and maintenance of the Proposed Development, including access. It is proposed that the lifetime of the Proposed Development will be 35 years, at which point the Proposed Development will be decommissioned. | | | substation and could therefore result in cumulative impacts on the A16 and A151. |
| 13 | EN0210007 | **National Grid Scheme - Weston Marsh to East Leicestershire**: A new circa 60 kilometre 400kV overhead electricity transmission line which connects into the Weston Marsh substation infrastructure (to be constructed under the Grimsby to Walpole Project), in the Spalding region of Lincolnshire, and runs west to a new 400kV transmission substation (WMEL-B) near Wartnaby in Leicestershire, via a new 400kV transmission substation (WMEL-A) near Corby Glen in Lincolnshire. | Directly adjacent (Weston Marsh) | Pre-Application in progress | Based on the information set out within the EIA Scoping Report (November 2025), the cumulative development is expected to be under construction for a period of 4 years between 2030 and 2034.<br>The scoping boundary of the cumulative scheme overlaps with the Order Limits of the Scheme north-east of Spalding. |

| ID | Application Reference | Application for 'other development' and brief description | Distance from Scheme | Status | Further Information |
|---|---|---|---|---|---|
| 21 | H16-0521-23 | **Land North of B1173 Barrier Bank and West of A16 Spalding (Lincs Gateway) Spalding**: Erection of buildings to comprise up to 70.000 square metres (Gross Internal Area) of Class B8 (storage or distribution) floorspace to include ancillary Class E(g) (office) floorspace and provision of associated Infrastructure including utilising existing vehicular access from B1173. Outline with means of access to be considered. | Approx. 3.5km from Grid Connection Route at closest point | Approved | Planning consent has been granted and construction is predicted to commence in 2027. Given the geographical proximity to the Meridian Solar Scheme, it is expected that the operational trips from the cumulative scheme will overlap with some receptors within the study area. |

## Cumulative Effects During Scheme Construction Phase

15.11.6. A key consideration for the cumulative assessment, which forms the foundation for the Inter-Project Cumulative Assessment, is that if the Scheme is expected to result in a Negligible effect for a given receptor and assessment, then there is considered to be no potential for a cumulative effect to arise when combined with other projects, including when combined with all cumulative schemes. This is a widely used and accepted approach taken in cumulative effects assessment. On this basis, a number of receptors have been screened out of the cumulative assessment, with the remaining receptors included in Table 15-36.

15.11.7. Based on the information provided in Table 15-35, the peak construction traffic flows for ID05, ID06 and ID07 and full operational traffic flows for ID21 have been identified and applied to the link and junction receptors within the traffic and access study area to identify the overall potential impacts of the traffic flows associated with the cumulative schemes. In the absence of peak hour flows for all screened-in schemes except ID21, 24-hour traffic flows have been used as the basis for the cumulative traffic assessment to maintain consistency across all screened-in cumulative schemes and to allow a full assessment to be carried out.

15.11.8. It should be noted that traffic flow estimates for Ossian Wind Farm (ID09) and Weston Marsh to East Leicestershire (ID13) were not available at the time of writing. The scoping opinions for these cumulative schemes do, however, indicate that traffic flow impacts would be limited to receptors located on the A16 and A151. As set out in Section 15.8, all effects associated with the Scheme are predicted to be negligible on the A16 and A151, meaning that a cumulative assessment of other schemes on these links can be screened out. Therefore, these cumulative schemes have not been included in the cumulative traffic flows assessment given there is not expected to be the potential for any cumulative effects when combined with the Scheme.

15.11.9. To present a worst-case traffic impact scenario, it has been assumed that the peaks of the construction periods for ID05, ID06 and ID07, as well as all operational traffic for ID21, will all fully overlap with the peak of the Scheme's construction period. It should be noted that this is an unlikely scenario which is not expected to arise in reality. Furthermore, the duration of any such overlaps between peak construction phases of multiple schemes would be expected to be short-term.

15.11.10. For the screened-in cumulative schemes, 24-hour traffic flows have been sourced from the following documents:

- ID05 – PEIR Volume 3 Part B Section Specific Assessments, Sections 1 to 7, Chapter 9 Traffic and Movement, Appendices (June 2025)[6]
  - Table 9C.1
- ID06 – Environmental Statement, Chapter 27 Traffic and Transport, Volume 3 Appendices, Appendix 27.1 Transport Assessment (February 2025)[7]
  - Table 27.32
- ID07 – PEIR Volume 2, Part 2, Appendix 2.12.C Traffic and Transport – Preliminary Construction Phase Traffic Flows (May 2025)[8]
  - Table 2.12.0-3 – EGL 3 and 4 Forecast Construction Phase Traffic Flows (by Link and Year) 2034
- ID21 – Lincs Gateway, Spalding: Air Quality Assessment (May 2023)[9]
  - Tables E2 and E3

15.11.11. It should be noted that, to maximise the coverage of the cumulative assessment, traffic flows have been inferred for certain receptors based on their geographical proximity to and expected traffic flows at nearby receptors, e.g. for link and junction receptors which fall within the Meridian Solar traffic and access study area (such as the A16) but fall outside the study area of other cumulative scheme(s).

15.11.12. The individual cumulative traffic flows from each of the screened-in cumulative schemes are shown in **ES Appendix 15-6 Cumulative Scheme Traffic Flows** (Doc. Ref. 6.3). Summary tables of the overall cumulative traffic

[6] Available at [redacted] Accessed 27/11/2025]

[7] Available at https://nsip-documents.planninginspectorate.gov.uk/published-documents/EN010130-001880-6.3.27.1%20Appendix%2027.1%20Transport%20Assessment.pdf [Accessed 27/11/2025]

[8] Available at [redacted] [Accessed 27/11/2025]

[9] Available at https://planning.sholland.gov.uk/OcellaWeb/viewDocument?file=dv_pl_files%5CH16-0521-23%5C89957.551363_REP_Lincs+Gateway+Spalding_AIR_05MAY2023.pdf&module=pl [Accessed 27/11/2025]

flows for all cumulative schemes combined, both in terms of total vehicle flows and HGV flows, are shown below in Table 15-36 and Table 15-37. It should be noted that these exclude traffic flows associated with the Meridian Solar Scheme.

### Table 15-36: Screened in Cumulative Schemes – 24-Hour Total Vehicle Traffic Flows

| Ref | Receptor | Screened in for Meridian Solar | Future Baseline Peak Flows | Total Cumulative Scheme Flows | Future Baseline + Cumulative Total Flows | Cumulative Increase (%) |
|---|---|---|---|---|---|---|
| L1 | A16 Spalding Bypass (North-East of Spalding) | Y | 27,769 | 981 | 28,750 | 4% |
| L3 | A151 Holbeach Road | Y | 18,751 | 509 | 19,260 | 3% |
| L4 | A151 Weston Bypass | Y | 17,694 | 298 | 17,992 | 2% |
| L7 | A16 Spalding Bypass (East of Spalding) | Y | 25,877 | 1152 | 27,029 | 4% |
| L14 | A16 Spalding Bypass (South-East of Spalding) | Y | 17,351 | 1547 | 18,898 | 9% |
| L15 | A16 Cowbit Road | Y | 25,022 | 1127 | 26,149 | 5% |
| L18 | A16 Crowland Bypass (Near Crowland Airfield) | Y | 21,993 | 1144 | 23,137 | 5% |
| L21 | Barrier Bank | Y | 2,202 | 0 | 2,202 | 0% |
| L22 | James Road | Y | 2,918 | 0 | 2,918 | 0% |
| L23 | Hull's Drove (West) | Y | 6,699 | 36 | 6,735 | 1% |
| L24 | Martins Road | Y | 237 | 0 | 237 | 0% |
| L25 | Hull's Drove (East) | Y | 5,497 | 36 | 5,533 | 1% |
| L31 | B1166 Long Lane | Y | 2,389 | 0 | 2,389 | 0% |
| L32 | Langary Gate Road | Y | 97 | 0 | 97 | 0% |

| Ref | Receptor | Screened in for Meridian Solar | Future Baseline Peak Flows | Total Cumulative Scheme Flows | Future Baseline + Cumulative Total Flows | Cumulative Increase (%) |
|---|---|---|---|---|---|---|
| L33 | A16 Crowland Bypass (East of Crowland) | Y | 26,286 | 1127 | 27,413 | 4% |
| L34 | A16 (South of Crowland) | Y | 23,829 | 1127 | 24,956 | 5% |
| L35 | A16 (North of Peterborough) | Y | 22,700 | 1116 | 23,816 | 5% |
| J1 | A16 / A151 Roundabout | Y | 44,014 | 1178 | 45,192 | 3% |
| J2 | A151 / High Road Roundabout | Y | 20,489 | 312 | 20,801 | 2% |
| J4 | A16 / B1165 Low Road Roundabout | Y | 31,325 | 1296 | 32,621 | 4% |
| J5 | A16 / A1175 Roundabout | Y | 29,590 | 1002 | 30,592 | 3% |
| J7 | A16 / B1357 Moulton Chapel Road / B1357 Stonegate Roundabout | Y | 28,880 | 1127 | 30,007 | 4% |
| J10 | B1166 Spalding Road / B1166 James Road / James Road Junction | Y | 4,566 | 0 | 4,566 | 0% |
| J11 | A16 Crowland Bypass / James Road / Hull's Drove Junction | Y | 30,031 | 1127 | 31,158 | 4% |
| J12 | Martins Road / B1166 Hull's Drove Junction | Y | 5,616 | 36 | 5,652 | 1% |
| J13 | B1168 Holbeach Drove Gate / B1166 Drove Road Junction | Y | 6,053 | 36 | 6,089 | 1% |

| Ref | Receptor | Screened in for Meridian Solar | Future Baseline Peak Flows | Total Cumulative Scheme Flows | Future Baseline + Cumulative Total Flows | Cumulative Increase (%) |
|---|---|---|---|---|---|---|
| J14 | Langary Gate Road / B1166 Mill Lane / B1166 Long Lane Junction | Y | 2,299 | 0 | 2,299 | 0% |
| J15 | A16 Crowland Bypass / B1040 Nene Terrance Road / B1040 Thorney Road South Junction | Y | 22,944 | 1127 | 24,071 | 5% |
| J16 | A16 / B1443 Thorney Road Roundabout | Y | 27,219 | 1116 | 28,335 | 4% |

### Table 15-37: Screened in Cumulative Schemes – 24-Hour HGV Traffic Flows

| Ref | Receptor | Screened in for Meridian Solar | Future Baseline Peak HGV Flows | Total Cumulative Scheme HGV Flows | Future Baseline + Cumulative Total HGV Flows | Cumulative Increase (%) |
|---|---|---|---|---|---|---|
| L1 | A16 Spalding Bypass (North-East of Spalding) | Y | 4,297 | 375 | 4,672 | 9% |
| L3 | A151 Holbeach Road | Y | 1,388 | 346 | 1,735 | 25% |
| L4 | A151 Weston Bypass | Y | 1,343 | 291 | 1,634 | 22% |
| L7 | A16 Spalding Bypass (East of Spalding) | Y | 3,810 | 422 | 4,232 | 11% |
| L14 | A16 Spalding Bypass (South-East of Spalding) | Y | 3,442 | 779 | 4,221 | 23% |
| L15 | A16 Cowbit Road | Y | 3,137 | 683 | 3,820 | 22% |
| L18 | A16 Crowland Bypass (Near Crowland Airfield) | Y | 3,009 | 691 | 3,700 | 23% |
| L21 | Barrier Bank | Y | 137 | 0 | 137 | 0% |
| L22 | James Road | Y | 173 | 0 | 173 | 0% |
| L23 | Hull's Drove (West) | Y | 327 | 36 | 363 | 11% |
| L24 | Martins Road | Y | 16 | 0 | 16 | 0% |
| L25 | Hull's Drove (East) | Y | 229 | 36 | 265 | 16% |
| L31 | B1166 Long Lane | Y | 121 | 0 | 121 | 0% |

| Ref | Receptor | Screened in for Meridian Solar | Future Baseline Peak HGV Flows | Total Cumulative Scheme HGV Flows | Future Baseline + Cumulative Total HGV Flows | Cumulative Increase (%) |
|---|---|---|---|---|---|---|
| L32 | Langary Gate Road | Y | 6 | 0 | 6 | 0% |
| L33 | A16 Crowland Bypass (East of Crowland) | Y | 3,220 | 683 | 3,903 | 21% |
| L34 | A16 (South of Crowland) | Y | 3,155 | 683 | 3,839 | 22% |
| L35 | A16 (North of Peterborough) | Y | 2,862 | 696 | 3,558 | 24% |
| J1 | A16 / A151 Roundabout | Y | 5,262 | 416 | 5,678 | 8% |
| J2 | A151 / High Road Roundabout | Y | 1,550 | 305 | 1,855 | 20% |
| J4 | A16 / B1165 Low Road Roundabout | Y | 4,014 | 571 | 4,585 | 14% |
| J5 | A16 / A1175 Roundabout | Y | 3,770 | 542 | 4,312 | 14% |
| J7 | A16 / B1357 Moulton Chapel Road / B1357 Stonegate Roundabout | Y | 3,341 | 683 | 4,025 | 20% |
| J10 | B1166 Spalding Road / B1166 James Road / James Road Junction | Y | 224 | 0 | 224 | 0% |
| J11 | A16 Crowland Bypass / James Road / Hull's Drove Junction | Y | 3,446 | 683 | 4,130 | 20% |
| J12 | Martins Road / B1166 Hull's Drove Junction | Y | 233 | 36 | 269 | 15% |

| Ref | Receptor | Screened in for Meridian Solar | Future Baseline Peak HGV Flows | Total Cumulative Scheme HGV Flows | Future Baseline + Cumulative Total HGV Flows | Cumulative Increase (%) |
|---|---|---|---|---|---|---|
| J13 | B1168 Holbeach Drove Gate / B1166 Drove Road Junction | Y | 224 | 36 | 260 | 16% |
| J14 | Langary Gate Road / B1166 Mill Lane / B1166 Long Lane Junction | Y | 112 | 0 | 112 | 0% |
| J15 | A16 Crowland Bypass / B1040 Nene Terrance Road / B1040 Thorney Road South Junction | Y | 2,945 | 683 | 3,628 | 23% |
| J16 | A16 / B1443 Thorney Road Roundabout | Y | 2,989 | 696 | 3,685 | 23% |

15.11.13. The potential cumulative traffic flow impacts have initially been evaluated using the receptor sensitivities adopted for the assessment of Driver Delay as this provides worst-case sensitivity levels for receptors across the majority of assessment categories. A separate review of the potential cumulative traffic flow impacts on Road Safety has then been evaluated later in this section.

15.11.14. The magnitude criteria for Severance and Pedestrian Delay have been used since this adopts the same thresholds as Driver Delay but also includes criteria for HGVs in addition to total vehicles. This allows HGVs to be captured as part of the cumulative assessment, given that several of the cumulative schemes comprise construction traffic.

15.11.15. Table 15-36 shows that the overall increase in total vehicle flows from the four screened-in cumulative schemes combined are not predicted to exceed 30% at any screened-in link or junction receptor. Under the assessment criteria outlined in Table 15-9 for Severance, Pedestrian Delay and Driver Delay, this means that all receptors have been assigned a Very Low impact magnitude for total vehicle flows.

15.11.16. Table 15-37 shows that the overall increase in HGV flows from the four screened-in cumulative schemes are not predicted to exceed 40% at any screened-in link or junction receptor. Under the Severance and Pedestrian Delay magnitude assessment criteria outlined in Table 15-9 for increases in HGV flows, this means that all screened-in receptors have been assigned either a Low (10-39% increase in HGVs) or Very Low (<10% increase in HGVs) impact magnitude for total vehicle flows.

15.11.17. Based on the assigned magnitudes noted above, as well as the Driver Delay sensitivities of the screened-in receptors shown in Table 15-24 and the significance criteria matrix shown in Table 15-11, the significant effects of all of the Cumulative Schemes combined (again, excluding the Meridian Solar Scheme) are summarised in Table 15-38.

**Table 15-38: Cumulative Schemes Significance Summary (excluding Meridian Solar Traffic Flows)**

| Receptor | Sensitivity | Magnitude | Cumulative Significance of Effect |
|---|---|---|---|
| J1 | Medium | Very Low | Negligible |
| J4 | Medium | Low | Minor |
| J5 | Medium | Low | Minor |

| Receptor | Sensitivity | Magnitude | Cumulative Significance of Effect |
|---|---|---|---|
| J7 | Medium | Low | Minor |
| J11 | Medium | Low | Minor |
| J15 | Medium | Low | Minor |
| J16 | Medium | Low | Minor |
| All other receptors | Low/Very Low | Low/Very Low | Negligible |

15.11.18. Since some receptors indicate that there will be minor adverse effects from the cumulative scheme traffic flows (excluding Meridian Solar Scheme), a further assessment of the combined cumulative scheme traffic flows and Scheme traffic flows has been carried out to determine whether any receptors will experience greater than minor adverse impacts when the Scheme is factored in. The results of this assessment are summarised in Table 15-39. Full tables showing the 24-hour total vehicle and HGV traffic flows associated with both the cumulative schemes and Meridian Solar are shown in Tables 11 and 12 in **ES Appendix 15-6 Cumulative Scheme Traffic Flows** (Doc. Ref. 6.3).

**Table 15-39: Cumulative Schemes Significance Summary (including Meridian Solar Traffic Flows)**

| Receptor | Sensitivity | Magnitude | Cumulative Significance of Effect |
|---|---|---|---|
| L23 | Low | Medium | Minor |
| L25 | Low | Medium | Minor |
| J1 | Medium | Low | Minor |
| J4 | Medium | Low | Minor |
| J5 | Medium | Low | Minor |
| J7 | Medium | Low | Minor |
| J11 | Medium | Low | Minor |
| J13 | Low | Medium | Minor |
| J15 | Medium | Low | Minor |

| Receptor | Sensitivity | Magnitude | Cumulative Significance of Effect |
|---|---|---|---|
| J16 | Medium | Low | Minor |
| All other receptors | Low/Very Low | Low/Very Low | Negligible |

15.11.19. As shown in Table 15-39, the effects from the combined Scheme traffic flows and cumulative scheme traffic flows are all predicted to be either minor adverse or negligible. By definition, this also means that the effects of the Scheme and any individual cumulative scheme will also be either minor or negligible and therefore not significant.

### Cumulative Effects on Road Safety

15.11.20. To evaluate the cumulative traffic flow effects on Road Safety, a separate assessment has been undertaken using the sensitivity and magnitude criteria for Road Safety detailed in Table 15-8 and Table 15-9.

15.11.21. Using these criteria, the significant effects of all of the Cumulative Schemes combined (excluding the Meridian Solar Scheme) are summarised in Table 15-40.

**Table 15-40: Cumulative Schemes Road Safety Significance Summary (excluding Meridian Solar Traffic Flows)**

| Receptor | Location | Sensitivity | Magnitude | Cumulative Significance of Effect |
|---|---|---|---|---|
| L3 | A151 Holbeach Road | High | Low | Moderate |
| L14 | A16 Spalding Bypass (South-East of Spalding) | Medium | Low | Minor |
| L15 | A16 Cowbit Road | Medium | Low | Minor |
| L25 | Hull's Drove (East) | High | Low | Moderate |
| L33 | A16 Crowland Bypass (East of Crowland) | Medium | Low | Minor |
| L34 | A16 (South of Crowland) | High | Low | Moderate |
| L35 | A16 (North of Peterborough) | High | Low | Moderate |
| J5 | A16 / A1175 Roundabout | Medium | Low | Minor |

| Receptor | Location | Sensitivity | Magnitude | Cumulative Significance of Effect |
|---|---|---|---|---|
| J11 | A16 Crowland Bypass / James Road / Hull's Drove Junction | Medium | Low | Minor |
| All other receptors | - | Low/Very Low | Low/Very Low | Negligible |

15.11.22. Since some receptors indicate that there will be moderate or minor adverse effects from the cumulative scheme traffic flows (excluding Meridian Solar Scheme), a further assessment of the combined cumulative scheme traffic flows and Scheme traffic flows has been carried to determine the severity of traffic impacts when the Scheme is factored in. The results of this assessment are summarised in Table 15-41.

**Table 15-41: Cumulative Schemes Road Safety Significance Summary (including Meridian Solar Traffic Flows)**

| Receptor | Location | Sensitivity | Magnitude | Cumulative Significance of Effect |
|---|---|---|---|---|
| L1 | A16 Spalding Bypass (North-East of Spalding) | Medium | Low | Minor |
| L3 | A151 Holbeach Road | High | Low | Moderate |
| L14 | A16 Spalding Bypass (South-East of Spalding) | Medium | Low | Minor |
| L15 | A16 Cowbit Road | Medium | Low | Minor |
| L24 | Martins Road | Very Low | High | Minor |
| L25 | Hull's Drove (East) | High | Low (Downgraded from Medium) | Moderate |
| L32 | Langary Gate Road | Very Low | High | Minor |
| L33 | A16 Crowland Bypass (East of Crowland) | Medium | Low | Minor |
| L34 | A16 (South of Crowland) | High | Low | Moderate |

| Receptor | Location | Sensitivity | Magnitude | Cumulative Significance of Effect |
|---|---|---|---|---|
| L35 | A16 (North of Peterborough) | High | Low | Moderate |
| J5 | A16 / A1175 Roundabout | Medium | Low | Minor |
| J11 | A16 Crowland Bypass / James Road / Hull's Drove Junction | Medium | Low | Minor |
| J12 | Martins Road / B1166 Hull's Drove Junction | Low | Medium | Minor |
| All other receptors | - | Low/Very Low | Low/Very Low | Negligible |

15.11.23. Table 15-41 shows that the combined cumulative and Scheme traffic flows result in Moderate impacts on four receptors (L3, L25, L34 and L35).

15.11.24. The Road Safety assessment for the Scheme discussed in section 15.8 shows that receptors L3, L34 and L35 were all evaluated as having Very Low magnitudes and Minor (not significant) effects. Based on this and the cumulative HGV traffic flows at these receptors shown in Table 15-37, the moderate significant effects reported at these receptors in the cumulative road safety assessment can primarily be attributed to the cumulative schemes and not to the Scheme.

15.11.25. L25 was initially assessed as having a Medium magnitude, as a result of the combination of HGV traffic flows from the Scheme (90 per day, or 9 per hour, as shown in **ES Appendix 15-3: Receptor Traffic Flow Tables** (Doc. Ref. 6.3)) and the HGV traffic flows from cumulative scheme ID05 Grimsby to Walpole (36 per day, or 3.6 per hour, as shown in Table 2 in **ES Appendix 15-6 Cumulative Scheme Traffic Flows** (Doc. Ref. 6.3)). However, using professional judgement, the magnitude at this receptor has been downgraded from Medium to Low for the following reasons:

- In the Meridian Solar traffic assessment summarised in Section 15.8, the magnitude at this receptor was downgraded from Low to Very Low on the basis that the sum of the peak hour baseline and development flows was lower than the shoulder peak flows in the AM and PM periods. Since the Grimsby to Walpole flows are approximately a third of the Scheme flows, and will likely have a similar temporal distribution since it is a similar type

of project, their impact could likely be downgraded to 'Very Low' using the same reasoning applied to the Scheme flows on this receptor in paragraph 15.8.59.

- In Volume 2, Chapter 5 of the Supplementary PEIR for the Grimsby to Walpole scheme, it is stated in paragraph 5.6.4 that: "The nature of the Project is such that construction activities at each of the substations would occur for much of the four year period, albeit peak construction traffic movements are anticipated during construction of the substation platforms."[10] Table 5.4 in the document indicates that the 'Build up Platform' activity associated with the substations will take place between Q1 2029 and Q4 2030. It is therefore likely that peak construction activity on the Grimsby to Walpole scheme will occur between these dates and is unlikely to overlap with the peak construction period for Solar Development Area Land Parcels B, C and D (when L25 will record peak flows), which, as shown in Table 15-16, is expected to be between Q3 2031 and Q1 2032. However, it is acknowledged that the overall construction period for the Solar Development Land Parcels B, C and D is expected to commence in Q4 2030 and that there may therefore be some overlap between the construction periods of the two schemes.
- In the Weston Marsh Supplementary PEIR for the Grimsby to Walpole scheme[11], Table 9A identifies B1166 Hull's Drove as a low sensitivity link and Table 9C indicates that the construction flows associated with the Grimsby to Walpole scheme are not sufficient to warrant further assessment according to the applied EIA criteria.
- **ES Appendix 15-4 Transport Assessment Note** shows that at link L25, there were no common causation factors identified for collisions recorded on the link to suggest that there was a safety concern with the link itself. Of the nine accidents recorded on the link in the last five years, none involved HGVs, and accordingly the Large Load sensitivity for the link was assessed as Very Low, as shown in Table 15-33.

[10] Supplementary Preliminary Environmental Information Report: Section 5 New Weston Marsh Substations A and B. Volume 2 Part A Introduction and Overview. Chapter 5 Project Description (November 2025)

[11] Supplementary Preliminary Environmental Information Report: Section 5 New Weston Marsh Substations A and B. Volume 3 Part B Section Specific Assessment, Sections 1 to 7, Chapter 9 Traffic and Movement Appendices (November 2025)

15.11.26. Based on the conclusion that the magnitude of impact of both the Scheme and ID05 on L25 Hull's Drove is likely to be Very Low, it is reasonable to conclude that the impact in practice would be at worst 'Low'. This would result in an assessment of Moderate adverse effects on Road Safety on L25. In practice, this is unlikely to occur, as it would only apply if the peaks of the construction phases of both schemes were to occur simultaneously.

15.11.27. Notwithstanding this, it is anticipated that there will be opportunities to minimise cumulative effects during the construction phase. As set out within the **Outline CEMP** (Doc Ref. 7.10), the Applicant will coordinate works with other construction sites within the vicinity of the Scheme. Furthermore, the monitoring required by the **Outline CTMP** (Doc. Ref. 7.13) in sections 7.4 and 7.8 includes measures pertaining to HGVs and Road Safety. Further commitments to management of HGVs and Road Safety are included in the **Outline CTMP** (Doc Ref. 7.13).

### Cumulative Effects on PRoWs

15.11.28. A key consideration for the cumulative assessment, which forms the foundation for the Inter-Project Cumulative Assessment, is that if the Scheme is expected to result in a Negligible effect for a given receptor and assessment, then there is considered to be no potential for a cumulative effect to arise when combined with other projects, including when combined with all cumulative schemes. This is a widely used and accepted approach taken in cumulative effects assessment.

15.11.29. As shown in Table 15-34, the Scheme is expected to produce a negligible effect on all PRoW and Common Land receptors during the construction phase.

15.11.30. On the basis of the above, it is considered that there is no potential for the Scheme to generate any cumulative significant effects on PRoW or Common Land.

### Summary of Cumulative Effects during Construction

15.11.31. In summary, based on the details set out in the tables above, the cumulative effects expected on Traffic and Access receptors within the Study Area are predicted to be either minor or negligible, with the exception of the Road Safety impacts on L3, L34 and L35, which are expected to have the potential for a moderate effect (significant) predominantly as a result of the cumulative schemes. In addition, there is potential for a moderate effect (significant) on L25, as a result of the Scheme and Grimsby to Walpole. In practice this is unlikely to occur as it requires the peaks of the construction phases to coincide.

Furthermore, the provisions of the **Outline CTMP** (Doc Ref. 7.13) and the Requirements of the **Draft DCO** (Doc Ref. 3.1) enable additional management to be applied if necessary.

## Cumulative Effects during Operation

15.11.32. Cumulative effects during the operational phase of the Scheme have been scoped out of this assessment as the number of trips associated with the operational phase of the Scheme is expected to be minimal, with negligible effects. This is therefore not expected to result in the potential for any cumulative effects when combined with any cumulative schemes.

## Cumulative Effects during Decommissioning

15.11.33. Since the Scheme will have an operational life of 40 years, it is not possible to predict which potential developments may need to be considered (e.g. those under construction, recently completed and operational or in the process of being decommissioned) at the same time as the Scheme is being decommissioned. Broadly, however, ID05, ID07 and ID13 are not expected to require decommissioning at the same time as the Scheme. As such, the effects at decommissioning are likely to be less and no worse than those identified during construction.