



LAND SOUTH OF EAST MIDLANDS AIRPORT

UPDATED ES ADDENDUM

VOLUME II, CHAPTER 8: TRANSPORT AND ACCESS (ADDENDUM)

OCTOBER 2025 MAY 2026

8. Transport and Access

8.1. Introduction

8.1.1. Chapter Purpose

This chapter of the Environmental Statement (ES) forms part of the Update ES Addendum and reports the outcome of the assessment of the likely significant transport effects of the proposed development during the construction stage and completed development stage. The chapter and its supporting appendices describe the planning policy context, the assessment methodology; the baseline conditions at the application site and surroundings; the likely significant effects; the mitigation measures required to prevent, reduce or offset any significant adverse effects; the likely residual effects after these measures have been employed; and the inter-project cumulative effects.

Separate to this chapter of the ES, a Transport Assessment (TA) has been prepared to assess the impact of the construction and operation of the proposed development on the transport network. The scope of the TA has been developed with regard to relevant best practice guidance and feedback from stakeholders. The TA has been produced in parallel to this ES chapter, and the ES and TA draw upon a shared technical base including baseline evidence and modelling data. However, the TA and Environmental Impact Assessment (EIA), while complementary, are separate assessments with different objectives and outcomes. This ES chapter is separate to the TA and reports only on the assessment criteria which are specific to the ES. The TA should be consulted for other information about forecast changes to the use and operation of the transport networks as a result of the proposed development. The TA is provided in Appendix 8.1, Volume IV and comprises environmental information in respect of the EIA reported in this Updated ES Addendum.

8.1.2. Appendices

A Framework Travel Plan has been submitted as part of the wider planning application, but is not appended to this chapter.

The TA is provided in Appendix 8.1, Volume IV.

8.2. Methodology

8.2.1. Guidance

The following guidance is relevant to and has been used to inform the assessment presented in this chapter:

National guidance and industry standards:

- Environmental Assessment of Traffic and Movement (formerly Guidelines for the Environmental Assessment of Road Traffic, Guidance Note Number 1) (Institute of Environmental Assessment (IEMA), July 2023). Provides guidance for the assessment of traffic and movement associated with all development projects subject to EIA and non-statutory environmental assessment;
- Design Manual for Roads and Bridges (DMRB), LA102 Screening Projects for Environmental Impact Assessment, Revision 0 (National Highways, July 2019). Sets out the requirements on screening projects for Environmental Impact Assessment in line with Directive 2011/92/EU as amended by 2014/52/EU;
- Design Manual for Roads and Bridges (DMRB), LA103 Scoping Projects for Environmental Assessment, Revision 1 (National Highways, January 2020). Sets out the requirements for scoping motorway and all-purpose trunk road projects for environmental assessment;

- Design Manual for Roads and Bridges (DMRB) LA104 Environmental assessment and monitoring, Revision 1 (National Highways, August 2020). Sets out the requirements for environmental assessment of projects, including reporting and monitoring of significant adverse environmental effects;
- Design Manual for Roads and Bridges (DMRB), LA112 Population and human health, Revision 1 (National Highways, 2020). Sets out the requirements for assessing and reporting the environmental effects on population and health from construction, operation and maintenance of highways projects; and
- Design Manual for Roads and Bridges (DMRB), Volume 11, Section 3, Part 8 Pedestrian and Others and Community Effects (Highways Agency, June 1993) (WITHDRAWN). Withdrawn guidance that sets out the requirements for the assessment of impacts on pedestrians, cyclists and community effects, including changes in journey length, changes in amenity and severance.

8.2.2. Legislation and Policy

The following legislation and policy is relevant to and has been used to inform the assessment presented in this chapter:

National Legislation and Policy:

- National Planning Policy Framework (NPPF) (December 2024). Provides guidance for the assessment of traffic and movement associated with all development projects subject to EIA and non-statutory environmental assessment.
- National Networks National Policy Statement (March 2024). Presents the need for, and government's policies to deliver Nationally Significant Infrastructure Projects on England's road and rail networks. The document also provides planning guidance for those promoting Nationally Significant Infrastructure Projects (NSIPs) on these networks.
- DfT Circular 01/2022 (December 2022) provides updated guidance on how National Highways will support sustainable development on the Strategic Road Network, including engagement in planning, impact assessment, travel plans and demand management.
- The Strategic Road Network – Planning for the Future (National Highways, 2023). Provides guidance on the approach National Highways take in the planning system, detailing the expectations for a planning proposal on land in proximity to the Strategic Road Network (SRN).

Regional Policy:

- Leicestershire Local Transport Plan (LTP) 4 (2025-2040). Outlines the county council's vision for transport to 2040 and provides a framework for how the transport system will be managed and the actions required to deliver LTP4.
- Leicestershire Cycling and Walking Strategy (2021). The strategy outlines Leicestershire's commitment to increasing the levels of active travel and addressing issues with air quality, public health and congestion in the county.
- Leicestershire Rights of Way Improvement Plan 2025-2035 (Draft). Supports the LTP4 and highlights the proposals which aim to maximise the use of the 3000km of paths throughout Leicestershire. It also outlines how the network will be maintained and developed.
- Leicestershire County Council Passenger Transport Policy (Dec 2023). Sets out the objectives and supporting principles that guide the County Council's support for road-based passenger transport services.
- Leicestershire County Council Passenger Transport Strategy (Dec 2023). Outlines the overall strategy that the county council will adopt to pursue the policy goals and principles set out in the Passenger Transport Policy.

8 Transport and Access

Local Policy:

- North West Leicestershire Local Plan (Adopted 2017, partial review adopted 2021). Establishes the policies which help to secure sustainable development in the region and provides a basis for determining planning applications.
- Draft North West Leicestershire Local Plan 2020 - ~~2040~~ 2042 (Regulation 18) (January 2024, additional sites consulted in March 2025). Sets out the draft policies which the District Council is proposing should form part of the new Local Plan for North West Leicestershire.

8.2.3. Consultation/Scoping

Engagement with key stakeholders, including North-West Leicestershire District Council (NWLDC), Leicestershire County Council (LCC) and National Highways, has been carried out throughout the pre-application process for the proposed development. A number of meetings have been held to discuss the project, programme, traffic modelling approach, construction methods, compound access locations, potential PRow closures and other relevant issues.

In May 2024, MAG submitted an outline planning application to NWLDC for the proposed development. Following the submission, further comments were received from consultees, and extensive engagement has taken place with key stakeholders, including NWLDC, LCC and National Highways.

To support this engagement, a Transport Working Group (TWG) was established, comprising representatives from MAG, LCC, and National Highways. The TWG has met regularly to discuss key aspects of the emerging development, including traffic modelling, site access, mitigation measures, and the Sustainable Transport Strategy. This engagement is expected to continue throughout the planning determination process.

~~This~~ The ES Update chapter (October 2025) and now this ES Addendum has been updated to reflect changes to the proposed development since the original 2024 submission and to incorporate feedback received from stakeholders. In addition, a traffic modelling strategy has been developed in consultation with National Highways and NWLDC. This strategy utilises a cordon from LCC's Pan Regional Transport Model (PRTM), referred to as the East Midlands Freeport Model (EMFM), to assess the potential traffic impacts of the development. Further details of the modelling approach and outcomes are provided in the accompanying Transport Assessment (provided in Appendix 8.1, Volume IV).

Scoping

The EIA Scoping Report (Appendix 2.1, ES Volume IV) was submitted to North-West Leicestershire District Council (NWLDC) on 12 January 2024. The proposed scope of the transport ES chapter was set out in Appendix B2: *Transport*.

NWLDC issued their formal Scoping Opinion on the 27 March 2024. Feedback has also been received from LCC and National Highways.

Table 8.2.1 summarises the key EIA Scoping Opinion comments from relevant consultees with respect to the transport chapter of the ES and how and where these have been addressed in the chapter. **Table 8.2.1** does not include comments received from consultees, including National Highways, where the comments specifically relate to the TA.

Table 8.2.1
Comments Provided in Scoping Opinion

Scoping Comments	How addressed in the ES chapter
Leicestershire County Council	

Scoping Comments	How addressed in the ES chapter
The strategic highway impact of the development should be investigated through the use of the PRTM and in support of a full Transport Assessment, Sustainable Transport Strategy, Construction Management and Travel Plan documents.	<p>The outline planning application for the proposed development is supported by a full Transport Assessment (Appendix 8.1, Volume IV), a Sustainable Transport Strategy and a framework Travel Plan.</p> <p>The PRTM has been used to assess the scheme. For the completed development stage, the assessment has been undertaken within PRTM for both the future baseline and with-scheme forecast years. For the construction stage, PRTM future baseline forecasts have been used, with construction traffic manually assigned, external to the model, to anticipated construction routes to derive traffic forecasts during construction.</p>
The LHA would endorse ongoing engagement and consultation with relevant stakeholders to ensure the various assumptions and inputs are agreed as the assessment and development proposals continue to emerge.	Engagement has been ongoing with relevant stakeholders and parties, including LCC (as LHA), National Highways and NWLDC. Statutory stakeholders will continue to be consulted throughout the detailed design of the proposed development.
The LHA also note that given the potential cumulative development impact in this area it is recommended that a collaborative approach be taken with relevant parties to best manage the development of respective transport strategies and in the preparation of associated programme and delivery strategies.	The assessment has considered the potential cumulative development impact in this area. All committed and additional developments have been agreed with NWLDC and the TWG through the EIA and PRTM Scoping process and accounted for within the future baseline scenario. There has been engagement with several key stakeholders and relevant parties throughout the planning stages of the proposed scheme. This includes discussions with the promoter of the Isley Woodhouse scheme, where information on the respective proposals was shared and it was agreed to maintain ongoing dialogue.
Given the significant scale of access and infrastructure proposals expected the LHA would welcome early sight and review of these proposals to help identify the extent and deliverability of the schemes. Not least the sustainable transport connections to fully understand how these proposals will integrate with the local network, wider growth and strategic highway improvements	Engagement has been ongoing with the LHA. Updated proposals have been shared with the LHA as the design and assessment of the proposed development have progressed. EMA have engaged with trentbarton regarding how existing bus services could be extended or diverted to serve the proposed development using a combination of existing or relocated bus stop facilities and a potential bus interchange within the development itself.
Protect Diseworth (WINGS)	
The EIA should fully evaluate impacts of access to/from south and southwest of Diseworth. No traffic, particularly HGVs, should be permitted to travel through Diseworth.	The assessment has included consideration of forecast changes in traffic on roads through and around Diseworth, including Grimes Gate, Lady Gate and the Green. A CTMP will be prepared at the Reserved Matters Application (RMA) stage (secured by means of an appropriately worded planning condition) and will include measures to restrict the routing of HGV trips on unsuitable roads in order to reduce the impact on local communities. Specifically, construction HGV traffic associated with the

8 Transport and Access

Scoping Comments	How addressed in the ES chapter
	proposed development will be prohibited from using Grimes Gate through Diseworth.
The EIA should demonstrate a long-term public transport system and cycling/pedestrian access to serve the development.	The proposed development will provide a number of pedestrian and cycle access points to the proposed development, from the A453 and Hyam's Lane. Planning conditions will require the proposed development to prepare a full Travel Plan when individual plot occupants are known in order to reduce car trip generation and promote sustainable mode share. The planning application for the proposed development is supported by an interim 'framework' Travel Plan. The Applicant has also engaged with trentbarton regarding how existing bus services could be extended or diverted to serve the proposed development using a combination of existing or relocated bus stop facilities and a potential bus interchange within the development itself.
EIA should use modelling that accounts for all traffic generators in the region including A453 dualling and the SRN.	The assessment has included consideration of the A453 and SRN. In addition, the assessment includes committed and additional developments and planned infrastructure improvements that are assumed to be completed and operational in each forecast year. Further details are provided in Section 8.2.8 of this ES.
South Derbyshire District Council	
Local roads to Melbourne could receive greater volumes of traffic, and this would need to be assessed through the Transport Assessment.	Local roads through Melbourne are not included within the cordon of LCC's PRTM which has been used to assess the proposed development. However, given the location of the proposed development site relative to the strategic road network, including the M1 to the east, the A42 to the south, and the A50 to the north, it is considered unlikely that the proposed development would result in a material change in traffic through Melbourne.
The A50 trunk road which passes through South Derbyshire, while further away from the application site, is also likely to receive increased volumes of traffic should the proposed industrial and logistics development come forward.	The assessment has included consideration of forecast changes in traffic on the A50, including the impact at the A50 Junction 1 'Sawley Junction'.
Charnwood Borough Council	
Additional vehicular movements between the site and Loughborough via the A6 through Hathern should be a consideration.	The assessment has included consideration of forecast changes in traffic on the A6 Kegworth Bypass.

8.2.4. Post Submission

The planning application for the proposed development was submitted to NWLDC in May 2024.

Table 8.2.2 summarises the key post-submission comments received from relevant consultees with respect to the transport chapter of the ES and where these have been addressed in this ES Update chapter.

Table 8.2.2
Consultee Feedback Relevant to the Environmental Statement

Post Submission Feedback	How addressed in the ES Update chapter
National Highways	
Collision clusters should be defined in accordance with The Road Safety Engineering Manual (RoSPA, 2023), which defines a cluster as four or more collisions within 100m over a three-year period). The revised cluster definition should use most recent five years of data, excluding those affected by the Covid-19 pandemic.	Collision cluster analysis has been updated to use the five-year period 2018, 2019, 2022, 2023, and 2024. Collision cluster analysis has been undertaken in line with the Road Safety Engineering Manual (RoSPA, 2023). To align with a five-year dataset, this threshold has been proportionally adjusted to six or more collisions over the same spatial extent.
Breedon On-The-Hill Parish Council	
The proposed development could impact operation of the local and strategic road network, particularly the M1 Junction 23a and M1 Junction 24, which should be assessed through a Transport Assessment.	A Transport Assessment (Appendix 8.1, Volume IV) has been prepared to evaluate the traffic and transport impacts of the proposed development. The assessment utilises a cordon of LCC's PRTM, covering key junctions including M1 Junction 23a and M1 Junction 24. This strategic modelling has been supplemented by detailed local operational analysis, including a VISSIM microsimulation model of the strategic road network within the study area. The approach to incorporating PRTM outputs into the VISSIM model is currently under discussion and will be finalised through ongoing engagement with the TWG. The results of the VISSIM modelling will be shared once available.
Castle Donington Parish Council	
There is no provision within the application to make highway improvements, including at the M1 Junction 23a/A42 junction or A453.	The proposed development includes a number of improvements to the highway network. This includes a new access junction on the A453, updates to the existing A453 / Beverley Road roundabout to accommodate a second site access, and upgrades to the Finger Farm roundabout to increase junction capacity. These new and amended junctions have been designed to accommodate forecast traffic flows during both the construction stage and completed development stage.
Charnwood Borough Council	
The assessment should include the cumulative impacts of committed developments on the highway network.	The assessment has considered the potential cumulative development impact in the area. All committed and additional developments have been agreed with NWLDC and the TWG through the EIA and PRTM Scoping process and are accounted for within the future baseline scenario.
Long Whatton and Diseworth Parish Council	

8 Transport and Access

Post Submission Feedback	How addressed in the ES Update chapter
Local roads to through Diseworth, Belton, Long Whatton and Breedon could receive increased volumes of traffic.	<p>The assessment has included consideration of forecast changes in traffic on roads through Diseworth, Belton and Long Whatton.</p> <p>The cordon of LCC's PRTM does not include roads through Breedon On-The-Hill. However, given the location of the proposed development site relative to the strategic road network, it is considered unlikely that the proposed development would result in a material change in traffic through Breedon On-The-Hill.</p>

8.2.5. Assessment Scope

Technical Scope

SUB-TOPICS SCOPED IN

The technical scope of the assessment reported in this ES chapter comprises the assessment of the likely significant effects of the proposed development with respect to transport network users across the following criteria:

- Severance;
- Driver delay;
- Pedestrian delay
- Non-motorised user amenity;
- Fear and intimidation; and
- Road Safety.

SUB-TOPICS SCOPED OUT

The following elements have been excluded from the scope of this assessment, as confirmed through the EIA Scoping process and have therefore not been considered further within this chapter:

- Hazardous/abnormal loads.

Spatial Scope

The spatial scope of the transport assessment covers the area within the application limits (including new highway infrastructure and existing infrastructure around the site that will be subject to physical changes), together with the area over which the proposed development is expected to result in changes to traffic levels that could potentially lead to effects on transport users.

Roads that have been assessed have been identified in accordance with IEMA screening guidance, as set out in Section 8.2.8 of this chapter.

8.2.6. Assessment Scenario

The transport assessment considers the likely impacts of the proposed development during the construction stage and completed development stage.

The impacts of the proposed development have been assessed by comparing changes in traffic levels and transport infrastructure associated with the proposed development against the future baseline scenario. The future baseline reflects the expected traffic and transport conditions in the study area without the proposed development. It includes committed and additional developments (as identified in section 8.2.8 of this ES, as agreed through the EIA and subsequent PRTM Scoping process) and planned infrastructure improvements that are assumed to be completed and operational in each forecast year. For the purpose of this assessment, 'committed and additional developments' refers to the planning data and highway infrastructure assumptions included in the forecast scenarios in PRTM 2023.

Construction

The anticipated peak level of construction activity associated with the proposed development is expected to occur in 2027, based on the information provided in ES Chapter 6: Construction Strategy (commencement assumed to be Q4 2026).

The following scenarios have therefore been considered:

- 2027 Future Baseline (Existing Baseline + Committed Developments); and
- 2027 With Scheme (Existing Baseline + Committed Developments + Proposed Development).

Completed Development

The anticipated opening year of the first development parcel is 2027. The assessment of the completed development stage has considered both the opening year of the proposed development and 5 years after opening in 2032, as requested by the LCC. In line with LCC requirements, both forecast years assume full occupation of all development parcels.

The following scenarios have therefore been considered:

- 2027 Future Baseline (Existing Baseline + Committed Developments);
- 2027 With Scheme (Existing Baseline + Committed Developments + Proposed Development);
- 2032 Future Baseline (Existing Baseline + Committed Developments); and
- 2032 With Scheme (Existing Baseline + Committed Developments + Proposed Development).

8.2.7. Baseline Characterisation Approach

Desk Study

Information was obtained from various publicly available data sources in order to establish the baseline conditions within the study area, including local planning authority public right of way information, aerial satellite and street-level imagery, road safety data published by the DfT and details of planned highway improvement schemes.

Field Study

Site visits have been undertaken by members of the project team in January and May 2024 to gather firsthand information on existing baseline conditions. These visits have comprised site walkovers, observation of existing traffic patterns including baseline junction operation and identifying non-motorised user (i.e. walking, cycling and horse riding) provision and travel patterns.

Traffic surveys, comprising junction turning counts and automatic traffic counts, were undertaken in September 2023. Baseline traffic data is provided in the accompanying Transport Assessment (Appendix 8.1, Volume IV).

8 Transport and Access

8.2.8. Assessment Method

The assessment has been based on the scheme information and planning application drawings presented in ES Chapter 5: Proposed Development and the construction methodology presented in ES Chapter 6: Construction Strategy.

The methodology employed in this assessment has been developed from the guidance set out in Section 8.2.1.

In order to ensure a robust assessment, the maximum development scenario has been assessed. This scenario is considered to represent the reasonable worst case with respect to vehicle trip generation in both the construction and completed development stages.

Screening

The study area for the assessment of effects associated with changes in road traffic has been defined in accordance with the IEMA guidelines. These guidelines (para 2.16) suggest the following rules as an initial screening process to determine the geographical extent of assessments:

- Rule 1: Include highway links where traffic flows will increase by more than 30% (or the number of heavy goods vehicles will increase by more than 30%); and
- Rule 2: Include highway links of high sensitivity where traffic flows have increased by 10% or more.

Although the IEMA guidelines specifically refer to forecast increases in traffic flow, this assessment also considers forecast decreases in traffic flows in order that positive effects may be identified.

In order to exclude links with a forecast high proportional change in traffic due to a low absolute baseline, any link meeting the initial screening criteria but triggered by a change of less than 60 total vehicles or 30 heavy goods vehicles in a 24-hour Annual Average Daily Traffic (AADT) period has been screened out.

In addition, any new or amended junction has been subject to operational capacity assessment using appropriate local junction modelling software.

Committed and Additional Developments

The area around the proposed development has seen a significant amount of development over recent years and further development is proposed in the area.

To account for the potential traffic impact of this, developments that are considered sufficiently likely to happen have been identified and considered for inclusion in the future year assessments.

An Uncertainty Log was developed and reviewed with the TWG, capturing planned housing, employment, and highway infrastructure schemes expected to be in place by 2027 and 2032. The log includes over 650 housing sites, more than 350 employment sites, and over 60 changes to the highway network. Further details on the committed and additional development assumptions incorporated into the future baseline PRTM forecasts are provided in Section 6.2.3 of the accompanying Transport Assessment (provided in Appendix 8.1, Volume IV).

Construction Stage

The assessment of the potential impacts during the construction stage arising from the proposed development has been carried out by assessing the number of vehicle movements anticipated during the construction works (as informed by the information provided in ES Chapter 6: Construction Strategy), taking into account HGVs associated with construction and Cars and Light Goods Vehicles (LGV) associated with the construction workforce.

The routes taken by construction traffic on the local highway network will be the subject of discussions between the contractor and the planning and highways authorities prior to construction commencing and will also be subject to the existing physical and legal restrictions on the movements of large vehicles. At this stage, however, it is assumed that the primary access route for the majority of construction HGVs and other vehicles will be to/from the application site via the M1 and A453 (the east), which provides the most direct route to the Strategic Road Network (SRN) and also avoids traffic being routed through built up areas such as Diseworth. A negligible volume (assumed to be up to 5%) of construction traffic may access from the west, and this route also provides a secondary access in the event of issues affecting access from the primary route (noting that this would still avoid routing through Diseworth).

This assessment has evaluated the impacts of construction of the proposed development during the most intensive (i.e. peak) period of construction, when traffic impacts will be greatest. This is programmed to occur in week 47 of the construction stage, which for the purpose of this assessment is assumed to occur in 2027. As a result, the impacts identified in this assessment would not occur across the entire construction period and the assessment therefore presents the worst case in respect of potential impacts.

It is anticipated that construction access will initially be taken from the existing A453 / Beverley Road roundabout via a new permanent arm constructed on the southern side of the roundabout. As the construction stage progresses, construction access will move to the new permanent roundabout site access, approximately 300m west of the existing roundabout along the A453.

Further detail is provided in the accompanying Transport Assessment (Appendix 8.1, Volume IV) and within ES Chapter 5: proposed Development Description and ES Chapter 6: Construction Strategy.

Completed Development Stage

The proposed development has been broken down into five areas (parcels), Parcel A (A1, A2 and A3), B and C, as shown in the parameter plan in ES Chapter 5: Proposed Development Description. A summary of the development proposals for each parcel is detailed below.

- **Parcels A1, A2 and A3:** located to the west of the site, can accommodate up to 93,000 sqm of floorspace across a range of units. Potential use classes within this parcel include B8 (storage and distribution), B2 (light industrial) and Use Class E(g)(i) (ancillary (integral) office).
- **Parcel B:** located in the centre of the site, has a maximum floorspace of 33,000 sqm and will accommodate a range of units.
- **Parcel C:** located to the east of the site, can accommodate up to 9,000 sqm of floorspace and will accommodate a range of units.

Two new vehicular access points are proposed from the A453 in order to serve the application site. Parcel A incorporates a new vehicular access from the A453 into the site, which will provide access to Parcels A and B via a new roundabout. The existing A453/ Beverley Road roundabout will be amended to provide access into Parcel C. A series of internal roads and footpaths will connect the three parcels, the nature and layout of which will be determined at the detailed design stage.

The assessment of the potential impacts during the completed development stage has been carried out by assessing the additional operational traffic including HGV and workforce movements associated with the proposed development.

The forecast operational traffic volumes have been derived from the TRICS database. Development trip distribution is based on PRTM's in-built gravity model, which distributes trips according to the size and proximity of surrounding land uses.

Further detail is provided in the accompanying Transport Assessment (Appendix 8.1, Volume IV).

8 Transport and Access

Cumulative Development Stage

As set out above, the future baseline scenario, against which impacts of the proposed development are assessed against, includes all future committed and additional developments that are assumed to be complete and operational in each forecast year, planned infrastructure improvements and projected traffic growth. As a result, the assessment of the construction and completed development stages include the cumulative effects of planned and committed developments by taking this into account within the background traffic growth in the future baseline.

Further detail is provided in the accompanying Transport Assessment (Appendix 8.1, Volume IV).

8.2.9. Assessment Criteria

Receptors

Receptors for the traffic and transport assessment are transport network users, with no distinction being made between the purpose of the journey these users make. **Table 8.2.3** identifies receptors that may experience significant effects as a result of the proposed development.

Table 8.2.3
Receptors requiring assessment for traffic and transport

Receptor Group	Receptors included within group
People walking and cycling	Those travelling by foot or on bicycle, including those classified as vulnerable (i.e. the young, elderly and those with mobility impairments).
Vehicle drivers and passengers	Those driving vehicles or who are passengers within vehicles, including private vehicles, taxis, private hire, buses, goods vehicles and emergency services.

The assessment of people walking and cycling includes users within the highway boundary, (including associated footways and cycle lanes) and users on Public Rights of Way (PRoW).

Receptor Sensitivity Criteria

The IEMA guidelines (para. 1.30) identify particular groups or locations which may be sensitive to changes in traffic conditions, which comprise:

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

The IEMA guidelines note that the above list is not comprehensive and other groups or locations can be included if considered appropriate.

The determination of receptor sensitivity is based on the criteria of value, adaptability and tolerance. Given that all persons are deemed to be of equal value, sensitivity to changes in transport conditions is focussed on vulnerable user groups who are less able to tolerate, adapt to or recover from changes. Therefore, receptor sensitivity may be high where there is vulnerable user activity in a particular area, for example adjacent to a school or in an area with an existing road safety issue, but low in an industrial area with small numbers of non-vulnerable movements.

Based on the guidance provided by IEMA, **Table 8.2.4** provides a summary of the different types of features and facilities and the subsequent sensitivity attributed to people walking and cycling that have been adopted for this assessment.

Table 8.2.4
Receptor Sensitivity Criteria

Link Features	Sensitivity
Receptors of the greatest sensitivity to traffic flow: primary schools, secondary schools, nurseries, retirement homes, care homes.	Very High
Receptors of high sensitivity to traffic flow: colleges, playgrounds, accident black spots*, urban/residential roads without footways that are used by people walking.	High
Traffic flow sensitive receptors including: doctors surgeries, hospitals, shopping areas with roadside frontage, roads with narrow footways, recreation facilities, community centres.	Medium
Receptors with some sensitivity to traffic flow: places of worship, public open space, tourist attractions and residential roads with adequate footway provision.	Low
Receptors with very low sensitivity to traffic flows and those sufficiently distant from affected roads and junctions.	Negligible

* Applicable to the road safety, severance and pedestrian delay assessments only

In accordance with IEMA guidance, any link identified in **Table 8.2.4** as having low, medium high or very high sensitivity receptors has been considered a sensitive area.

DMRB LA112 provides further guidance regarding the categorisation of receptor sensitivity for walkers, cyclists and horse riders (WCH) on PRoW and other trails and routes. This is summarised in **Table 8.2.5**.

Table 8.2.5
Receptor Sensitivity Criteria

Description	Sensitivity
1) national trails and routes likely to be used for both commuting and recreation that record frequent (daily) use. Such routes connect communities with employment land uses and other services with a direct and convenient WCH route. Little / no potential for substitution.	Very High
2) routes regularly used by vulnerable travellers such as the elderly, school children and people with disabilities, who could be disproportionately affected by small changes in the baseline due to potentially different needs.	
3) rights of way for WCH crossing roads at grade with >16,000 vehicles per day.	
1) regional trails and routes (e.g. promoted circular walks) likely to be used for recreation and to a lesser extent commuting, that record frequent (daily) use. Limited potential for substitution; and/or	High

8 Transport and Access

Description	Sensitivity
2) rights of way for WCH crossing roads at grade with >8,000 - 16,000 vehicles per day	
1) public rights of way and other routes close to communities which are used for recreational purposes (e.g. dog walking), but for which alternative routes can be taken. These routes are likely to link to a wider network of routes to provide options for longer, recreational journeys, and / or	Medium
2) rights of way for WCH crossing roads at grade with >4000 – 8000 vehicles per day.	
1) routes which have fallen into disuse through past severance, or which are scarcely used because they do not currently offer a meaningful route for either utility or recreational purposes, and/or	Low
2) rights of way for WCH crossing roads at grade with <4000 vehicles per day	

The receptor sensitivity detailed in Table 8.2.4 and Table 8.2.5 are concerned with the identification of areas with higher numbers of vulnerable user activity and are therefore not considered applicable to the determination of sensitivity for vehicle drivers and passengers. Features applicable to these receptors are identified in the IEMA guidelines as collision cluster locations, routes with road safety concerns and junctions and highway links that are at (or over) capacity. As a result, the sensitivity of vehicle drivers and passengers is considered to be high at locations with a collision cluster for the road safety assessment. For the driver delay assessment, receptor sensitivity is considered to be medium at junctions or links that are operating at or over capacity, and low at all other junctions and links. In accordance with IEMA guidance, any link identified as having medium or high sensitivity vehicle driver and passenger receptors has been considered a sensitive area.

Magnitude of Impact Criteria

SEVERANCE

Severance is defined within the IEMA guidelines as ‘the perceived division that can occur within a community when it becomes separated by major traffic infrastructure’. The IEMA guidelines also note that ‘severance may result from the difficulty of crossing a heavily trafficked road or a physical barrier created by infrastructure’ (IEMA, 2023, para. 3.13).

The IEMA guidelines suggest that ‘changes in traffic flow of 30%, 60% and 90% are regarded as producing ‘slight’, ‘moderate’ and ‘substantial’ changes in severance respectively’ (IEMA, 2023, para. 3.16). However, the guidance notes that the application of these indicators should pay full regard to specific local conditions.

The IEMA guidelines evaluate proportional changes in traffic flow but do not consider absolute levels of traffic, including levels below which any change in traffic would result in a negligible impact on severance. The IEMA guidelines note that there are useful resources to augment historic thresholds and assist the determination of the significance of severance effects. Guidance on the categorisation of severance in relation to levels of traffic flow was provided in the now withdrawn DMRB Volume 11, Section 3, Part 8 (Highways Agency, 1993). This stated that severance should be described in terms of ‘Slight’, ‘Moderate’ or ‘Severe’, and that these categories are applicable both to the direct effects of a scheme and to effects caused by increases in traffic levels on existing roads. In addition (with specific reference to relief from existing severance), the DMRB guidance acknowledged that there is a traffic flow threshold below which changes in severance are considered not significant, corresponding to a 24-hour AADT flow less than 8,000 vehicles. Severance levels provided in the withdrawn DMRB guidance are summarised in **Table 8.2.6**.

Table 8.2.6
Severance Levels

Severance Level	Total Traffic Flow (24 Hour AADT)
Slight	<8000
Moderate	8000-16000
Severe	>16,000

Source: Withdrawn DMRB Volume 11, Section 3, Part 8 (Highways Agency, 1993)

The assessment of severance has been undertaken for all links identified through the initial screening process and considers all relevant factors including total traffic flow, speed, availability of crossing facilities and the number of movements likely to cross the affected routes.

Forecast changes in 24-hour AADT traffic flows have then been used to determine the magnitude of impact of the proposed development, as set out in **Table 8.2.7**. Where there is no change in the forecast level of severance, this has been assessed as no change. Where there is a change in the level severance and the change in traffic flow is forecast to be less than 30%, the change has been assessed to be negligible. A change in the level of severance and a forecast change in traffic flow between 30% and 60% has been defined as a small impact. Changes in the level of severance and a forecast change in traffic flow between 60% to 90% have been defined as a medium impact and changes greater than 90% with a change in the level of severance have been defined as a large impact. Where the level of severance in the future baseline is already severe, any further increase in traffic will be assessed using the same impact categories as if there had been a change in the level of severance.

Table 8.2.7
Severance Magnitude of Impact

Magnitude of Impact	% Change in Traffic Flows (AADT) from Baseline Conditions
Large	Change in level of severance with: > 90% change in 24 hour two-way all vehicle flow
Medium	Change in level of severance with: >60% to 90% change in 24 hour two-way all vehicle flow
Small	Change in level of severance with: >30% to 60% change in 24 hour two-way all vehicle flow
No Change / Negligible	No Change in level of severance; or Change in level of severance with: <30% change in 24 hour two-way all vehicle flow

The determination of whether the resulting effect is significant is discussed in section 8.2.9.

Severance associated with the closure or diversion of a highway or pedestrian/cycle route is assessed as part of the driver delay and pedestrian delay assessment respectively.

DRIVER DELAY

IEMA guidelines (para. 3.19) note that delay can occur at several points on the highway network, although delays are only likely to be significant when traffic on the network is already at, or close to, the capacity of the system.

For each junction assessed, junction capacity has been defined according to the arm with the highest Volume over Capacity (VoC) using the following categories:

- VoC < 0.75 well within capacity;

8 Transport and Access

- VoC $\geq 0.75 < 0.85$ within capacity;
- VoC $\geq 0.85 < 1.0$ close to capacity; and
- VoC ≥ 1.0 over capacity

Forecast changes in VoC have then been used to inform the magnitude of impact of the proposed development, as set out in **Table 8.2.8**. Where there is no change in the forecast level of operation, this has been assessed as no change. Where there is a change in the level of operation between well within and within capacity, the change has been assessed as negligible. Changes in the level of operation between well within or within capacity and close to capacity have been defined as a small impact. Changes between well within, within or close to capacity and over capacity have been defined as a medium or large impact. Where a junction in the future baseline is already over capacity, any further deterioration of junction performance will be assessed qualitatively using metrics such as changes in VoC and queue lengths. Where forecast VoC data is not available, the assessment will be undertaken qualitatively using metrics such as changes in in Level of Service (LOS), delay and queue lengths.

Table 8.2.8
Driver Delay Magnitude of Impact

Magnitude of Impact	Change in Level of Junction Operation from Baseline Conditions
Large	Change in level of operation between: <ul style="list-style-type: none"> - well within capacity (VoC < 0.75) and over capacity (VoC ≥ 1.0);
Medium	<ul style="list-style-type: none"> - within capacity (VoC $\geq 0.75 < 0.85$) and over capacity (VoC ≥ 1.0); or - close to capacity (VoC $\geq 0.85 < 1.0$) and over capacity (VoC ≥ 1.0)
Small	Change in level of operation between: <ul style="list-style-type: none"> - well within capacity (VoC < 0.75) and close to capacity (VoC $\geq 0.85 < 1.0$); or - within capacity (VoC $\geq 0.75 < 0.85$) and close to capacity (VoC $\geq 0.85 < 1.0$)
No Change / Negligible	No Change in level of operation; or Change in level of operation between: <ul style="list-style-type: none"> - well within capacity (VoC < 0.75) and within capacity (VoC $\geq 0.75 < 0.85$)

The assessment of driver delay has been undertaken for all junctions scoped into the accompanying Transport Assessment (provided in Appendix 8.1, Volume IV).

PEDESTRIAN DELAY

Where an existing pedestrian or cycle route is severed or diverted, this can cause an increase in journey lengths as people divert to an alternate route. Similarly, new and enhanced walking and cycling infrastructure can result in a reduction in journey lengths. The assessment of pedestrian delay incorporates delay to all non-motorised users.

Guidance on the categorisation of changes to journey lengths is provided the DMRB Volume 11, Section 3, Part 6 LA 112 Population and Human Health (Highways England, 2020) and is summarised in **Table 8.2.9**. The magnitude of impact definitions have been updated to ensure consistent terminology throughout the ES.

Table 8.2.9
Walking and Cycling Delay Magnitude of Impact

Magnitude of Impact	Total Hazard Score
Large	>500 metres (m) increase / decrease in WCH journey length
Medium	>250m – 500m increase or decrease in WCH journey length
Small	>50 – 250m increase or decrease in walkers, cyclists and horse-riders (WCH) journey length
Negligible	<50m increase or decrease in journey length

Source: DMRB, LA112 (4), Table 3.12 (updated terminology)

Pedestrian delay associated with difficulty crossing the road is assessed as part of the severance assessment.

NON-MOTORISED USER AMENITY

Non-motorised user amenity is defined within the IEMA guidelines as “the relative pleasantness of a journey, and is considered to be affected by traffic flow, traffic composition and pavement width/separation from traffic” (IEMA, 2023, para. 3.29).

Further guidance on changes in amenity was provided in the withdrawn DMRB Volume 11, Section 3, Part 8 (Highways Agency, 1993) which noted that whilst the volume and composition of traffic are important determinants of amenity, other factors should also be taken into account. For people walking these include footpath width, distance from traffic, barriers between people and traffic and the quality of any street furniture and planting. For people cycling it includes factors such as clear signing of alternate cycle routes, subways or cycle crossings and segregation from other traffic.

IEMA guidelines (para. 3.30) suggest a tentative threshold for judging the significance of changes in amenity would be where the traffic flow (or its HGV component) is halved or doubled. The IEMA guidelines note however that the assessment should pay full regard to specific local conditions.

Forecast changes in 24-hour AADT traffic flows have then been used to determine the magnitude of impact of the proposed development. Where traffic flows are less than halved or doubled, the this has been assessed as negligible. Where the magnitude of change is greater than this, professional judgement has been used taking into account the magnitude of change in flow, the proportion of Heavy Goods Vehicles (HGVs), the availability of footways and separation of pedestrian desire lines from the carriageway.

ROAD SAFETY

Increases in traffic flows on roads and through junctions could result in increased accident risk. Similarly, reductions in traffic flows could result in a reduction in accident risk.

Following submission of the outline planning application for the proposed development in May 2024, National Highways advised that collision analysis should exclude years affected by the Covid-19 pandemic and that collision clusters identification should follow guidance provided in the Road Safety Engineering Manual (Royal Society for the Prevention of Accidents (RoSPA), 2023).

In response, Personal Injury Collision (PIC) data has been sourced from the Department for Transport for the years 2018, 2019, 2022, 2023, and 2024. Cluster analysis has been undertaken in accordance with RoSPA

8 Transport and Access

guidance, which defines a collision cluster as four or more collisions within a 100m diameter over three years. To reflect the five-year dataset, this threshold has been proportionally adjusted to six or more collisions over the same spatial extent.

The assessment of PIC clusters has been undertaken for all clusters located on links identified through the initial screening process based on two-way 24-hour AADT forecast traffic flows.

The magnitude of change has been determined through a qualitative assessment of the circumstances of each collision cluster, considering the relative and absolute change in traffic flow as a result of the proposed development, along with other local circumstances or factors that may elevate or lessen risks, in order to assess the potential significance of accident / safety risk.

FEAR AND INTIMIDATION

Fear and Intimation can be experienced by pedestrians as a result of their proximity to traffic. The IEMA guidelines (para 3.33) note that the extent of fear and intimidation is dependent on:

- The total volume of traffic;
- The heavy vehicle composition;
- The speed these vehicles are passing; and
- The proximity of traffic to people – and/or the feeling of the inherent lack of protection created by factors such as a narrow pavement median, a narrow path or a constraint (such as a wall or fence) preventing people stepping further away from moving vehicles.

There are no commonly agreed thresholds for estimating fear and intimidation, although the IEMA guidelines do suggest thresholds that define the degree of hazard to people which can be used, based on previous research. The IEMA guidelines provide a weighting system to provide a first approximation of the likelihood of fear and intimidation. The degree of hazard is assessed with reference to the established thresholds, and a score provided for each combination of a highway link under consideration, as shown in **Table 8.2.10**.

Table 8.2.10
Fear and Intimidation Thresholds

Average traffic flow over 18-hour day – all vehicles/hour 2-way	Total 18-hour heavy vehicle flow	Average vehicle speed	Degree of hazard score
+1,800	+3,000	->40	30
1,200-1,800	2,000-3,000	30-40	20
600-1,200	1,000-2,000	20-30	10
<600	<1,000	<20	0

Source: IEMA, 2023

The score from all three elements is combined to provide a 'level' of fear and intimidation for all three elements, as shown in **Table 8.2.11**.

Table 8.2.11
Level of Fear and Intimidation

Level of Fear and Intimidation	Total Hazard Score
Extreme	71+
Great	41-70
Moderate	21-40
Small	0-20

Source: IEMA, 2023

Lastly, the IEMA guidelines set out that the magnitude of impact is approximated with reference to the changes in the level of fear and intimidation from the existing baseline conditions, as shown in **Table 8.2.12**.

Table 8.2.12
Fear and Intimidation Magnitude of Impact

Magnitude of Impact	Change in step/traffic flows (AADT) from baseline conditions
Large	Two step changes in level
Medium	One step change in level but with: <ul style="list-style-type: none"> - >400 veh increase in average 18 hr average two-way all vehicle flow; and/or - >500 HGV increase in 18hr total HGV flow
Small	One step change in level but with: <ul style="list-style-type: none"> - <400 veh increase in average 18 hr average two-way all vehicle flow; and/or - <500 HGV increase in 18hr total HGV flow
Negligible	No change in step changes.

Source: IEMA, 2023

In addition to the guidelines set out above, where the level of fear and intimidation in the future baseline is already extreme, any further increase in traffic will be assessed using the small and medium impact categories as if there had been a one stop change in the level of fear and intimidation.

In accordance with IEMA guidelines, the assessment of fear and intimidation has been undertaken on all links identified through the initial screening process, with the magnitude of change determined based on the forecast change in the level of fear and intimidation as set out in **Table 8.2.12**.

Note that for the purpose of this assessment, average vehicle speed will be taken from the PRTM modelled free flow speed in all scenarios.

8 Transport and Access

Scale of Effect Criteria

The assessment of significance within this chapter has been based on the scale of effect matrix presented in **Table 8.2.13**.

Table 8.2.13
Significance Matrix

Magnitude of Impact	Sensitivity of Receptor				
	Very High	High	Medium	Low	Negligible
Large	Major	Major	Moderate or Major	Minor or Moderate	Minor
Medium	Major	Moderate or Major	Moderate	Minor	Negligible or Minor
Small	Moderate or Major	Minor or Moderate	Minor	Negligible or Minor	Negligible or Minor
Negligible	Minor	Minor	Negligible or Minor	Negligible or Minor	Negligible
No Change	Negligible	Negligible	Negligible	Negligible	Negligible
Where the effect is Negligible/Minor or Minor/Moderate, professional judgement will be applied to determine the appropriate scale of effect.					

Effects have the potential to be adverse or beneficial. Where the significance is shown as being one of two alternatives, DMRB suggests that a single description should be decided upon with a reasoned judgement for the level of significance chosen. The process applies a precautionary approach, whereby caution is exercised in order that professional judgement is inclined towards concluding a reasonable worst-case outcome in the event of uncertainty regarding selection from more than one possible outcome.

For the purposes of the transport assessment, effects considered likely to be significant are moderate or major. Effects identified as negligible or minor are considered to be not significant.

8.2.10. In-Combination Climate Change Impact (ICCI) Assessment

The UKCP18 climate projections for the UK, as set out in Chapter 2: EIA Methodology of this volume of the ES, have been reviewed. The climate change trends are not expected to affect the receptors considered within this assessment. On this basis, an ICCI assessment has not been undertaken in this ES chapter.

8.2.11. Assumptions / limitations

In undertaking the transport assessment of the application site and wider surrounding area, there are a number of assumptions informing outputs from this work. These include:

- The assessment of traffic-related impacts of the proposed development has been undertaken using a cordon from LCC's PRTM, referred to as the East Midlands Freeport Model (EMFM). The model scope, study area and general parameters have been agreed with LCC and National Highways.
- For the completed development stage, the assessment has been undertaken within PRTM for both the future baseline and with-scheme forecast years. For the construction stage, PRTM future baseline forecasts have been used, with construction traffic manually assigned, external to the model, to anticipated construction routes to derive construction traffic forecasts.
- The PRTM traffic forecasts assessed within this chapter correspond to the Scenario A forecasts reported in the Transport Assessment (Appendix 8.1, Volume IV). Forecasts that include the proposed development reflect the 'with development and mitigation' scenario. Further detail is provided in the accompanying Transport Assessment (Appendix 8.1, Volume IV)
- The assessment of driver delay has been undertaken for all junctions reported in the accompanying Transport Assessment (Appendix 8.1, Volume IV), using a combination of microsimulation and standalone local junction models. While the PRTM 2023 modelling captures the wider network impacts of the proposed development, this has been supplemented by detailed local operational analysis. Microsimulation modelling, agreed in consultation with the TWG, has been applied to the immediate highway network surrounding the site; primarily National Highways infrastructure with a small section of LCC's network. Other junctions have been assessed using standalone models. ~~The approach to incorporating PRTM 2023 outputs into the VISSIM model is still under development and will be agreed through ongoing engagement with the TWG. VISSIM model results will be shared once available. As such, the current assessment of driver delay excludes junctions within the VISSIM model.~~ Further details, including the spatial extent of the VISSIM model, are provided in the accompanying Transport Assessment (Appendix 8.1, Volume IV).
- Construction traffic routing on the local highway network will be subject to discussion with the Local Planning Authority and Local Highways Authority, as well as existing restrictions on large vehicle movements.
- The normal working hours for construction activities will be 08:00-18:00 on Mondays to Fridays and 08:00 to 14:00 on Saturdays. Deliveries and unloading will be between the hours of 07:00-18:00. No works will be undertaken on Sundays or Public Holidays, however in the event that works are necessary during these times, agreement will be reached with the Local Planning Authority.
- All staff and workforce have been assumed to travel to work by car or LGV.
- A CTMP and Construction Environmental Management Plan (CEMP) will be implemented that will seek to restrict the number of deliveries and access to working sites during highway peak periods. However, the methodology and assessment described above does not take account of this and HGV trips have been assumed to distribute evenly across all hours of the normal working day. Consequently, traffic impacts reported within this assessment may be overstated.
- The CTMP will include measures to restrict the routing of HGV trips on unsuitable roads in order to reduce the impact on local communities. Construction traffic will be prohibited from using East Midlands Airport highway network north of the A453, Grimes Gate through Diseworth or Hyam's Lane. The primary access route for the majority of construction HGV traffic and other vehicles is anticipated to be via the M1 and A453 (to the east), which provides the most direct route to the SRN and avoids traffic being routed through built up areas such as Diseworth. A negligible volume (assumed to be up to 5%) of construction traffic has been assumed to route from the west.
- Vehicle trips generated by workforce and construction HGV vehicles have been assigned to the workforce and construction HGV routes. Where a road serves more than one workforce or construction HGV route, the flows from the different sources have been combined and assigned to that route. The assessment reports the highest impact of the proposed development on each road and junction during the construction stage.
- Analysis of total traffic volumes recorded in the surveys undertaken in September 2023 (outside of the school summer holidays) across the study area identified the busiest weekday hours were 08:00-09:00 and 17:00-18:00. As such, the traffic impacts during the operational stage of the development have been assessed for

8 Transport and Access

these peak hours. This approach is considered to provide a robust assessment of the traffic impacts associated with the proposed development.

- The forecast operational traffic volumes have been derived from the TRICS database. Development trip distribution is based on PRTM's in-built gravity model, which distributes trips according to the size and proximity of surrounding land uses.
- Planning conditions will require the proposed development to prepare full Travel Plan(s) when individual plot occupants are known in order to reduce car trip generation and promote sustainable mode share. The planning application for the proposed development is supported by an interim 'framework' Travel Plan. However, the workforce trip generation methodology and assessment does not take account of this and consequently traffic impacts may be overstated.

Further details on how traffic impacts have been forecast are provided in the accompanying Transport Assessment (Appendix 8.1, Volume IV).

These assumptions and limitations are typical for an assessment of this type and are not expected to affect the validity of the outcome of the assessment.

8.3. Baseline Conditions

8.3.1. Existing Baseline

Highway Infrastructure

The application site is bound by the A453 Ashby Road to the north. The A453 is a single carriageway road with a speed limit of 50mph and is a 'Red Route', with restrictions in place between Isley Walton access to the west, and Finger Farm Roundabout to the East, preventing stopping at any time.

The application site is also accessible from the Strategic Road Network (SRN); the A453 is connected to the M1 northbound at Junction 24 and the M1 southbound at Junction 23a via Finger Farm Roundabout.

Hyam's Lane to the south of the application site is an unsurfaced adopted highway. This is not a through-route but is accessed via Grimes Gate to the West of the application site. Hyam's Lane appears to be primarily used by farm vehicles and public rights of way users.

Public Transport

RAIL

The closest rail station is East Midlands Parkway Station which is approximately 7.5 km from the application site and located north of EMA. The station is Category A, meaning it has step free access to all platforms and has tactile paving at the edge of all platforms. There are 20 cycle stands situated at the front of the station. The station is managed by East Midlands Railway and provides connections to key locations such as Nottingham, Derby, and London St Pancras.

BUS

The application site has two proposed entrances located on the A453; one of which, will be directly opposite the eastern most access point to the application site. From here, the closest bus stops are the Pegasus Business Park stops which are located on the eastern and western side of Beverley Road. These stops are a walk of approximately 100m from the application site. The second closest bus stop is DHL Cargo East, located on Beverley Road, approximately 400m from the application site. Both bus stops have a shelter and raised bus

boarding kerbs. Bus services provide connections to destinations including Nottingham, Long Easton, Clifton, Leicester, Loughborough and Derby.

Walking and Cycling

A number of walking and cycling facilities are provided in the vicinity of the proposed development.

PRoW Footpath L45 passes through the northeastern part of the application site, providing pedestrian connectivity between the village of Diseworth and the A453 near Finger Farm roundabout. From Diseworth, Footpath L45 follows the route of Hyam's Lane, a partially unsurfaced adopted highway that provides no street lighting. Between Hyam's Lane and the A453, Footpath L45 passes across existing agricultural land that forms part of the proposed development application site.

To the north of the application site, the A453 provides a well-lit footway alongside the northern side of the carriageway, which stretches between Finger Farm roundabout and the main airport access road. The eastern section, between Finger Farm roundabout and the A453 / Beverley Road roundabout, is set back from the carriageway behind a narrow grass verge and includes a crossing refuge to facilitate the crossing of Beverley Road. The footway then continues west along the northern side of the A453 to the main airport access junction, set back from the carriageway behind a wide grass verge and tall hedgerow, before proceeding into the EMA site towards Viscount Road and Beverley Road. Beyond this point, the A453 lacks additional footway provision.

To the west of the application site, Grimes Gate provides connectivity between the A453, Diseworth village and The Green. The only walking and cycling provision on Grimes Gate between the A453 and Diseworth is a short section of on-street cycle lanes and shared use paths on either side of the carriageway on the approach to the junction with the A453. Here, two crossing refuges are provided on traffic islands to facilitate the crossing of Grimes Gate. Onward north-south connectivity into the EMA site is provided via a shared-use path that joins the northern side of the A453 directly opposite the junction with Grimes Gate.

Grimes Gate also forms part of National Cycle Network (NCN) Route 15. This is a partially complete route that will eventually connect National Route 6 in Leicestershire with National Route 1 in Lincolnshire, travelling via Nottingham, Grantham and Sleaford.

Further cycle provision in the vicinity of the application site includes short sections of shared-use paths at the A453 / Beverley Road roundabout and Finger Farm roundabout that facilitate cyclists crossing Beverley Road and the A453.

Road Safety

Personal Injury Collision data has been obtained from the Department for Transport (DfT) for the five-year period 2018, 2019, 2022, 2023, and 2024. This selection reflects National Highways' request to exclude pandemic-affected years from the five-year dataset used for assessment. The PRTM area of interest has been used as the study area for the road safety analysis.

Collision cluster analysis has been undertaken in line with the Road Safety Engineering Manual (RoSPA, 2023), which defines a cluster as four or more collisions within a 100m diameter over three years. To align with a five-year dataset, this threshold has been proportionally adjusted to six or more collisions over the same spatial extent.

Four collision clusters have been identified within the study area. Further details of the collision clusters are provided below.

COLLISION CLUSTER 1 – A453 ASHBY ROAD / UNNAMED ROAD

8 Transport and Access

This collision cluster is located at the junction of the A453 Ashby Road and an unnamed road leading to Diseworth. Six collisions have been identified at this junction, one of which was classified as serious and five of which were classified as slight.

A summary of the collisions is provided in **Table 8.3.1**.

Table 8.3.1
Cluster 1 – A453 Ashby Road / Unnamed Road

Ref	Date/Time	Severity	Description
331800171	11/01/2018 12:55	Slight	One vehicle and no pedestrians or cyclists involved
331800603	09/06/2018 09:35	Serious	Three vehicles and no pedestrians or cyclists involved
331901277	27/06/2019 16:00	Slight	Three vehicles and no pedestrians or cyclists involved
332200634	02/08/2022 08:00	Slight	Three vehicles and no pedestrians or cyclists involved
332200862	10/10/2022 08:45	Slight	Two vehicles and no pedestrians or cyclists involved
332400733	13/08/2024 12:00	Slight	Two vehicles and no pedestrians or cyclists involved

Source: DFT

COLLISION CLUSTER 2 – CHARLEY ROAD / ABBEY ROAD / IVESHEAD ROAD

This collision cluster is located at the junction of Charley Road, Abbey Road and Iveshead Road. Thirteen collisions have been identified at this junction, four of which were classified as serious and nine of which were classified as slight.

A summary of the collisions is provided in **Table 8.3.2**.

Table 8.3.2
Cluster 2 – Charley Road / Abbey Road / Iveshead Road

Ref	Date/Time	Severity	Description
332401209	16/12/2024 06:59	Serious	Two vehicles and no pedestrians or cyclists involved
332301206	05/12/2023 16:15	Slight	Two vehicles and no pedestrians or cyclists involved
331900022	16/01/2019 09:05	Slight	Two vehicles and no pedestrians or cyclists involved
331900377	20/04/2019 10:56	Slight	Two vehicles and no pedestrians or cyclists involved
331900326	09/04/2019 12:36	Serious	Two vehicles and no pedestrians or cyclists involved
331900360	16/04/2019 09:26	Slight	Two vehicles and no pedestrians or cyclists involved

Ref	Date/Time	Severity	Description
331900232	14/03/2019 11:35	Serious	Two vehicles and no pedestrians or cyclists involved
331900453	04/05/2019 19:49	Slight	Two vehicles and no pedestrians or cyclists involved
331900716	08/07/2019 08:01	Slight	Two vehicles and no pedestrians or cyclists involved
331901137	06/11/2019 17:30	Slight	Two vehicles and no pedestrians or cyclists involved
331800963	02/08/2018 17:15	Slight	Two vehicles and no pedestrians or cyclists involved
331801353	28/11/2018 16:56	Slight	Two vehicles and no pedestrians or cyclists involved
331801361	10/12/2018 14:34	Serious	Two vehicles and no pedestrians or cyclists involved

Source: DFT

COLLISION CLUSTER 3 – B591 / CHARLEY ROAD

This collision cluster is located at the junction of the B591 and Charley Road. Eight collisions have been identified at this junction, four of which were classified as serious and four of which were classified as slight.

A summary of the collisions is provided in **Table 8.3.3**.

Table 8.3.3
Cluster 3 – B591 / Charley Road

Ref	Date/Time	Severity	Description
332400302	06/04/2024 16:59	Serious	Two vehicles and no pedestrians or cyclists involved
332400064	21/01/2024 00:40	Serious	Two vehicles and no pedestrians or cyclists involved
332400400	08/05/2024 08:33	Slight	Two vehicles and no pedestrians or cyclists involved
332301100	07/11/2023 11:43	Slight	Two vehicles and no pedestrians or cyclists involved
332200157	22/03/2022 08:41	Serious	Two vehicles and no pedestrians or cyclists involved
331900150	10/01/2019 07:55	Slight	Two vehicles and no pedestrians or cyclists involved
331900180	15/03/2019 20:40	Serious	Two vehicles and no pedestrians or cyclists involved
331900831	27/08/2019 17:15	Slight	Three vehicles and no pedestrians or cyclists involved

Source: DFT

8 Transport and Access

COLLISION CLUSTER 4 – B5330 SHEPSHED ROAD / BEACON ROAD

This collision cluster is located at the junction of B5330 Shepshed Road and Beacon Road. Eight collisions have been identified at this junction, one of which was classified as serious and seven of which were classified as slight.

A summary of the collisions is provided in **Table 8.3.4**.

Table 8.3.4
Cluster 4 – B5330 Shepshed Road / Beacon Road

Ref	Date/Time	Severity	Description
332400183	23/02/2024 17:28	Slight	Three vehicles and no pedestrians or cyclists involved
332400269	24/03/2024 09:10	Slight	Three vehicles and no pedestrians or cyclists involved
332400552	16/06/2024 16:45	Slight	Two vehicles and no pedestrians or cyclists involved
332401230	22/12/2024 09:27	Slight	Two vehicles and no pedestrians or cyclists involved
331900425	23/05/2019 16:40	Serious	Two vehicles and no pedestrians or cyclists involved
331800680	24/06/2018 17:20	Slight	Two vehicles and no pedestrians or cyclists involved
331801135	09/10/2018 09:44	Slight	Two vehicles and no pedestrians or cyclists involved
331802149	01/10/2018 09:45	Slight	Two vehicles and no pedestrians or cyclists involved

Source: DfT

8 Transport and Access

8.4. Potential Impacts

The impacts considered to have the potential to result in significant effects (prior to inclusion of any embedded mitigation) are reported in **Table 8.4.1**

Table 8.4.1
Potential significant Impacts

Stage	Description of Potential Impacts	Adverse/beneficial
Construction	Increased traffic levels including construction HGV and workforce movements resulting in impacts on Severance, Driver Delay, Non-Motorised User Amenity, Road Safety and Fear and Intimidation.	Adverse
Construction	Changes to highway infrastructure resulting in impacts on Driver Delay and Road Safety.	Adverse or Beneficial
Construction	Changes to non-motorised user infrastructure resulting in impacts on Severance, Pedestrian Delay, Non-Motorised User Amenity, Road Safety and Fear and Intimidation.	Adverse
Completed Development	Increased traffic levels including operational HGV and workforce movements resulting in impacts on Severance, Driver Delay, Non-Motorised User Amenity, Road Safety and Fear and Intimidation.	Adverse
Completed Development	Changes to highway infrastructure resulting in impacts on Driver Delay and Road Safety.	Adverse or Beneficial
Completed Development	Changes to non-motorised user infrastructure resulting in impacts on Severance, Pedestrian Delay, Non-Motorised User Amenity, Road Safety and Fear and Intimidation.	Adverse

8.5. Embedded Mitigation

Table 8.5.1 identifies those design interventions that have been incorporated into the design of the proposed development, as well as any control methods that have been incorporated into the proposed development to mitigate the potential impacts identified during the course of the design evolution process. These measures are collectively referred to as embedded mitigation.

Table 8.5.1
Embedded Mitigation

Embedded Mitigation	Description	Reason for Intervention	Further information
Vehicle access strategy	During the construction stage vehicular access to the application site will initially be taken from the existing A453 / Beverley Road roundabout via a new permanent arm constructed on the southern side of the roundabout. As the construction phase progresses, construction access will move to the new permanent roundabout site access, approximately 300m west of the existing roundabout. These two accesses will then form the vehicular access during the completed development stage.	This ensures appropriate vehicular access into the application site.	ES Vol II Chapter 6: Construction Strategy (Figure 6.3.1) and Section 5 of the Transport Assessment (Appendix 8.1, Volume IV)
Junction design	The amended A453 / Beverley Road roundabout, Finger Farm roundabout and the proposed access roundabout have been designed to accommodate the forecast traffic flow both during the construction stage and in the completed development stage	This ensures that traffic passing through these junctions will not encounter significant queuing or delay.	ES Vol II Chapter 5: Proposed Development and Section 6 of the Transport Assessment (Appendix 8.1, Volume IV)
Non-motorised user infrastructure provision	The amended A453 / Beverley Road roundabout, Finger Farm roundabout and the proposed access roundabout will include suitable provision for non-motorised users, including roadside footways and refuge islands to assist users crossing the road.	This ensures appropriate non-motorised user access into the application site.	ES Vol II Chapter 5 Proposed Development

8.6. Assessment of Effects (including Embedded Mitigation)

8.6.1. Construction Stage

8 Transport and Access

Severance

The assessment of the proposed development has identified no locations that meet the flow change screening criteria detailed in Section 8.2.8 or have a proposed infrastructure change relevant to severance. As a result, there will be no significant effects on severance during the construction stage.

Driver Delay

The assessment of the proposed development has identified no locations that meet the flow change criteria detailed in Section 8.2.8 during the construction stage. As a result, there will be no significant effects on driver delay during the construction stage.

Pedestrian Delay

The assessment of the likely pedestrian delay effects of the proposed development during the construction stage (including embedded mitigation) is set out in **Table 8.6.1**.

Table 8.6.1
Pedestrian Delay Assessment - Construction Stage

Receptor Location	Receptor Sensitivity	Description of Impact	Magnitude of Impact	Scale of Effect and Significance	Additional Mitigation proposed?
Footpath L45	Low	As there are no viable alternate routes, PRoW Footpath L45 will be temporarily closed during construction with no diversion route.	High	Major Adverse (significant)	No

Non-Motorised User Amenity

The assessment of the proposed development has identified no locations that meet the flow change screening criteria detailed in Section 8.2.8 or have a proposed infrastructure change relevant to non-motorised user amenity. As a result, there will be no significant effects on non-motorised user amenity during the construction stage.

Road Safety

The assessment of the proposed development has identified no locations that meet the flow change screening criteria detailed in Section 8.2.8 or have a proposed infrastructure change relevant to road safety. As a result, there will be no significant effects on road safety during the construction stage.

Fear and Intimidation

The assessment of the proposed development has identified no locations that meet the flow change screening criteria detailed in Section 8.2.8 or have a proposed infrastructure change relevant to fear and intimidation. As a result, there will be no significant effects on fear and intimidation during the construction stage.

8.6.2. Completed Development Stage

2027

Severance

The assessment of the potential severance effects of the proposed development during the completed development stage in 2027 (including embedded mitigation) is set out in **Table 8.6.2**.

For reporting purposes, only the links that have a magnitude of impact of small, medium or large (adverse or beneficial), or a proposed infrastructure change relevant to severance, are considered in this section to focus on potential significant effects.

8 Transport and Access

Table 8.6.2
Severance Assessment – Completed Development Stage 2027

Receptor Location	Receptor Sensitivity	Future Baseline AADT	With Scheme AADT	% Change	Future Baseline Severance Level	With Scheme Severance Level	With Scheme Infrastructure Change Relevant to Severance	Additional Comments	Magnitude of Impact	Scale of Effect and Significance	Additional Mitigation proposed?
A453 (between Airport main access and proposed site access)	Negligible	20,038 <u>20,622</u>	18,552 <u>19,868</u>	-7% <u>-4%</u>	Severe	Severe	A refuge island will be provided on the western arm of the proposed new site access junction to facilitate safe crossing the carriageway for non-motorised users and connect to the proposed spine road shared use path.	<p>The refuge island is considered to sufficiently mitigate potential difficulty crossing the road to access the proposed development.</p> <p>Existing users of the A453 footway will be otherwise unaffected with regards to severance.</p>	Negligible	Negligible (not significant)	No
A453 (between proposed site access and Beverley Road)	Negligible	20,038 <u>20,622</u>	21,670 <u>23,175</u>	8% <u>12%</u>	Severe	Severe	<p>A refuge island will be provided on the eastern arm of the proposed new site access junction to facilitate safe crossing the carriageway for non-motorised users and connect to the proposed spine road shared use path.</p> <p>The amended A453 / Beverley Road roundabout will introduce a new signalised toucan crossing to replace the existing uncontrolled refuge crossing on the western A453 arm.</p>	<p>The refuge island and toucan crossing are considered to sufficiently mitigate potential difficulty crossing the road to access the proposed development.</p> <p>Existing users of the A453 footway will be otherwise unaffected with regards to severance.</p>	Negligible	Negligible (not significant)	No
A453 (between Beverley Road and Finger Farm Roundabout)	Negligible	25,498 <u>26,542</u>	27,824 <u>29,796</u>	9% <u>12%</u>	Severe	Severe	<p>The amended A453 / Beverley Road roundabout will introduce an uncontrolled refuge island on the existing eastern A453 arm and will provide a refuge island on the new southern arm to facilitate crossing the carriageway for non-motorised user access to the proposed development.</p> <p>A new signalised puffin crossing will be provided to facilitate crossing of the A453 for non-motorised users between PRow Footpath L45/1 and Footpath L45/2.</p> <p>The existing uncontrolled refuge crossing on the western A453 arm of Finger Farm Roundabout will be removed. Pedestrians will be diverted along a new footway along the westbound carriageway to the proposed puffin crossing near Footpath L45.</p>	<p>The refuge islands are considered to sufficiently mitigate potential difficulty crossing the road to access the proposed development.</p> <p>The proposed puffin crossing represents an enhancement in pedestrian infrastructure, supporting the safe movement of PRow users and is considered to sufficiently mitigate the forecast increase in traffic.</p>	Negligible	Negligible (not significant)	No
A453 (between Finger Farm)	Negligible	33,076 <u>33,764</u>	33,636 <u>34,647</u>	2% <u>3%</u>	Severe	Severe	A toucan crossing will replace the existing uncontrolled refuge crossing on the	The toucan crossing is considered to sufficiently mitigate potential difficulty	Small	Minor beneficial (not significant)	No

8 Transport and Access

Receptor Location	Receptor Sensitivity	Future Baseline AADT	With Scheme AADT	% Change	Future Baseline Severance Level	With Scheme Severance Level	With Scheme Infrastructure Change Relevant to Severance	Additional Comments	Magnitude of Impact	Scale of Effect and Significance	Additional Mitigation proposed?
Roundabout and A6 Kegworth Bypass)							northern arm of the Finger Farm roundabout to facilitate crossing of the carriageways for non-motorised users.	crossing the road and represents an improvement in non-motorised user infrastructure, supporting the safe movement of pedestrians and cyclists across the A453.			
Beverley Road (between A453 and Herald Way)	Low	7,574 <u>7,697</u>	7,156 <u>7,285</u>	-6% <u>-5%</u>	Slight	Slight	The existing uncontrolled shared use and pedestrian crossings on Beverley Road will be replaced with upgraded uncontrolled shared use crossings to facilitate non-motorised users crossing the carriageway.	The upgraded shared use crossings are considered sufficient to continue mitigating potential difficulties associated with crossing the road.	Negligible	Negligible (not significant)	No

Driver Delay

The assessment of the potential driver delay effects of the proposed development during the completed development stage in 2027 (including embedded mitigation) is set out in **Table 8.6.3**.

Table 8.6.3

Driver Delay Assessment - Completed Development Stage 2027

Receptor Location	Receptor Sensitivity	Description of Impact	Magnitude of Impact	Scale of Effect and Significance	Additional Mitigation proposed?	Further information
<u>Finger Farm Roundabout - A453 / A42 and M1 on and off-slips / Donington Services</u>	Medium	<p>During the AM peak the A453 Ashby Road (north) arm is forecast to operate well within capacity in the future baseline and close to capacity with the proposed development. The M1 / A42 exit and A453 arms are forecast to operate close to capacity in both the future baseline and with the proposed development. The Donington Services Access arm is forecast to operate over capacity in the future baseline and close to capacity with the proposed development.</p> <p>During the PM peak the A453 Ashby Road (north) arm is forecast to operate well within capacity in the future baseline and close to capacity with the proposed development. The M1 / A42 exit arm is forecast to operate within capacity in the future baseline and close to capacity with the proposed development. The Donington Service Access arm is forecast to operate within capacity in both the future baseline and with the proposed development. The A453 arm is forecast to operate close to capacity in both the future baseline and with the proposed development.</p>	Small	Minor adverse (not significant)	No	Forecast junction operation is provided in Section 7 of the Transport Assessment (Appendix 8.1, Volume IV).
<u>A453 / Beverley Road / Site Access</u>	Low	<p>During the AM peak the A453 / Beverley Road / Site Access junction is forecast to operate well within capacity in both the future baseline and with the proposed development traffic flows.</p> <p>During the PM peak the A453 / Beverley Road / Site Access junction is forecast to operate within capacity in the future baseline and well within capacity with the proposed development traffic flows.</p>	Negligible	Negligible (not significant)	No	Forecast junction operation is provided in Section 7 of the Transport Assessment (Appendix 8.1, Volume IV).
<u>A453 / Airport Access Road</u>	Low	<p>During the AM peak the A453 / Airport Access Road junction is forecast to operate within capacity in the future baseline and close to capacity with the proposed development traffic flows.</p> <p>During the PM peak the A453 / Airport Access Road junction is forecast to operate within capacity in both the future baseline and with the proposed development traffic flows.</p>	Small	Minor adverse (not significant)	No	Forecast junction operation is provided in Section 7 of the Transport Assessment (Appendix 8.1, Volume IV).
<u>A453 / A6 Kegworth Bypass / Wilders Way</u>	Medium	<p>During the AM peak the A453 / A6 Kegworth Bypass / Wilders Way junction is forecast to operate over capacity in both the future baseline and with the proposed development traffic flows.</p>	Negligible	Negligible (not significant)	No	Forecast junction operation is provided in Section 7 of

8 Transport and Access

Receptor Location	Receptor Sensitivity	Description of Impact	Magnitude of Impact	Scale of Effect and Significance	Additional Mitigation proposed?	Further information
		<u>During the PM peak the A453 / A6 Kegworth Bypass / Wilders Way junction is forecast to operate close to capacity in both the future baseline and with the proposed development traffic flows.</u>				<u>the Transport Assessment (Appendix 8.1, Volume IV).</u>
<u>M1 Junction 24 - Kegworth Interchange</u>	Medium	During the AM and PM peak hours the M1 Junction 24 - Kegworth Interchange junction is forecast to operate over capacity in both the future baseline and with the proposed development traffic flows.	Small	Minor adverse (not significant)	No	Forecast junction operation is provided in Section 7 of the Transport Assessment (Appendix 8.1, Volume IV).
<u>A453 / new site access junction</u>	Low	During the AM and PM peak hours the A453 / new site access junction is forecast to operate well within capacity with the proposed development traffic flows.	Negligible	Negligible (not significant)	No	Forecast junction operation is provided in Section 7 of the Transport Assessment (Appendix 8.1, Volume IV).
A453 / Grimes Gate	Low	During the AM and PM peak hours the A453 / Grimes Gate junction is forecast to operate well within capacity in both the future baseline and with the proposed development traffic flows.	Negligible	Negligible (not significant)	No	Forecast junction operation is provided in Section 6.7 of the Transport Assessment (Appendix 8.1, Volume IV).
A453 / The Green <u>Unnamed Road</u>	Low	During the AM and PM peak hours the A453 / The Green <u>Unnamed Road</u> junction is forecast to operate well within capacity in both the future baseline and with the proposed development traffic flows.	Negligible	Negligible (not significant)	No	Forecast junction operation is provided in Section 6.7 of the Transport Assessment (Appendix 8.1, Volume IV).
A453 / EMA Jet Park 2	Low	During the AM and PM peak hours the A453 / The Green <u>EMA Jet Park 2</u> junction is forecast to operate well within capacity in both the future baseline and with the proposed development traffic flows.	Negligible	Negligible (not significant)	No	Forecast junction operation is provided in Section 6.7 of the Transport Assessment (Appendix 8.1, Volume IV).
A453 / Donington Park Access Road	Low	During the AM and PM peak hours the A453 / Donington Park Access Road junction is forecast to operate well within capacity in both the future baseline and with the proposed development traffic flows.	Negligible	Negligible (not significant)	No	Forecast junction operation is provided in Section 6.7 of the Transport Assessment (Appendix 8.1, Volume IV).
A453 / Melbourne Road	Low	During the AM peak, the A453/Melbourne road junction is forecast to operate well within capacity in both the future baseline and proposed development scenarios. During the PM peak the A453/Melbourne Road junction is forecast to operate within capacity in both the future baseline and proposed development scenarios.	Negligible	Negligible (not significant)	No	Forecast junction operation is provided in Section 6.7 of the Transport Assessment (Appendix 8.1, Volume IV).
A453 / Moor Lane	Low	During the AM peak, the A453/Moor Lane junction is forecast to operate within capacity in both the future baseline and proposed development scenarios. During the PM peak the A453/Moor Lane junction is forecast to operate well within capacity in both the future baseline and proposed development scenarios.	Negligible	Negligible (not significant)	No	Forecast junction operation is provided in Section 6.7 of the Transport Assessment (Appendix 8.1, Volume IV).
A42 J14 (eastbound off-slip) / A453	Low	During the AM and PM peak hours the A42 J14 (eastbound off-slip) / A453 is forecast to operate well within capacity in both the future baseline and with the proposed development traffic flows.	Negligible	Negligible (not significant)	No	Forecast junction operation is provided in Section 6.7 of the Transport Assessment (Appendix 8.1, Volume IV).

8 Transport and Access

Receptor Location	Receptor Sensitivity	Description of Impact	Magnitude of Impact	Scale of Effect and Significance	Additional Mitigation proposed?	Further information
A42 J14 (westbound on-slip) / A453 / Gelscoe Lane / Top Brand	Low	During the AM and PM peak hours the A41 J14 (westbound on-slip_ / A453 / Gelscoe Lane / Top Brand is forecast to operate well within capacity in both the future baseline and with the proposed development traffic flows.	Negligible	Negligible (not significant)	No	Forecast junction operation is provided in Section 6.7 of the Transport Assessment (Appendix 8.1, Volume IV).
Grimes Gate / Lady Gate / Hall Gate	Low	During the AM and PM peak hours the Grimes Gate / Lady Gate / Hall Gate junction is forecast to operate well within capacity in both the future baseline and with the proposed development traffic flows.	Negligible	Negligible (not significant)	No	Forecast junction operation is provided in Section 6.7 of the Transport Assessment (Appendix 8.1, Volume IV).
The Green / Unnamed Road	Low	During the AM and PM peak hours the Green / Unnamed Road junction is forecast to operate well within capacity in both the future baseline and with the proposed development traffic flows.	Negligible	Negligible (not significant)	No	Forecast junction operation is provided in Section 6.7 of the Transport Assessment (Appendix 8.1, Volume IV).
The Green / Lady Gate / Long Mere Lane	Low	During the AM and PM peak hours the Green / Lady Gate / Long Mere Lane junction is forecast to operate well within capacity in both the future baseline and with the proposed development traffic flows.	Negligible	Negligible (not significant)	No	Forecast junction operation is provided in Section 6.7 of the Transport Assessment (Appendix 8.1, Volume IV).
A50 Junction 1 - Sawley Junction	Medium	During the AM and PM peak hours the A50 Junction 1 – Sawley Junction is forecast to operate over capacity in both the future baseline and with the proposed development traffic flows.	Negligible	Negligible (not significant)	No	Forecast junction operation is provided in Section 6.7 of the Transport Assessment (Appendix 8.1, Volume IV).
Castle Donington Relief Road roundabout	Low	During the AM and PM peak hours the Castle Donington Relief Road roundabout is forecast to operate well within capacity in both the future baseline and with the proposed development traffic flows.	Negligible	Negligible (not significant)	No	Forecast junction operation is provided in Section 6.7 of the Transport Assessment (Appendix 8.1, Volume IV).
M1 Junction 25 - Sandiacre Junction	Medium	<p>During the AM peak the M1 Junction 25 – Sandiacre Junction is forecast to operate over capacity in both the future baseline and with the proposed development traffic flows.</p> <p>During the PM peak the M1 Junction 25 – Sandiacre Junction is forecast to operate close to capacity (with a maximum DoS of 99.1%) in both the future baseline and at capacity (with a maximum DoS of 100.0%) with the proposed development traffic flows.</p>	Small	Minor <u>adverse</u> (not significant)	No	Forecast junction operation is provided in Section 6.7 of the Transport Assessment (Appendix 8.1, Volume IV).

Pedestrian Delay

The assessment of the potential pedestrian delay effects of the proposed development during the completed development stage in 2027 (including embedded mitigation) is set out in **Table 8.6.4**.

Table 8.6.4

Pedestrian Delay Assessment - Completed Development Stage 2027

Receptor Location	Receptor Sensitivity	Description of Impact	Magnitude of Impact	Scale of Effect and Significance	Additional Mitigation proposed?
Footpath L45	Low	Footpath L45 will be realigned where it passes through the north-eastern part of the proposed development site. Including a diversion to the proposed puffin crossing on the A453 (assuming existing users climb over the Vehicle Restrain System (VRS) barrier rather than walk around it), the realignment will increase journey length for users of Footpath L45 by up to approximately 75m.	Small	Minor adverse	No

8 Transport and Access

Receptor Location	Receptor Sensitivity	Description of Impact	Magnitude of Impact	Scale of Effect and Significance	Additional Mitigation proposed?
		The realignment will necessitate footpath users crossing the internal development access road, however traffic levels on this road will be negligible.		(not significant)	
A453 (between Beverley Road and Finger Farm Roundabout)	Negligible	Removal of the existing uncontrolled refuge crossing on the western A453 arm of Finger Farm Roundabout and diversion to the proposed puffin crossing near Footpath L45. The diversion will increase journey length for some users crossing the A453 by approximately 310m.	Medium	Minor adverse (not significant)	No

Non-Motorised User Amenity

The assessment of the potential non-motorised user amenity effects of the proposed development during the completed development stage in 2027 (including embedded mitigation) is set out in **Table 8.6.5**.

For reporting purposes, only the links that have a magnitude of impact of small, medium or large (adverse or beneficial), or a proposed infrastructure change relevant to non-motorised user amenity, are considered in this section to focus on potential significant effects.

Table 8.6.5

Non-Motorised User Amenity Assessment - Completed Development Stage 2027

Receptor Location	Receptor Sensitivity	Future Baseline AADT	With Scheme AADT	AADT % Change	Future Baseline HGV AADT	With Scheme HGV AADT	HGV AADT % Change	With Scheme Infrastructure Change Relevant to Non-Motorised User Amenity	Additional Comments	Magnitude of Impact	Scale of Effect and Significance	Additional Mitigation proposed?
A453 (between Airport main access and proposed site access)	Negligible	20,038 20,622	18,552 19,868	-7% -4%	817	802	-2%	A new shared use path will be provided alongside the northern perimeter of the proposed site access roundabout.	The existing A453 footway is set back from the carriageway behind a wide grass verge and hedge. This provides a degree of separation that reduces the perceived threat from vehicular traffic. The provision of a connection to the new shared use path will require the removal of a short section of hedgerow (approximately 40 m). While this will reduce the physical separation between non-motorised users and vehicular traffic, the footway will remain sufficiently set back from the carriageway such that any impact on amenity is considered negligible.	Negligible	Negligible (not significant)	No
A453 (between proposed site access and Beverley Road)	Negligible	20,038 20,622	21,670 23,175	8% 12%	817	2042	150%	A new shared use path will be provided alongside the northern perimeter of the proposed site access roundabout. A new shared use path will be provided along the southern side of the A453. The existing shared use path on the western arm of the Beverley Road roundabout will be replaced with a new shared use path.	The existing A453 footway is set back from the carriageway behind a wide grass verge and hedge. This provides a degree of separation that reduces the perceived threat from vehicular traffic and thereby reduces the impact of the forecast increase in traffic. The provision of a connection to the new shared use path will require the removal of a short section of hedgerow (approximately 40 m). While this will reduce the physical separation between non-motorised users and vehicular traffic, the footway will remain sufficiently set back from the carriageway such that any impact on amenity is considered negligible.	Negligible	Negligible (not significant)	No

8 Transport and Access

Receptor Location	Receptor Sensitivity	Future Baseline AADT	With Scheme AADT	AADT % Change	Future Baseline HGVT AADT	With Scheme HGVT AADT	HGVT AADT % Change	With Scheme Infrastructure Change Relevant to Non-Motorised User Amenity	Additional Comments	Magnitude of Impact	Scale of Effect and Significance	Additional Mitigation proposed?
									The improved shared use path on the western arm of the Beverley Road roundabout will increase the setback from the carriageway from approximately 2 m to 3 m, providing slightly greater separation from traffic. The shared use path will connect to a new Toucan crossing, replacing the existing uncontrolled refuge crossing. These changes are expected to improve amenity for pedestrians and cyclists by enhancing both safety and comfort at this location.			
A453 (between Beverley Road and Finger Farm Roundabout)	Negligible	25,498 26,542	27,824 29,796	9% 12%	1,039 1,063	2,348 2,434	126% 129%	The existing shared use path around the perimeter of the eastern arm of the Beverley Road roundabout will be widened to 3m. The existing shared use path on the western arm of the Finger Farm roundabout will be widened to 3m and realigned to accommodate the widened carriageway.	The existing A453 footway is set back from the carriageway behind a narrow grass verge. This provides a degree of separation that reduces the perceived threat from vehicular traffic and thereby reduces the impact of the forecast increase in traffic. The widened shared use path at the Beverley Road roundabout will continue to be set back from the carriageway, positioned behind a narrow verge of approximately 2m. The realigned and widened shared use path at the Finger Farm roundabout will reduce the verge width between the carriageway and the path, from up to approximately 10m at its widest point to around 3m, resulting in a slight reduction in amenity.	Small	Minor Adverse (not significant)	No
A453 (between Finger Farm Roundabout and A6 Kegworth Bypass)	Negligible	33,076 33,764	33,636 34,647	2% 3%	3,686 3,427	4,067 4,081	10% 19%	The existing shared use path on the approach to Finger Farm roundabout will be realigned and widened to 3m and will connect to existing facilities and the proposed toucan crossing.	The grass verge between the northbound carriageway and the realigned, widened shared use path will be reduced from a maximum width of approximately 10m to around 3m. On the southbound carriageway, the verge will decrease from approximately 3 m to 1.5 m. While the reduction in separation between non-motorised users and vehicular traffic may slightly reduce amenity, this impact will be partially mitigated by the enhanced shared use path and the provision of a controlled crossing facility across the A453, providing users with a more continuous and accessible active travel corridor.	Negligible	Negligible (not significant)	No
Beverley Road (between A453 and Herald Way)	Low	7,574 7,697	7,156 7,285	-6% -5%	225 226	227 229	1%	A new shared use path will be introduced along the northbound carriageway, extending from the A453 / Beverley Road roundabout and connecting to the existing footpath at the bus stop.	The proposed shared use path and upgrades to existing footpaths will improve connectivity for non-motorised users along Beverley Road, enabling cyclists to travel with a degree of segregation from vehicular traffic. This	Small	Minor beneficial (not significant)	No

8 Transport and Access

Receptor Location	Receptor Sensitivity	Future Baseline AADT	With Scheme AADT	AADT % Change	Future Baseline HGVAADT	With Scheme HGVAADT	HGV AADT % Change	With Scheme Infrastructure Change Relevant to Non-Motorised User Amenity	Additional Comments	Magnitude of Impact	Scale of Effect and Significance	Additional Mitigation proposed?
								<p>The existing footpaths on both sides of the carriageway will be upgraded to shared use paths to accommodate both pedestrians and cyclists.</p> <p>New cycle stands will be installed on both sides of the carriageway to support active travel.</p>	<p>will help reduce the perceived threat and enhance comfort for pedestrians and cyclists.</p> <p>The installation of cycle stands will further improve the quality and functionality of the road environment, supporting active travel and encouraging sustainable transport choices.</p>			

Road Safety

The assessment of the proposed development has identified no locations that meet the flow change screening criteria detailed in Section 8.2.8 where a collision cluster is present.

The assessment of the proposed development has identified one location that meets the flow change screening criteria set out in Section 8.2.8 where an existing collision cluster is present: Cluster 1 – A453 / Unnamed Road.

A total of six collisions have been recorded at this junction, comprising one collision classified as serious and five classified as slight. This location has been identified for further assessment as a result of a forecast increase in traffic flows on the Unnamed Road arm, where total traffic is predicted to increase by approximately 12%, from 3,527 AADT in the future baseline scenario to 3,954 AADT with the proposed development in place.

Traffic flows on the A453 Ashby Road are forecast to marginally decrease as a result of the proposed development. Traffic on the eastern arm is predicted to reduce by approximately 0.4%, from 12,632 AADT in the future baseline to 12,583 AADT with the proposed development. Similarly, traffic on the western arm is forecast to decrease by around 1%, from 13,116 AADT to 12,991 AADT. Overall, total junction traffic is forecast to increase by approximately 1% as a result of the development proposals. Receptor sensitivity at this location is classified as high.

A review of the recorded collision data indicates that three of the collisions involved rear-end shunts, where vehicles approaching from the west were waiting to turn right. A further two collisions also involved westbound vehicles positioned to turn right. Of these, one collision involved vehicles approaching from both the west and east, while the other involved vehicles approaching from the east and south. The remaining collision involved a single vehicle that lost control after striking the kerb.

Taking into account the modest forecast changes in traffic flows and the nature and causation of the recorded collisions, the effect of the proposed development on road safety at this location is assessed as minor adverse and not significant.

The amended A453 / Beverley Road roundabout, the proposed three-armed roundabout and the amended Finger Farm roundabout will be designed and constructed to current standards. As such, the proposed development is unlikely to create any new safety concerns at these locations.

As a result, there will be no significant effects on road safety during the completed development stage in 2027.

Fear and Intimidation

The assessment of the potential fear and intimidation effects of the proposed development during the completed development stage in 2027 (including embedded mitigation) is set out in **Table 8.6.6.**

For reporting purposes, only the links that have a magnitude of impact of small, medium or large (adverse or beneficial), or a proposed infrastructure change relevant to fear and intimidation, are considered in this section to focus on potential significant effects.

8 Transport and Access

Table 8.6.6
Fear and Intimidation Assessment - Completed Development Stage 2027

Receptor Location	Receptor Sensitivity	Future Baseline Avg 18-Hr AADT Flow/hr	With Scheme Avg 18-Hr AADT Flow/hr	Future Baseline 18-Hr HGV AADT	With Scheme 18-Hr HGV AADT	Posted Speed Limit	Future Baseline Fear and Intimidation Level	With Scheme Fear and Intimidation Level	With Scheme Infrastructure Change Relevant to Fear and Intimidation	Additional Comments	Magnitude of Impact	Scale of Effect and Significance	Additional Mitigation proposed?
A453 (between Airport main access and proposed site access)	Negligible	964 993	892 956	714 736	699 770	50	Moderate	Moderate	A new shared use path will be provided alongside the northern perimeter of the proposed site access roundabout.	<p>The existing A453 footway is set back from the carriageway behind a wide grass verge and hedge. This provides a degree of separation that reduces the perceived threat from vehicular traffic.</p> <p>The provision of a connection to the new shared use path will require the removal of a short section of hedgerow (approximately 40 m). While this will reduce the physical separation between non-motorised users and vehicular traffic, the footway will remain sufficiently set back from the carriageway such that any impact on fear and intimidation is considered negligible.</p>	Negligible	Negligible (not significant)	No
A453 (between proposed site access and Beverley Road)	Negligible	964 993	1,043 1,116	714 736	1,777 1,851	50	Moderate	Great	<p>A new shared use path will be provided alongside the northern perimeter of the proposed site access roundabout.</p> <p>A new shared use path will be provided along the southern side of the A453.</p> <p>The existing shared use path on the western arm of the Beverley Road roundabout will be replaced with a new shared use path.</p>	<p>The existing A453 footway is set back from the carriageway behind a wide grass verge and hedge. This provides a degree of separation that reduces the perceived threat from vehicular traffic and thereby reduces the impact of the forecast increase in traffic.</p> <p>The provision of a connection to the new shared use path will require the removal of a short section of hedgerow (approximately 40 m). While this will reduce the physical separation between non-motorised users and vehicular traffic, the footway will remain sufficiently set back from the carriageway such that any impact on fear and intimidation is considered negligible.</p> <p>The improved shared use path on the western arm of the Beverley Road roundabout will increase the setback from the carriageway from approximately 2 m to 3 m, providing slightly greater separation from traffic.</p>	Small	Minor Adverse (not significant)	No
A453 (between Beverley Road and Finger Farm Roundabout)	Negligible	1,226 1,277	1,338 1,434	907 929	2,044 2,119	Currently 50mph both directions. Proposed to reduce eastbound to 40mph	Great	Great	<p>The existing shared use path around the perimeter of the eastern arm of the Beverley Road roundabout will be widened to 3m.</p>	<p>The existing A453 footway is set back from the carriageway behind a narrow grass verge. This provides a degree of separation that reduces the perceived threat from vehicular traffic and thereby reduces the impact of the forecast increase in traffic.</p> <p>The widened shared use path at the Beverley Road roundabout will continue to be set back from the</p>	Small	Minor Adverse (not significant)	No

8 Transport and Access

Receptor Location	Receptor Sensitivity	Future Baseline Avg 18-Hr AADT Flow/hr	With Scheme Avg 18-Hr AADT Flow/hr	Future Baseline 18-Hr HGV AADT	With Scheme 18-Hr HGV AADT	Posted Speed Limit	Future Baseline Fear and Intimidation Level	With Scheme Fear and Intimidation Level	With Scheme Infrastructure Change Relevant to Fear and Intimidation	Additional Comments	Magnitude of Impact	Scale of Effect and Significance	Additional Mitigation proposed?
										<p>The existing shared use path on the western arm of the Finger Farm roundabout will be widened to 3m and realigned to accommodate the widened carriageway.</p> <p>The eastbound speed limit will be reduced from 50mph to 40mph between Beverley Road and Finger Farm Roundabout</p>			
										<p>carriageway, positioned behind a narrow verge of approximately 2m.</p> <p>The realigned and widened shared use path at the Finger Farm roundabout will reduce the verge width between the carriageway and the path, from up to approximately 10m at its widest point to around 3m, resulting in a slight increase in fear and intimidation.</p> <p>The proposed widening and improvement of the shared use paths will reduce the potential for fear and intimidation among non-motorised users by increasing the available width to a consistent 3.0m. This is expected to improve perceived safety and comfort levels, particularly in terms of reducing the fear of conflict between pedestrians and cyclists.</p>			
A453 (between Finger Farm Roundabout and A6 Kegworth Bypass)	Negligible	1,590 <u>1,624</u>	1,618 <u>1,668</u>	3,213 <u>2,969</u>	3,540 <u>3,551</u>	70	Extreme <u>Great</u>	Extreme	The existing shared use path on the approach to Finger Farm roundabout will be realigned and widened to 3m and will connect to existing facilities and the proposed toucan crossing.	<p>The grass verge between the northbound carriageway and the realigned, widened shared use path will be reduced from a maximum width of approximately 10m to around 3m. On the southbound carriageway, the verge will decrease from approximately 3 m to 1.5 m. These reductions in physical separation between non-motorised users and vehicular traffic may result in a slight increase in perceived fear and intimidation at these locations.</p> <p>The widened shared use paths will contribute to improved user comfort and result in a slight reduction in the fear of conflict between pedestrians and cyclists.</p>	Small <u>Medium</u>	Minor adverse (not significant)	No
Beverley Road (between A453 and Herald Way)	Low	365 <u>370</u>	346 <u>352</u>	196 <u>197</u>	198 <u>200</u>	30	Small	Small	<p>A new shared use path will be introduced along the northbound carriageway, extending from the A453 / Beverley Road roundabout and connecting to the existing footpath at the bus stop.</p> <p>The existing footpaths on both sides of the carriageway will be upgraded to shared use paths to accommodate</p>	<p>The proposed shared use path and upgrades to existing footpaths will improve connectivity for non-motorised users along Beverley Road, enabling cyclists to travel with a degree of segregation from vehicular traffic. This will help reduce the perceived threat and enhance comfort for pedestrians and cyclists.</p>	Small	Minor beneficial (not significant)	No

8 Transport and Access

Receptor Location	Receptor Sensitivity	Future Baseline Avg 18-Hr AADT Flow/hr	With Scheme Avg 18-Hr AADT Flow/hr	Future Baseline 18-Hr HGVAADT	With Scheme 18-Hr HGVAADT	Posted Speed Limit	Future Baseline Fear and Intimidation Level	With Scheme Fear and Intimidation Level	With Scheme Infrastructure Change Relevant to Fear and Intimidation	Additional Comments	Magnitude of Impact	Scale of Effect and Significance	Additional Mitigation proposed?
										both pedestrians and cyclists.			

2032 Severance

The assessment of the potential severance effects of the proposed development during the completed development stage in 2032 (including embedded mitigation) is set out in **Table 8.6.7**.

For reporting purposes, only the links that have a magnitude of impact of small, medium or large (adverse or beneficial), or a proposed infrastructure change relevant to severance, are considered in this section to focus on potential significant effects.

Table 8.6.7
Severance Assessment – Completed Development Stage 2032

Receptor Location	Receptor Sensitivity	Future Baseline AADT	With Scheme AADT	% Change	Future Baseline Severance Level	With Scheme Severance Level	With Scheme Infrastructure Change Relevant to Severance	Additional Comments	Magnitude of Impact	Scale of Effect and Significance	Additional Mitigation proposed?
A453 (between Airport main access and proposed site access)	Negligible	20,318 21,095	19,312 20,780	-5% -1%	Severe	Severe	A refuge island will be provided on the western arm of the proposed new site access junction to facilitate safe crossing the carriageway for non-motorised users and connect to the proposed spine road shared use path.	The refuge island is considered to sufficiently mitigate potential difficulty crossing the road to access the proposed development. Existing users of the A453 footway will be otherwise unaffected with regards to severance.	Negligible	Negligible (not significant)	No
A453 (between proposed site access and Beverley Road)	Negligible	20,318 21,095	22,345 24,153	10% 14%	Severe	Severe	A refuge island will be provided on the eastern arm of the proposed new site access junction to facilitate safe crossing the carriageway for non-motorised users and connect to the proposed spine road shared use path. The amended A453 / Beverley Road roundabout will introduce a new signalised toucan crossing to replace the existing uncontrolled refuge crossing on the western A453 arm.	The refuge island and toucan crossing are considered to sufficiently mitigate potential difficulty crossing the road to access the proposed development. Existing users of the A453 footway will be otherwise unaffected with regards to severance.	Negligible	Negligible (not significant)	No
A453 (between Beverley Road and Finger Farm Roundabout)	Negligible	25,320 26,418	28,999 31,050	15% 18%	Severe	Severe	The amended A453 / Beverley Road roundabout will introduce an uncontrolled refuge island on the existing eastern A453 arm and will provide a refuge island on the new southern arm to facilitate crossing the carriageway for non-motorised user access to the proposed development.	The refuge islands are considered to sufficiently mitigate potential difficulty crossing the road to access the proposed development. The proposed puffin crossing represents an enhancement in pedestrian infrastructure,	Negligible	Negligible (not significant)	No

8 Transport and Access

Receptor Location	Receptor Sensitivity	Future Baseline AADT	With Scheme AADT	% Change	Future Baseline Severance Level	With Scheme Severance Level	With Scheme Infrastructure Change Relevant to Severance	Additional Comments	Magnitude of Impact	Scale of Effect and Significance	Additional Mitigation proposed?
							<p>A new signalised puffin crossing will be provided to facilitate crossing of the A453 for non-motorised users between PRow Footpath L45/1 and Footpath L45/2.</p> <p>The existing uncontrolled refuge crossing on the western A453 arm of Finger Farm Roundabout will be removed. Pedestrians will be diverted along a new footway along the westbound carriageway to the proposed puffin crossing near Footpath L45.</p>	supporting the safe movement of PRow users and is considered to sufficiently mitigate the forecast increase in traffic.			
A453 (between Finger Farm roundabout and A6 Kegworth Bypass)	Negligible	34,721 34,858	35,976 37,217	4% 7%	Severe	Severe	A toucan crossing will replace the existing uncontrolled refuge crossing on the northern arm of the Finger Farm roundabout to facilitate crossing of the carriageways for non-motorised users.	The toucan crossing is considered to sufficiently mitigate potential difficulty crossing the road and represents an improvement in non-motorised user infrastructure, supporting the safe movement of pedestrians and cyclists across the A453.	Small	Minor beneficial (not significant)	No
Beverley Road (between A453 and Herald Way)	Low	7,948 7,984	7,246 7,644	-9% -4%	Slight	Slight	The existing uncontrolled shared use and pedestrian crossings on Beverley Road will be replaced with upgraded uncontrolled shared use crossings to facilitate non-motorised users crossing the carriageway.	The upgraded shared use crossings are considered sufficient to continue mitigating potential difficulties associated with crossing the road.	Negligible	Negligible (not significant)	No

Driver Delay

The assessment of the potential driver delay effects of the proposed development during the completed development stage in 2032 (including embedded mitigation) is set out in **Table 8.6.8**.

Table 8.6.8

Driver Delay Assessment - Completed Development Stage 2032

Receptor Location	Receptor Sensitivity	Description of Impact	Magnitude of Impact	Scale of Effect and Significance	Additional Mitigation proposed?	Further information
<u>Finger Farm Roundabout - A453 / A42 and M1 on and off-slips / Donington Services</u>	Medium	<p><u>During the AM peak the A453 Ashby Road (north) and new development access arms are forecast to operate well within capacity in the future baseline and close to capacity with the proposed development. The M1 / A42 exit and A453 arms are forecast to operate close to capacity in both the future baseline and with the proposed development. The Donington Services Access arm is forecast to operate over capacity in the future baseline and close to capacity with the proposed development.</u></p> <p><u>During the PM peak the A453 Ashby Road (north) and new development access arms are forecast to operate well within capacity in the future baseline and close to capacity with the proposed development. The M1 / A42 exit and Donington Service Access arms are forecast to operate within capacity in both the future baseline and with the proposed</u></p>	Small	Minor adverse (not significant)	No	Forecast junction operation is provided in Section 7 of the Transport Assessment (Appendix 8.1, Volume IV).

8 Transport and Access

Receptor Location	Receptor Sensitivity	Description of Impact	Magnitude of Impact	Scale of Effect and Significance	Additional Mitigation proposed?	Further information
		<u>development. The A453 arm is forecast to operate close to capacity in both the future baseline and with the proposed development.</u>				
<u>A453 / Beverley Road / Site Access</u>	Low	<p><u>During the AM peak the A453 / Beverley Road / Site Access junction is forecast to operate well within capacity in the future baseline and within capacity with the proposed development traffic flows.</u></p> <p><u>During the PM peak the A453 / Beverley Road / Site Access junction is forecast to operate within capacity in the future baseline and well within capacity with the proposed development traffic flows.</u></p>	Negligible	Negligible (not significant)	No	Forecast junction operation is provided in Section 7 of the Transport Assessment (Appendix 8.1, Volume IV).
<u>A453 / Airport Access Road</u>	Low	<p><u>During the AM peak the A453 / Airport Access Road junction is forecast to operate within capacity in the future baseline and close to capacity with the proposed development traffic flows.</u></p> <p><u>During the PM peak the A453 / Airport Access Road junction is forecast to operate within capacity in both the future baseline and with the proposed development traffic flows.</u></p>	Small	Minor adverse (not significant)	No	Forecast junction operation is provided in Section 7 of the Transport Assessment (Appendix 8.1, Volume IV).
<u>A453 / A6 Kegworth Bypass / Wilders Way</u>	Medium	<p><u>During the AM peak the A453 / A6 Kegworth Bypass / Wilders Way junction is forecast to operate over capacity in both the future baseline and with the proposed development traffic flows.</u></p> <p><u>During the PM peak the A453 / A6 Kegworth Bypass / Wilders Way junction is forecast to operate close to capacity in both the future baseline and with the proposed development traffic flows.</u></p>	Small	Minor adverse (not significant)	No	Forecast junction operation is provided in Section 7 of the Transport Assessment (Appendix 8.1, Volume IV).
<u>M1 Junction 24 - Kegworth Interchange</u>	Medium	<u>During the AM and PM peak hours the M1 Junction 24 - Kegworth Interchange junction is forecast to operate over capacity in both the future baseline and with the proposed development traffic flows.</u>	Negligible	Negligible (not significant)	No	Forecast junction operation is provided in Section 7 of the Transport Assessment (Appendix 8.1, Volume IV).
<u>A453 / new site access junction</u>	Low	<u>During the AM and PM peak hours the A453 / new site access junction is forecast to operate well within capacity with the proposed development traffic flows.</u>	Negligible	Negligible (not significant)	No	Forecast junction operation is provided in Section 7 of the Transport Assessment (Appendix 8.1, Volume IV).
<u>A453 / Grimes Gate</u>	Low	<u>During the AM and PM peak hours the A453 / Grimes Gate junction is forecast to operate well within capacity in both the future baseline and with the proposed development traffic flows.</u>	Negligible	Negligible (not significant)	No	Forecast junction operation is provided in Section 6.7 of the Transport Assessment (Appendix 8.1, Volume IV).
<u>A453 / The Green Unnamed Road</u>	Low	<u>During the AM and PM peak hours the A453 / The Green Unnamed Road junction is forecast to operate well within capacity in both the future baseline and with the proposed development traffic flows.</u>	Negligible	Negligible (not significant)	No	Forecast junction operation is provided in Section 6.7 of the Transport Assessment (Appendix 8.1, Volume IV).
<u>A453 / EMA Jet Park 2</u>	Low	<u>During the AM and PM peak hours the A453 / EMA Jet Park 2 junction is forecast to operate well within capacity in both the future baseline and with the proposed development traffic flows.</u>	Negligible	Negligible (not significant)	No	Forecast junction operation is provided in Section 6.7 of the Transport Assessment (Appendix 8.1, Volume IV).
<u>A453 / Donington Park Access Road</u>	Low	<p><u>During the AM peak and PM peak hours the A453 / Donington Park Access Road junction is forecast to operate well within capacity in both the future baseline and with the proposed development traffic flows.</u></p> <p><u>During the PM peak the A453 / Donington Park Access Road junction is forecast to operate within capacity in both the future baseline and with the proposed development traffic flows.</u></p>	Negligible	Negligible (not significant)	No	Forecast junction operation is provided in Section 6.7 of the Transport Assessment (Appendix 8.1, Volume IV).

8 Transport and Access

Receptor Location	Receptor Sensitivity	Description of Impact	Magnitude of Impact	Scale of Effect and Significance	Additional Mitigation proposed?	Further information
A453 / Melbourne Road	Medium Low	<p>During the AM peak, the A453/Melbourne Road junction is forecast to operate well within capacity in both the future baseline and proposed development scenarios.</p> <p>During the PM peak the A453/Melbourne Road junction is forecast to operate over capacity in the future baseline scenario and close to capacity in the proposed development scenario.</p> <p><u>During the PM peak, the A453/Melbourne Road junction is forecast to operate close to capacity in both the future baseline and proposed development scenarios.</u></p>	Medium Negligible	Moderate beneficial (significant) Negligible (not significant)	No	Forecast junction operation is provided in Section 6.7 of the Transport Assessment (Appendix 8.1, Volume IV).
A453 / Moor Lane	Low	During the AM and PM peak hours the A453 / Moor Lane junction is forecast to operate well within capacity in both the future baseline and with the proposed development traffic flows.	Negligible	Negligible (not significant)	No	Forecast junction operation is provided in Section 6.7 of the Transport Assessment (Appendix 8.1, Volume IV).
A42 J14 (eastbound off-slip) / A453	Low	During the AM and PM peak hours the A41 J14 (eastbound off-slip) / A453 is forecast to operate well within capacity in both the future baseline and with the proposed development traffic flows.	Negligible	Negligible (not significant)	No	Forecast junction operation is provided in Section 6.7 of the Transport Assessment (Appendix 8.1, Volume IV).
A42 J14 (westbound on-slip) / A453 / Gelscoe Lane / Top Brand	Low	During the AM and PM peak hours the A41 J14 (westbound on-slip) / A453 / Gelscoe Lane / Top Brand is forecast to operate well within capacity in both the future baseline and with the proposed development traffic flows.	Negligible	Negligible (not significant)	No	Forecast junction operation is provided in Section 6.7 of the Transport Assessment (Appendix 8.1, Volume IV).
Grimes Gate / Lady Gate / Hall Gate	Low	During the AM and PM peak hours the Grimes Gate / Lady Gate / Hall Gate junction is forecast to operate well within capacity in both the future baseline and with the proposed development traffic flows.	Negligible	Negligible (not significant)	No	Forecast junction operation is provided in Section 6.7 of the Transport Assessment (Appendix 8.1, Volume IV).
The Green / Unnamed Road	Low	<p>During the AM peak, the Green / Unnamed road junction will operate well within capacity in the future baseline and within capacity in the proposed development scenario.</p> <p>During the <u>AM and PM peak hours</u> the Green / Unnamed road will operate well within capacity in both the future baseline and proposed development scenarios.</p>	Negligible	Negligible (not significant)	No	Forecast junction operation is provided in Section 6.7 of the Transport Assessment (Appendix 8.1, Volume IV).
The Green / Lady Gate / Long Mere Lane	Low	During the AM and PM peak hours the Green / Lady Gate / Long Mere Lane junction is forecast to operate well within capacity in both the future baseline and with the proposed development traffic flows.	Negligible	Negligible (not significant)	No	Forecast junction operation is provided in Section 6.7 of the Transport Assessment (Appendix 8.1, Volume IV).
A50 Junction 1 - Sawley Junction	Medium	During the AM and PM peak hours the A50 Junction 1 – Sawley Junction is forecast to operate over capacity in both the future baseline and with the proposed development traffic flows.	Small	Minor adverse (not significant)	No	Forecast junction operation is provided in Section 6.7 of the Transport Assessment (Appendix 8.1, Volume IV).
Castle Donington Relief Road roundabout	Low	During the AM and PM peak hours the Castle Donington Relief Road roundabout is forecast to operate well within capacity in both the future baseline and with the proposed development traffic flows.	Negligible	Negligible (not significant)	No	Forecast junction operation is provided in Section 6.7 of the Transport Assessment (Appendix 8.1, Volume IV).

8 Transport and Access

Receptor Location	Receptor Sensitivity	Description of Impact	Magnitude of Impact	Scale of Effect and Significance	Additional Mitigation proposed?	Further information
M1 Junction 25 - Sandiacre Junction	Medium	<p>During the AM and PM peak hours the M1 Junction 25 – Sandiacre Junction is forecast to operate over capacity in both the future baseline and with the proposed development traffic flows.</p> <p>In the future baseline, the junction is forecast to operate above theoretical capacity in both the AM and PM peak hours, likely associated with background traffic growth and committed developments. With the proposed development, queue lengths are forecast to increase further. While the proposed development contributes a small increase to demand at the junction, the underlying capacity constraints are a result of existing and background growth pressures on the network, which are expected to lead to performance issues even in the absence of the proposed development.</p>	Medium Small	Moderate adverse (significant) Minor adverse (not significant)	No	Forecast junction operation is provided in Section 6.7 of the Transport Assessment (Appendix 8.1, Volume IV).

Pedestrian Delay

The assessment of the potential pedestrian delay effects of the proposed development during the completed development stage in 2032 (including embedded mitigation) is set out in **Table 8.6.9**.

Table 8.6.9
Pedestrian Delay Assessment - Completed Development Stage 2032

Receptor Location	Receptor Sensitivity	Description of Impact	Magnitude of Impact	Scale of Effect and Significance	Additional Mitigation proposed?
Footpath L45	Low	Footpath L45 will be realigned where it passes through the north-eastern part of the proposed development site. Including a diversion to the proposed puffin crossing on the A453 (assuming existing users climb over the Vehicle Restrain System (VRS) barrier rather than walk around it), the realignment will increase journey length for users of Footpath L45 by up to approximately 75m. The realignment will necessitate footpath users crossing the internal development access road, however traffic levels on this road will be negligible.	Small	Minor adverse (not significant)	No
A453 (between Beverley Road and Finger Farm Roundabout)	Negligible	Removal of the existing uncontrolled refuge crossing on the western A453 arm of Finger Farm Roundabout and diversion to the proposed puffin crossing near Footpath L45. The diversion will increase journey length for some users crossing the A453 by approximately 310m.	Medium	Minor adverse (not significant)	No

Non-Motorised User Amenity

The assessment of the potential non-motorised user amenity effects of the proposed development during the completed development stage in 2032 (including embedded mitigation) is set out in **Table 8.6.10**.

For reporting purposes, only the links that have a magnitude of impact of small, medium or large (adverse or beneficial), or a proposed infrastructure change relevant to non-motorised user amenity, are considered in this section to focus on potential significant effects.

Table 8.6.10
Non-Motorised User Amenity Assessment - Completed Development Stage 2032

Receptor Location	Receptor Sensitivity	Future Baseline AADT	With Scheme AADT	AADT % Change	Future Baseline HGVT AADT	With Scheme HGVT AADT	HGV AADT % Change	With Scheme Infrastructure Change Relevant to Non-Motorised User Amenity	Additional Comments	Magnitude of Impact	Scale of Effect and Significance	Additional Mitigation proposed?
A453 (between Airport main access	Negligible	20,318 21,095	19,312 20,780	-5% -1%	923 927	927 1,040	0% 12%	A new shared use path will be provided alongside the northern perimeter of the proposed site access roundabout.	The existing A453 footway is set back from the carriageway behind a wide grass verge and hedge. This	Negligible	Negligible (not significant)	No

8 Transport and Access

Receptor Location	Receptor Sensitivity	Future Baseline AADT	With Scheme AADT	AAADT % Change	Future Baseline HGVAADT	With Scheme HGVAADT	HGV AADT % Change	With Scheme Infrastructure Change Relevant to Non-Motorised User Amenity	Additional Comments	Magnitude of Impact	Scale of Effect and Significance	Additional Mitigation proposed?
and proposed site access)									provides a degree of separation that reduces the perceived threat from vehicular traffic. The provision of a connection to the new shared use path will require the removal of a short section of hedgerow (approximately 40 m). While this will reduce the physical separation between non-motorised users and vehicular traffic, the footway will remain sufficiently set back from the carriageway such that any impact on amenity is considered negligible.			
A453 (between proposed site access and Beverley Road)	Negligible	20,318 <u>21,095</u>	22,345 <u>24,153</u>	10% <u>14%</u>	923 <u>927</u>	2,164 <u>2,283</u>	134% <u>146%</u>	<p>A new shared use path will be provided alongside the northern perimeter of the proposed site access roundabout.</p> <p>A new shared use path will be provided along the southern side of the A453.</p> <p>The existing shared use path on the western arm of the Beverley Road roundabout will be replaced with a new shared use path.</p>	<p>The existing A453 footway is set back from the carriageway behind a wide grass verge and hedge. This provides a degree of separation that reduces the perceived threat from vehicular traffic and thereby reduces the impact of the forecast increase in traffic.</p> <p>The provision of a connection to the new shared use path will require the removal of a short section of hedgerow (approximately 40 m). While this will reduce the physical separation between non-motorised users and vehicular traffic, the footway will remain sufficiently set back from the carriageway such that any impact on amenity is considered negligible.</p> <p>The improved shared use path on the western arm of the Beverley Road roundabout will increase the setback from the carriageway from approximately 2 m to 3 m, providing slightly greater separation from traffic. The shared use path will connect to a new Toucan crossing, replacing the existing uncontrolled refuge crossing. These changes are expected to improve amenity for pedestrians and cyclists by enhancing both safety and comfort at this location.</p>	Negligible	Negligible (not significant)	No
A453 (between Beverley Road and Finger Farm Roundabout)	Negligible	25,320 <u>26,418</u>	28,999 <u>31,050</u>	15% <u>18%</u>	1,141 <u>1,145</u>	2,471 <u>2,592</u>	117% <u>126%</u>	<p>The existing shared use path around the perimeter of the eastern arm of the Beverley Road roundabout will be widened to 3m.</p> <p>The existing shared use path on the western arm of the Finger Farm roundabout will be widened to 3m and realigned to accommodate the widened carriageway.</p>	<p>The existing A453 footway is set back from the carriageway behind a narrow grass verge. This provides a degree of separation that reduces the perceived threat from vehicular traffic and thereby reduces the impact of the forecast increase in traffic.</p> <p>The widened shared use path at the Beverley Road roundabout will continue to be set back from the carriageway, positioned behind a narrow verge of approximately 2m.</p>	Small	Minor Adverse (not significant)	No

8 Transport and Access

Receptor Location	Receptor Sensitivity	Future Baseline AADT	With Scheme AADT	AAADT % Change	Future Baseline HGVAADT	With Scheme HGVAADT	HGV AADT % Change	With Scheme Infrastructure Change Relevant to Non-Motorised User Amenity	Additional Comments	Magnitude of Impact	Scale of Effect and Significance	Additional Mitigation proposed?
									The realigned and widened shared use path at the Finger Farm roundabout will reduce the verge width between the carriageway and the path, from up to approximately 10m at its widest point to around 3m, resulting in a slight reduction in amenity.			
A453 (between Finger Farm Roundabout and A6 Kegworth Bypass)	Negligible	34,721 34,858	35,976 37,217	4% 7%	3,258 3,199	3,799 3,775	17% 18%	The existing shared use path on the approach to Finger Farm roundabout will be realigned and widened to 3m and will connect to existing facilities and the proposed toucan crossing.	<p>The grass verge between the northbound carriageway and the realigned, widened shared use path will be reduced from a maximum width of approximately 10m to around 3m.</p> <p>On the southbound carriageway, the verge will decrease from approximately 3 m to 1.5 m.</p> <p>While the reduction in separation between non-motorised users and vehicular traffic may slightly reduce amenity, this impact will be partially mitigated by the enhanced shared use path and the provision of a controlled crossing facility across the A453, providing users with a more continuous and accessible active travel corridor.</p>	Negligible	Negligible (not significant)	No
Beverley Road (between A453 and Herald Way)	Low	7,948 7,984	7,246 7,644	-9% -4%	221 223	224 226	1%	<p>A new shared use path will be introduced along the northbound carriageway, extending from the A453 / Beverley Road roundabout and connecting to the existing footpath at the bus stop.</p> <p>The existing footpaths on both sides of the carriageway will be upgraded to shared use paths to accommodate both pedestrians and cyclists.</p> <p>New cycle stands will be installed on both sides of the carriageway to support active travel.</p>	<p>The proposed shared use path and upgrades to existing footpaths will improve connectivity for non-motorised users along Beverley Road, enabling cyclists to travel with a degree of segregation from vehicular traffic. This will help reduce the perceived threat and enhance comfort for pedestrians and cyclists.</p> <p>The installation of cycle stands will further improve the quality and functionality of the road environment, supporting active travel and encouraging sustainable transport choices.</p>	Small	Minor beneficial (not significant)	No

Road Safety

The assessment of the proposed development and future baseline forecasts has identified no locations that meet the flow change screening criteria detailed in Section 8.2.8 where a collision cluster is present.

The amended A453 / Beverley Road roundabout, the proposed three-armed roundabout and the amended Finger Farm roundabout will be designed and constructed to current standards. As such, the proposed development is unlikely to create any new safety concerns at these locations.

As a result, there will be no significant effects on road safety during the completed development stage in 2032.

Fear and Intimidation

8 Transport and Access

The assessment of the potential fear and intimidation effects of the proposed development during the completed development stage in 2032 (including embedded mitigation) is set out in **Table 8.6.11**.

Table 8.6.11

Fear and Intimidation Assessment - Completed Development Stage 2032

Receptor Location	Receptor Sensitivity	Future Baseline Avg 18-Hr AADT Flow/hr	With Scheme Avg 18-Hr AADT Flow/hr	Future Baseline 18-Hr HGVT AADT	With Scheme 18-Hr HGVT AADT	Posted Speed Limit	Future Baseline Fear and Intimidation Level	With Scheme Fear and Intimidation Level	With Scheme Infrastructure Change Relevant to Severance	Additional Comments	Magnitude of Impact	Scale of Effect and Significance	Additional Mitigation proposed?
A453 (between Airport main access and proposed site access)	Negligible	977 <u>1,016</u>	929 <u>1,000</u>	809 <u>811</u>	807 <u>911</u>	50	Moderate	Moderate	A new shared use path will be provided alongside the northern perimeter of the proposed site access roundabout.	The existing A453 footway is set back from the carriageway behind a wide grass verge and hedge. This provides a degree of separation that reduces the perceived threat from vehicular traffic. The provision of a connection to the new shared use path will require the removal of a short section of hedgerow (approximately 40 m). While this will reduce the physical separation between non-motorised users and vehicular traffic, the footway will remain sufficiently set back from the carriageway such that any impact on fear and intimidation is considered negligible.	Negligible	Negligible (not significant)	No
A453 (between proposed site access and Beverley Road)	Negligible	977 <u>1,016</u>	1,076 <u>1,163</u>	809 <u>811</u>	1,883 <u>1,991</u>	50	Moderate	Great	A new shared use path will be provided alongside the northern perimeter of the proposed site access roundabout. A new shared use path will be provided along the southern side of the A453. The existing shared use path on the western arm of the Beverley Road roundabout will be replaced with a new shared use path.	The existing A453 footway is set back from the carriageway behind a wide grass verge and hedge. This provides a degree of separation that reduces the perceived threat from vehicular traffic and thereby reduces the impact of the forecast increase in traffic. The provision of a connection to the new shared use path will require the removal of a short section of hedgerow (approximately 40 m). While this will reduce the physical separation between non-motorised users and vehicular traffic, the footway will remain sufficiently set back from the carriageway such that any impact on fear and intimidation is considered negligible. The improved shared use path on the western arm of the Beverley Road roundabout will increase the setback from the carriageway from approximately 2 m to 3 m, providing slightly greater separation from traffic.	Small	Minor Adverse (not significant)	No
A453 (between Beverley Road and Finger Farm Roundabout)	Negligible	1,219 <u>1,273</u>	1,394 <u>1,493</u>	998 <u>1,002</u>	2,150 <u>2,260</u>	Currently 50mph both directions. Proposed to reduce eastbound to 40mph	Great	Great	The existing shared use path around the perimeter of the eastern arm of the Beverley Road roundabout will be widened to 3m. The existing shared use path on the western arm of the Finger Farm	The existing A453 footway is set back from the carriageway behind a narrow grass verge. This provides a degree of separation that reduces the perceived threat from vehicular traffic and thereby reduces the impact of the forecast increase in traffic. The widened shared use path at the Beverley Road roundabout will continue to be set back from the carriageway, positioned behind a narrow verge of approximately 2m.	Small	Minor Adverse (not significant)	No

8 Transport and Access

Receptor Location	Receptor Sensitivity	Future Baseline Avg 18-Hr AADT Flow/hr	With Scheme Avg 18-Hr AADT Flow/hr	Future Baseline 18-Hr HGV AADT	With Scheme 18-Hr HGV AADT	Posted Speed Limit	Future Baseline Fear and Intimidation Level	With Scheme Fear and Intimidation Level	With Scheme Infrastructure Change Relevant to Severance	Additional Comments	Magnitude of Impact	Scale of Effect and Significance	Additional Mitigation proposed?
									<p>roundabout will be widened to 3m and realigned to accommodate the widened carriageway.</p> <p>The eastbound speed limit will be reduced from 50mph to 40mph between Beverley Road and Finger Farm Roundabout</p>	<p>The realigned and widened shared use path at the Finger Farm roundabout will reduce the verge width between the carriageway and the path, from up to approximately 10m at its widest point to around 3m, resulting in a slight increase in fear and intimidation.</p> <p>The proposed widening and improvement of the shared use paths will reduce the potential for fear and intimidation among non-motorised users by increasing the available width to a consistent 3.0m. This is expected to improve perceived safety and comfort levels, particularly in terms of reducing the fear of conflict between pedestrians and cyclists.</p>			
A453 (between Finger Farm roundabout and A6 Kegworth Bypass)	Negligible	1,668 1,676	1,729 1,791	2,829 2,776	3,309 3,293	70	Great	Extreme	The existing shared use path on the approach to Finger Farm roundabout will be realigned and widened to 3m and will connect to existing facilities and the proposed toucan crossing.	<p>The grass verge between the northbound carriageway and the realigned, widened shared use path will be reduced from a maximum width of approximately 10m to around 3m. On the southbound carriageway, the verge will decrease from approximately 3 m to 1.5 m. These reductions in physical separation between non-motorised users and vehicular traffic may result in a slight increase in perceived fear and intimidation at these locations.</p> <p>The widened shared use paths will contribute to improved user comfort and result in a slight reduction in the fear of conflict between pedestrians and cyclists.</p>	Small	Minor adverse (not significant)	No
Beverley Road (between A453 and Herald Way)	Low	382 384	349 369	193 195	195 198	30	Small	Small	<p>A new shared use path will be introduced along the northbound carriageway, extending from the A453 / Beverley Road roundabout and connecting to the existing footpath at the bus stop.</p> <p>The existing footpaths on both sides of the carriageway will be upgraded to shared use paths to accommodate both pedestrians and cyclists.</p>	The proposed shared use path and upgrades to existing footpaths will improve connectivity for non-motorised users along Beverley Road, enabling cyclists to travel with a degree of segregation from vehicular traffic. This will help reduce the perceived threat and enhance comfort for pedestrians and cyclists.	Small	Minor beneficial (not significant)	No

8 Transport and Access

8.7. Additional Mitigation & Enhancement Measures

Table 8.7.1 identifies the additional mitigation measures that have been proposed in order to address the effects identified in Section 8.6, as well as the effectiveness of those measures, and how they would be secured. Possible enhancement measures have also been identified where relevant.

Table 8.7.1
Proposed Mitigation & Enhancement Measures

Stage	Receptor(s) affected	Possible effect being mitigated	Mitigation/Enhancement measure	How secured / trigger	Further information
Construction	All receptors	Additional construction HGV and workforce traffic and resulting traffic-related effects on Severance, Driver Delay, Non-Motorised User Amenity, Road Safety and Fear and Intimidation.	Implementation of a Construction Traffic Management Plan (CTMP) and Construction Environmental Management Plan (CEMP) to reduce the effects of HGVs and workforce vehicles throughout construction. As part of this, traffic management measures specifically designed to protect vulnerable road users will be implemented. Adverse effects of construction will be temporary and closely managed and monitored throughout the construction period.	Planning condition	ES Chapter 6 Construction Strategy
Completed development	All receptors	Additional operational HGV and workforce traffic and resulting traffic-related effects on Severance, Driver Delay, Non-Motorised User Amenity, Road Safety and Fear and Intimidation.	Implementation of a Travel Plan(s) to reduce car vehicle trip generation and promote sustainable mode share.	Planning condition	Framework Travel Plan (standalone document submitted with the planning application)

8.8. Residual Effects

Table 8.8.1 provides a tabulated summary of the outcomes of the transport assessment of the proposed development.

Table 8.8.1
Residual Effects

Stage	Receptor (sensitivity)	Description of Residual Effect and Any Additional Mitigation	Residual Effect						
			Magnitude post-mitigation	Scale of Effect and Significance	ADV / BEN	ST / MT / LT	D/IND	P/T	R/IRR
Key: ADV/BEN= Adverse/Beneficial; ST/MT/LT = Short-term/Medium-term/Long-term; D/IND = Direct/Indirect; P/T = Permanent/Temporary; R/IRR = Reversible/Irreversible									
Construction	People walking and cycling on Footpath L45 (Low)	Pedestrian delay effect as a result of there being no alternate route during the temporary closure	High	Major (significant)	ADV	ST	D	T	R
Completed Development 2027	People walking and cycling on the A453 (between Airport main access and proposed site access) (Negligible)	Severance effect from changes to existing infrastructure provision	Negligible	Negligible (not significant)	BEN	LT	D	P	IRR
		Non-motorised user amenity effect from changes to existing infrastructure provision	Negligible	Negligible (not significant)	BEN	LT	D	P	IRR
		Fear and intimidation effect from changes to existing infrastructure provision	Negligible	Negligible (not significant)	BEN	LT	D	P	IRR
Completed Development 2027	People walking and cycling on the A453 (between proposed site access and Beverley Road) (Negligible)	Severance effect from changes to existing infrastructure provision	Negligible	Negligible (not significant)	ADV	LT	D	P	IRR
		Non-motorised user amenity effect due to changes in traffic and changes to existing infrastructure provision	Negligible	Negligible (not significant)	ADV	LT	D	P	IRR

8 Transport and Access

Stage	Receptor (sensitivity)	Description of Residual Effect and Any Additional Mitigation	Residual Effect						
			Magnitude post-mitigation	Scale of Effect and Significance	ADV / BEN	ST / MT / LT	D/IND	P/T	R/IRR
Key: ADV/BEN= Adverse/Beneficial; ST/MT/LT = Short-term/Medium-term/Long-term; D/IND = Direct/Indirect; P/T = Permanent/Temporary; R/IRR = Reversible/Irreversible									
Completed Development 2027	People walking and cycling on the A453 (between Beverley Road and Finger Farm Roundabout) (Negligible)	Fear and intimidation effect due to changes in traffic and changes to existing infrastructure provision	Small	Minor (not significant)	ADV	LT	D	P	IRR
		Severance effect from changes to existing infrastructure provision	Negligible	Negligible (not significant)	ADV	LT	D	P	IRR
		Pedestrian delay effect from changes to existing infrastructure provision	Medium	Minor (not significant)	ADV	LT	D	P	IRR
		Non-motorised user amenity effect due to changes in traffic and changes to existing infrastructure provision	Small	Minor (not significant)	ADV	LT	D	P	IRR
Completed Development 2027	People walking and cycling on the A453 (between Finger Farm Roundabout and A6 Kegworth Bypass) (Negligible)	Fear and intimidation effect from changes to existing infrastructure provision	Small	Minor (not significant)	ADV	LT	D	P	IRR
		Severance effect from changes to existing provision	Small	Minor (not significant)	BEN	LT	D	P	IRR
		Non-motorised user amenity effect changes to existing infrastructure	Negligible	Negligible (not significant)	ADV	LT	D	P	IRR
Completed Development 2027	People walking and cycling on Beverley Road (between A453 and Herald Way) (Low)	Fear and intimidation effect due to changes in traffic and changes to existing provision	Small	Minor (not significant)	ADV	LT	D	P	IRR
		Severance effect from changes to existing provision	Negligible	Negligible (not significant)	BEN	LT	D	P	IRR
		Non-motorised user amenity effect from changes to existing provision	Small	Minor (not significant)	BEN	LT	D	P	IRR
Completed Development 2027	Vehicle drivers and passengers on the A453 / A42 and M1 on and off-slips / Donington Services	Driver delay effect from operational traffic.	Small	Minor (not significant)	ADV	LT	D	P	IRR
		Driver delay effect from operational traffic.	Negligible	Negligible (not significant)	ADV	LT	D	P	IRR
		Driver delay effect from operational traffic.	Small	Minor (not significant)	ADV	LT	D	P	IRR
Completed Development 2027	Vehicle drivers and passengers on the A453 / Airport Access Road	Driver delay effect from operational traffic.	Small	Minor (not significant)	ADV	LT	D	P	IRR
		Driver delay effect from operational traffic.	Negligible	Negligible (not significant)	ADV	LT	D	P	IRR
Completed Development 2027	Vehicle drivers and passengers on the M1 Junction 24 - Kegworth Interchange	Driver delay effect from operational traffic.	Small	Minor (not significant)	ADV	LT	D	P	IRR
		Driver delay effect from operational traffic.	Negligible	Negligible (not significant)	ADV	LT	D	P	IRR
Completed Development 2027	Vehicle drivers and passengers on the A453 / new site access junction	Driver delay effect from operational traffic.	Negligible	Negligible (not significant)	ADV	LT	D	P	IRR

8 Transport and Access

Stage	Receptor (sensitivity)	Description of Residual Effect and Any Additional Mitigation	Residual Effect						
			Magnitude post-mitigation	Scale of Effect and Significance	ADV / BEN	ST / MT / LT	D/IND	P/T	R/IRR
Key: ADV/BEN= Adverse/Beneficial; ST/MT/LT = Short-term/Medium-term/Long-term; D/IND = Direct/Indirect; P/T = Permanent/Temporary; R/IRR = Reversible/Irreversible									
Completed Development 2027	Vehicle drivers and passengers on the A453 / Grimes Gate (Low)	Driver delay effect from operational traffic.	Negligible	Negligible (not significant)	ADV	LT	D	P	IRR
Completed Development 2027	Vehicle drivers and passengers on the A453 / The Green <u>Unnamed Road</u> (Low sensitivity for driver delay, high sensitivity for road safety)	Driver delay effect from operational traffic.	Negligible	Negligible (not significant)	ADV	LT	D	P	IRR
		<u>Road safety effect from operational traffic</u>	<u>Minor</u>	<u>Minor (not significant)</u>	<u>ADV</u>	<u>LT</u>	<u>D</u>	<u>P</u>	<u>IRR</u>
Completed Development 2027	Vehicle drivers and passengers on the A453 / EMA Jet Park 2 (Low)	Driver delay effect from operational traffic	Negligible	Negligible (not significant)	ADV	LT	D	P	IRR
Completed Development 2027	Vehicle drivers and passengers on the A453 / Donington Park Access Road (Low)	Driver delay effect from operational traffic	Negligible	Negligible (not significant)	ADV	LT	D	P	IRR
Completed Development 2027	Vehicle drivers and passengers on the A453 / Melbourne Road (Low)	Driver delay effect due to changes in traffic	Negligible	Negligible (not significant)	ADV	LT	D	P	IRR
Completed Development 2027	Vehicle drivers and passengers on the A453 / Moor Lane (Low)	Driver delay effect due to changes in traffic	Negligible	Negligible (not significant)	ADV	LT	D	P	IRR
Completed Development 2027	Vehicle drivers and passengers on the A42 J14 (eastbound off-slip) / A453 (Low)	Driver delay effect due to changes in traffic	Negligible	Negligible (not significant)	ADV	LT	D	P	IRR
Completed Development 2027	Vehicle drivers and passengers on the A42 J14 (westbound on-slip) / A453 / Gelscoe Lane / Top Brand (Low)	Driver delay effect due to changes in traffic	Negligible	Negligible (not significant)	ADV	LT	D	P	IRR
Completed Development 2027	Vehicle drivers and passengers on Grimes Gate / Lady Gate / Hall Gate (Low)	Driver delay effect due to changes in traffic	Negligible	Negligible (not significant)	ADV	LT	D	P	IRR
Completed Development 2027	Vehicle drivers and passengers on The Green / Unnamed Road (Low)	Driver delay effect due to changes in traffic	Negligible	Negligible (not significant)	ADV	LT	D	P	IRR
Completed Development 2027	Vehicle drivers and passengers on The Green / Lady Gate / Long Mere Lane (Low)	Driver delay effect due to changes in traffic	Negligible	Negligible (not significant)	ADV	LT	D	P	IRR
Completed Development 2027	Vehicle drivers and passengers on the A50 Junction 1 - Sawley Junction (Medium)	Driver delay effect due to changes in traffic	No change <u>Negligible</u>	Negligible (not significant)	ADV	LT	D	P	IRR
Completed Development 2027	Vehicle drivers and passengers on the Castle Donington Relief Road roundabout (Low)	Driver delay effect due to changes in traffic	Negligible	Negligible (not significant)	ADV	LT	D	P	IRR
Completed Development 2027	Vehicle drivers and passengers on the M1 Junction 25 - Sandiacre Junction (Medium)	Driver delay effect due to changes in traffic	Small	Minor (not significant)	ADV	LT	D	P	IRR
Completed Development 2027	People walking and cycling on Footpath L45 (Low)	Pedestrian delay effect as a result of the realignment of the P _{Ro} W through the north-eastern part of the proposed development site and diversion to the proposed puffin crossing across the A453.	Small	Minor (not significant)	ADV	LT	D	P	IRR

8 Transport and Access

Stage	Receptor (sensitivity)	Description of Residual Effect and Any Additional Mitigation	Residual Effect						
			Magnitude post-mitigation	Scale of Effect and Significance	ADV / BEN	ST / MT / LT	D/IND	P/T	R/IRR
Key: ADV/BEN= Adverse/Beneficial; ST/MT/LT = Short-term/Medium-term/Long-term; D/IND = Direct/Indirect; P/T = Permanent/Temporary; R/IRR = Reversible/Irreversible									
Completed Development 2032	People walking and cycling on the A453 (between Airport main access and proposed site access) (Negligible)	Severance effect from changes to existing infrastructure provision	Negligible	Negligible (not significant)	BEN	LT	D	P	IRR
		Non-motorised user amenity effect from changes to existing infrastructure provision	Negligible	Negligible (not significant)	BEN	LT	D	P	IRR
		Fear and intimidation effect from changes to existing infrastructure provision	Negligible	Negligible (not significant)	BEN	LT	D	P	IRR
Completed Development 2032	People walking and cycling on the A453 (between proposed site access and Beverley Road) (Negligible)	Severance effect from changes to existing infrastructure provision	Negligible	Negligible (not significant)	ADV	LT	D	P	IRR
		Non-motorised user amenity effect due to changes in traffic and changes to existing infrastructure provision	Negligible	Negligible (not significant)	ADV	LT	D	P	IRR
		Fear and intimidation effect due to changes in traffic and changes to existing infrastructure provision	Small	Minor (not significant)	ADV	LT	D	P	IRR
Completed Development 2032	People walking and cycling on the A453 (between Beverley Road and Finger Farm Roundabout) (Negligible)	Severance effect from changes to existing infrastructure provision	Negligible	Negligible (not significant)	ADV	LT	D	P	IRR
		Pedestrian delay effect from changes to existing infrastructure provision	Medium	Minor (not significant)	ADV	LT	D	P	IRR
		Non-motorised user amenity effect due to changes in traffic and changes to existing infrastructure provision	Small	Minor (not significant)	ADV	LT	D	P	IRR
		Fear and intimidation effect from changes to existing infrastructure provision	Small	Minor (not significant)	ADV	LT	D	P	IRR
Completed Development 2032	People walking and cycling on the A453 (between Finger Farm roundabout and A6 Kegworth Bypass) (Negligible)	Severance effect from changes to existing provision	Small	Minor (not significant)	BEN	LT	D	P	IRR
		Non-motorised user amenity effect from changes to existing provision	Negligible	Negligible (not significant)	BEN	LT	D	P	IRR
		Fear and intimidation effect due to changes in traffic and changes to existing infrastructure provision	Small	Minor (not significant)	ADV	LT	D	P	IRR
Completed Development 2032	People walking and cycling on Beverley Road (between A453 and Herald Way) (Low)	Severance effect from changes to existing infrastructure provision	Negligible	Negligible (not significant)	BEN	LT	D	P	IRR
		Non-motorised user amenity effect from changes to existing provision	Small	Minor (not significant)	BEN	LT	D	P	IRR
		Fear and intimidation effect from changes to existing infrastructure provision	Small	Minor (not significant)	BEN	LT	D	P	IRR

8 Transport and Access

Stage	Receptor (sensitivity)	Description of Residual Effect and Any Additional Mitigation	Residual Effect						
			Magnitude post-mitigation	Scale of Effect and Significance	ADV / BEN	ST / MT / LT	D/IND	P/T	R/IRR
Key: ADV/BEN= Adverse/Beneficial; ST/MT/LT = Short-term/Medium-term/Long-term; D/IND = Direct/Indirect; P/T = Permanent/Temporary; R/IRR = Reversible/Irreversible									
Completed Development 2032	Vehicle drivers and passengers on the Finger Farm Roundabout - A453 / A42 and M1 on and off-slips / Donington Services	Driver delay effect from operational traffic.	Small	Minor (not significant)	ADV	LT	D	P	IRR
Completed Development 2032	Vehicle drivers and passengers on the A453 / Beverley Road / Site Access	Driver delay effect from operational traffic.	Negligible	Negligible (not significant)	ADV	LT	D	P	IRR
Completed Development 2032	Vehicle drivers and passengers on the A453 / Airport Access Road	Driver delay effect from operational traffic.	Small	Minor (not significant)	ADV	LT	D	P	IRR
Completed Development 2032	Vehicle drivers and passengers on the A453 / A6 Kegworth Bypass / Wilders Way	Driver delay effect from operational traffic.	Small	Minor (not significant)	ADV	LT	D	P	IRR
Completed Development 2032	Vehicle drivers and passengers on the M1 Junction 24 - Kegworth Interchange	Driver delay effect from operational traffic.	Negligible	Negligible (not significant)	ADV	LT	D	P	IRR
Completed Development 2032	Vehicle drivers and passengers on the A453 / new site access junction	Driver delay effect from operational traffic.	Negligible	Negligible (not significant)	ADV	LT	D	P	IRR
Completed Development 2032	Vehicle drivers and passengers on the A453 / Grimes Gate (Low)	Driver delay effect due to changes in traffic	Negligible	Negligible (not significant)	ADV	LT	D	P	IRR
Completed Development 2032	Vehicle drivers and passengers on the A453 / The Green Unnamed Road (Low)	Driver delay effect due to changes in traffic	Negligible	Negligible (not significant)	ADV	LT	D	P	IRR
Completed Development 2032	Vehicle drivers and passengers on the A453 / EMA Jet Park 2 (Low)	Driver delay effect due to changes in traffic	Negligible	Negligible (not significant)	ADV	LT	D	P	IRR
Completed Development 2032	Vehicle drivers and passengers on the A453 / Donington Park Access Road (Low)	Driver delay effect due to changes in traffic	Negligible	Negligible (not significant)	ADV	LT	D	P	IRR
Completed Development 2032	Vehicle drivers and passengers on the A453 / Melbourne Road (Medium Low)	Driver delay effect due to changes in traffic	Medium Negligible	Moderate (significant) Negligible (not significant)	BEN	LT	D	P	IRR
Completed Development 2032	Vehicle drivers and passengers on the A453 / Moor Lane (Low)	Driver delay effect due to changes in traffic	Negligible	Negligible (not significant)	ADV	LT	D	P	IRR
Completed Development 2032	Vehicle drivers and passengers on the A42 J14 (eastbound off-slip) / A453 (Low)	Driver delay effect due to changes in traffic	Negligible	Negligible (not significant)	ADV	LT	D	P	IRR
Completed Development 2032	Vehicle drivers and passengers on the A42 J14 (westbound on-slip) / A453 / Gelscoe Lane / Top Brand (Low)	Driver delay effect due to changes in traffic	Negligible	Negligible (not significant)	ADV	LT	D	P	IRR
Completed Development 2032	Vehicle drivers and passengers on Grimes Gate / Lady Gate / Hall Gate (Low)	Driver delay effect due to changes in traffic	Negligible	Negligible (not significant)	ADV	LT	D	P	IRR
Completed Development 2032	Vehicle drivers and passengers on The Green / Unnamed Road (Low)	Driver delay effect due to changes in traffic	Negligible	Negligible (not significant)	ADV	LT	D	P	IRR

8 Transport and Access

Stage	Receptor (sensitivity)	Description of Residual Effect and Any Additional Mitigation	Residual Effect						
			Magnitude post-mitigation	Scale of Effect and Significance	ADV / BEN	ST / MT / LT	D/IND	P/T	R/IRR
Key: ADV/BEN= Adverse/Beneficial; ST/MT/LT = Short-term/Medium-term/Long-term; D/IND = Direct/Indirect; P/T = Permanent/Temporary; R/IRR = Reversible/Irreversible									
Completed Development 2032	Vehicle drivers and passengers on The Green / Lady Gate / Long Mere Lane	Driver delay effect due to changes in traffic	Negligible	Negligible (not significant)	ADV	LT	D	P	IRR
Completed Development 2032	Vehicle drivers and passengers on the A50 Junction 1 - Sawley Junction (Medium)	Driver delay effect due to changes in traffic	Small	Minor (not significant)	ADV	LT	D	P	IRR
Completed Development 2032	Vehicle drivers and passengers on the Castle Donington Relief Road roundabout	Driver delay effect due to changes in traffic	Negligible	Negligible (not significant)	ADV	LT	D	P	IRR
Completed Development 2032	Vehicle drivers and passengers on the M1 Junction 25 - Sandiacre Junction (Medium)	Driver delay effect due to changes in traffic. In the future baseline, the junction is forecast to operate above theoretical capacity in both the AM and PM peak hours, likely associated with background traffic growth and committed developments. With the proposed development, queue lengths are forecast to increase further. While the proposed development contributes a small increase to demand at the junction, the underlying capacity constraints are a result of existing and background growth pressures on the network, which are expected to lead to performance issues even in the absence of the proposed development.	Medium Small	Moderate (significant) Minor (not significant)	ADV	LT	D	P	IRR
Completed Development 2032	People walking and cycling on Footpath L45 (Low)	Pedestrian delay effect as a result of the realignment of the PRoW through the north-eastern part of the proposed development site and diversion to the proposed puffin crossing across the A453.	Small	Minor (not significant)	ADV	LT	D	P	IRR

8.9. Transport: Inter-Development Cumulative Effects

As outlined in Section 8.2.8, a screening exercise was undertaken to identify committed and additional developments for inclusion in the PRTM, documented through the preparation of an Uncertainty Log. This log, reviewed and agreed with the TWG, captures over 650 housing sites, more than 350 employment sites, and over 60 planned changes to the highway network. Further detail is provided in the accompanying Transport Assessment (Appendix 8.1, Volume IV).

The future baseline scenario, used to assess the impacts of the proposed development, incorporates all committed and additional developments expected to be complete and operational in each forecast year, alongside planned infrastructure improvements and projected traffic growth. Consequently, the assessments presented in Section 8.6 for both the construction and completed development stages account for the cumulative effects of these developments through the background traffic growth assumptions embedded within the PRTM forecasts. As such, the cumulative effects of committed developments are inherently captured within the future baseline scenario, and a separate cumulative assessment is not required.

8.10. In-Combination Climate Change Effects

Climate change is not anticipated to affect the assessment of effects reported in this chapter. As such, an assessment of in-combination climate change effects has not been undertaken.

8 Transport and Access

8.11. Works Cited

National Planning Policy Framework (revised December 2024)

National Networks National Policy Statement (March 2024)

DfT Circular 01/2022: The Strategic Road Network and the Delivery of Sustainable Development DfT Circular 01/2022

The Strategic Road Network – Planning for the Future (National Highways, 2023).

Institute of Environmental Management and Assessment (IEMA) Guidelines: Environmental Assessment of Traffic and Movement (IEMA, July 2023);

Guidelines for the Environmental Assessment of Road Traffic, Guidance Note Number 1 (IEMA, 1993)

Design Manual for Roads and Bridges (DMRB), LA102 Screening Projects for Environmental Impact Assessment, Revision 0 (National Highways, July 2019)

DMRB, LA103 Scoping Projects for Environmental Assessment, Revision 1 (National Highways, January 2020)

DMRB LA104 Environmental assessment and monitoring, Revision 1 (National Highways, August 2020)

DMRB, LA112 Population and human health, Revision 1 (National Highways, January 2020)

DMRB, Volume 11, Section 3, Part 8 Pedestrian and Others and Community Effects (Highways Agency, June 1993) (WITHDRAWN)

Road Safety Engineering Manual (RoSPA, 2023)

8 Transport and Access

8.12. ES Update, October 2025 - Changes to Original ES Chapter

Table X.X.X 8.12.1
ES Update, October 2025 - Changes to Original ES Chapter

Section Number / Table Number / Figure Number in Original Chapter	Changes to Original ES Chapter	Reason
8.1.1 and throughout	Text added to introduce the ES update	This chapter of the ES forms part of the ES update
8.1.1 and throughout	Reference to the Transport Assessment Appendix added	Updated to reflect that Transport Assessment is now appended
8.2.1	Legislation and Policy documents updated	Updated to reflect latest version of relevant legislation and policy documents
8.2.2	NPPF references	Updated to reflect the latest version of the National Planning Policy Framework
8.2.2	Leicestershire Local Transport Plan references	Updated to reflect the latest version of the Leicestershire Local Transport Plan (LTP4 2025-2040)
8.2.2	Leicestershire Rights of Way Improvement Plan references	Updated to reflect the latest (draft) version of the Leicestershire Rights of Way Improvement Plan
8.2.3	Consultation and traffic modelling strategy references	Section updated to explain that PRTM forecasts are now used in the assessment and provide an overview of consultation/engagement undertaken since the Original ES Chapter.
8.2.3	“from” added	Grammatical correction
Table 8.2.1	Use of PRTM forecasts in the assessment	Updated to reflect that PRTM forecasts are now used in the assessment
Table 8.2.1	Reference to the cumulative assessment of the SEGRO Scheme removed	This ES Update does not include an assessment scenario of the proposed development and land to the south of Hyam’s Lane.
Table 8.2.1	Reference to a Framework CTMP removed	A CTMP will be prepared at the Reserved Matters Application
Table 8.2.1	Reference to the STS added	The outline planning application for the proposed development is supported by a Sustainable Transport Strategy

Section Number / Table Number / Figure Number in Original Chapter	Changes to Original ES Chapter	Reason
Table 8.2.1	Trent Barton spelling change	Consistency with other reports
Table 8.2.1	Reference to Long Mere Lane has been removed	Cordon PRTM does not include Long Mere Lane
Table 8.2.1	Reference to the assessment of forecast traffic changes on local roads towards Melbourne, including Melbourne Road has been removed. Text has been added to explain that it is considered unlikely that the proposed development would result in a material change in traffic through Melbourne.	Cordon of PRTM does not include roads through Melbourne
Table 8.2.1	“and the TWG” added	Updated to clarify that the TWG were also consulted on committed developments as part of the PRTM scoping process.
8.2.4	Reference to the Original ES submission	Reference added to the planning application submitted to NWLDC in May 2024
Table 8.2.2	Table 8.2.2 added	Table 8.2.2 provides an overview of consultee feedback from the previous planning submission in May 2024 and how this has been addressed in the ES update chapter.
8.2.6	Reference to the cumulative assessment of the SEGRO Scheme removed	This ES Update does not include an assessment scenario of the proposed development and land to the south of Hyam’s Lane.
8.2.6	“2026” updated to “2027”	Updated to reflect revised assessment year
8.2.6	“Q3 2025” updated to “Q4 2026”	Updated to reflect latest construction program
8.2.6	“proposed development” updated to “first development parcel”	Updated to reflect phased development approach
8.2.6	Reference to forecast year assumptions added	Updated to clarify that both forecast years assume full occupation of all development parcels in line with LCC requirements
8.2.6	“+Cumulative Scheme” scenarios removed	This ES Update does not include an assessment scenario of the proposed development and land to the south of Hyam’s Lane.

8 Transport and Access

Section Number / Table Number / Figure Number in Original Chapter	Changes to Original ES Chapter	Reason
8.2.8	Reference to third party land has been removed	Updated to reflect latest development proposals
8.2.8	There has been an update to the approach for identification of committed developments, due to the use of PRTM forecasts in the assessment.	Updated to reflect Uncertainty Log developed for committed developments Further details on the committed development assumptions can now be found in the accompanying Transport Assessment. This ES Update does not include an assessment scenario of the proposed development and land to the south of Hyam's Lane.
8.2.8	Table 8.2.2 deleted along with table references	Further detailed on the committed development assumptions can now be found in the accompanying Transport Assessment.
8.2.8	"53" updated to "47"	Updated to reflect latest construction program
8.2.8	"2026" updated to "2027"	Updated to reflect latest construction program
8.2.8	Reference that Parcel A has a series of sub parcels – A1, A2 and A3	Updated to reflect latest development proposals
8.2.8	Clarification added about the new vehicular access from the A453	This will provide access to Parcel A and Parcel B via a new roundabout
8.2.8 and throughout document	"Hunter" Road updated to "Beverley" Road	Road name amended throughout to align with the National Street Gazetteer
8.2.8	Traffic routing methodology updated to reflect the use of PRTM	Updated to reflect that trip distribution is now based on PRTM's in-built gravity model
8.2.8	Reference to the cumulative assessment of the SEGRO Scheme removed	This ES Update does not include an assessment scenario of the proposed development and land to the south of Hyam's Lane.
8.2.8 and throughout document	"committed development" updated to "committed and cumulative development"	Terminology update

Section Number / Table Number / Figure Number in Original Chapter	Changes to Original ES Chapter	Reason
8.2.9	Road safety assessment methodology revised in accordance with RoSPA guidance	Road safety assessment methodology has been revised to reflect National Highways post submission comments.
8.2.9	Text updated regarding average vehicle speed, with reference to the assumption of the posted speed limit removed and updated with reference to PRTM:	Updated to reflect that average vehicle speed has been taken from PRTM modelled free flow speed.
8.2.11	"have been assessed" replaced with "has been undertaken"	Wording updated for clarity
8.2.11	Assumption added regarding the use of PRTM. The following text has therefore been deleted: "Due the programme delays associated with the availability of the PRTM, the transport assessment for the proposed development has been assessed through a manual trip generation and assignment exercise, complemented by local junction modelling for the completed development stage at the planned vehicular access points. To validate the traffic forecasts, the LCC PRTM will be utilised. This will include, where necessary, an assessment of junctions outside of the proposed development red line boundary and junctions in the construction stage. The findings of the PRTM assessments will be presented to the relevant authorities in due course when available."	Updated to reflect that PRTM forecasts are now used in the assessment
8.2.11	Assumption regarding the assessment of driver delay added, in addition to reference to the Transport Assessment as an Appendix	Text added to explain the approach taken for the assessment of driver delay, using a combination of microsimulation and local junction models.
8.2.11	Clarification added about the expected hours for deliveries and unloading	Deliveries and unloading will be between the hours of 07:00-18:00
8.2.11	Development operational trip distribution approach updated	Development trip distribution is based on PRTM's in-built gravity model, compared to being based on professional judgement based on the proximity to the strategic road network in the original ES chapter.
8.2.11	Reference to proposed development Travel Plan(s)	Individual Travel Plans will be prepared when plot occupants are known
8.2.11	Reference to the cumulative assessment of the SEGRO Scheme removed	This ES Update does not include an assessment scenario of the proposed development and land to the south of Hyam's Lane.

8 Transport and Access

Section Number / Table Number / Figure Number in Original Chapter	Changes to Original ES Chapter	Reason
8.3.1	Road safety assessment methodology revised in accordance with RoSPA guidance. Collision cluster analysis updated accordingly and revised results throughout the road safety section presented. Four collision clusters are presented, compared to one in the Original ES Chapter. Table 8.3.1 updated accordingly, and Table 8.3.2, Table 8.3.3 and Table 8.3.4 added	Road safety assessment methodology has been revised to reflect National Highways post submission comments. Section updated to reflect latest assessment
8.3.1 and throughout document	“Diseworth Road” updated to “unnamed road leading to Diseworth”	Road name amended to align with the National Street Gazetteer
8.3.1	Table 8.3.1 data source updated from “2018-2022 CrashMap 2018, 2022” to “DfT”	The analysis no longer uses CrashMap
8.4	The following text has been removed: “*Note that potential impacts associated with driver delay during the construction stage will be considered within the PRTM, the results of which will be presented to relevant authorities when available”	Removed to reflect revised methodology
8.5	“and” deleted	Grammatical correction
Table 8.5.1	Chapter references updated	Updated to reflect latest document structure
8.6.1	Driver Delay assessment write up added	Updated to reflect latest assessment
8.6.2	The following text has been removed: “The assessment of the proposed development has identified 3 locations that meet the flow change screening criteria detailed in Section 8.2.7 or have a proposed infrastructure change relevant to severance.”	Updated to reflect latest assessment
8.6.2 and throughout document	“likely” updated throughout to “potential”	Updated to reflect that assessment considers potential effects
8.6.2	Text added to state that “for reporting purposes, only the links that have a magnitude of impact of small, medium or large (adverse or beneficial), or a proposed infrastructure change relevant to severance, are considered in this section to focus on potential significant effects.”	Updated to reflect latest assessment

Section Number / Table Number / Figure Number in Original Chapter	Changes to Original ES Chapter	Reason
Table 8.6.2	Various	Updated to reflect revised design and assessment
Table 8.6.3	Various	Updated to reflect revised design and assessment
Table 8.6.4	Various	Updated to reflect revised design and assessment
8.6.2	The following text has been removed: “The assessment of the proposed development has identified 3 locations that meet the flow change screening criteria detailed in Section 8.2.7 or have a proposed infrastructure change relevant to non-motorised user amenity.”	Updated to reflect latest assessment
8.6.2	Text added to state that for reporting purposes, only the links that have a magnitude of impact of small, medium or large (adverse or beneficial), or a proposed infrastructure change relevant to non-motorised user amenity, are considered in this section to focus on potential significant effects.	Updated to reflect revised proposals
Table 8.6.5	Various	Updated to reflect revised design and assessment
8.6.2	“and”	Updated to reflect revised proposals
8.6.2	“and amended Finger Farm roundabout”	Updated to reflect revised proposals
8.6.2	The following text has been removed: “The assessment of the proposed development has identified 3 locations that meet the flow change screening criteria detailed in Section 8.2.7 or have a proposed infrastructure change relevant to fear and intimidation.”	Updated to reflect latest assessment
8.6.2	Text added to state that for reporting purposes, only the links that have a magnitude of impact of small, medium or large (adverse or beneficial), or a proposed infrastructure change relevant to fear and intimidation, are considered in this section to focus on potential significant effects.”	Updated to reflect latest assessment

8 Transport and Access

Section Number / Table Number / Figure Number in Original Chapter	Changes to Original ES Chapter	Reason
Table 8.6.6	Various	Updated to reflect revised design and assessment
8.6.2	The following text has been removed: “The assessment of the proposed development has identified 2 locations that meet the flow change screening criteria detailed in Section 8.2.7 or have a proposed infrastructure change relevant to severance.”	Updated to reflect latest assessment
8.6.2	Text added to state that for reporting purposes, only the links that have a magnitude of impact of small, medium or large (adverse or beneficial), or a proposed infrastructure change relevant to severance, are considered in this section to focus on potential significant effects.”	Updated to reflect latest assessment
Table 8.6.7	Various	Updated to reflect revised design and assessment
Table 8.6.8	Various	Updated to reflect revised design and assessment
Table 8.6.9	Various	Updated to reflect revised design and assessment
8.6.2	The following text has been removed: “The assessment of the proposed development has identified 2 locations that meet the flow change screening criteria detailed in Section 8.2.7 or have a proposed infrastructure change relevant to non-motorised user amenity.”	Updated to reflect latest assessment
8.6.2	Text added to state that for reporting purposes, only the links that have a magnitude of impact of small, medium or large (adverse or beneficial), or a proposed infrastructure change relevant to non-motorised user amenity, are considered in this section to focus on potential significant effects.”	Updated to reflect latest assessment
Table 8.6.10	Various	Updated to reflect revised design and assessment

Section Number / Table Number / Figure Number in Original Chapter	Changes to Original ES Chapter	Reason
8.6.2	The following text has been removed: “The assessment of the proposed development has identified 2 locations that meet the flow change screening criteria detailed in Section 8.2.7 or have a proposed infrastructure change relevant to fear and intimidation.”	Updated to reflect latest assessment
8.6.2	Text added to state that for reporting purposes, only the links that have a magnitude of impact of small, medium or large (adverse or beneficial), or a proposed infrastructure change relevant to fear and intimidation, are considered in this section to focus on potential significant effects.”	Updated to reflect latest assessment
Table 8.6.11	Various	Updated to reflect revised design and assessment
Table 8.7.1	Column 4 title change	Updated to reflect section heading
Table 8.8.1	Various	Updated to reflect revised design and assessment
8.9	The following text has been removed: “The assessment of inter-development cumulative effects broadly takes place over two stages, the first of which is screening. The screening exercise undertaken for the cumulative schemes identified in Chapter 2: EIA Methodology of this volume of the ES, is included in Section 8.9.1. Those identified to have the potential to result in cumulative effects with the proposed development have been assessed in Section 8.9.2.”	Further details on the committed development assumptions can now be found in the accompanying Transport Assessment.

8 Transport and Access

Section Number / Table Number / Figure Number in Original Chapter	Changes to Original ES Chapter	Reason
8.9	<p>The following text has been added:</p> <p>“As outlined in Section 8.2.8, a screening exercise was undertaken to identify committed developments for inclusion in the PRTM, documented through the preparation of an Uncertainty Log. This log, reviewed and agreed with the TWG, captures over 650 housing sites, more than 350 employment sites, and over 60 planned changes to the highway network. Further detail is provided in the accompanying Transport Assessment.</p> <p>The future baseline scenario, used to assess the impacts of the proposed development, incorporates all committed developments expected to be complete and operational in each forecast year, alongside planned infrastructure improvements and projected traffic growth. Consequently, the assessments presented in Section 8.6 for both the construction and completed development stages account for the cumulative effects of these developments through the background traffic growth assumptions embedded within the PRTM forecasts.”</p>	<p>Further details on the committed development assumptions can now be found in the accompanying Transport Assessment.</p> <p>Background traffic growth assumptions are embedded within the PRTM forecasts.</p>

Section Number / Table Number / Figure Number in Original Chapter	Changes to Original ES Chapter	Reason
8.9.1	Entire section	Further details on the committed development assumptions can now be found in the accompanying Transport Assessment.
8.9.2	Entire section	This ES Update does not include an assessment scenario of the proposed development and land to the south of Hyam’s Lane.
8.11	NPPF references	Updated to reflect the latest version of the National Planning Policy Framework
8.11	Additional and updated works cited	Updated to reflect additional and updated works cited in this ES Update.