Transport

One of a series of background topic papers prepared by db symmetry in support of a public consultation on proposals for a strategic rail freight interchange in Blaby district, to the north-east of Hinckley in Leicestershire.

INTRODUCTION

1. In 2019 db symmetry will apply to the government for a Development Consent Order (DCO) for a proposed strategic rail freight interchange on a site in Blaby District, to the east of Hinckley in Leicestershire. The project is known as the Hinckley National Rail Freight Interchange (HNRFI).

2. A DCO is a special form of planning permission for large infrastructure projects. It can include a range of additional powers required to implement the proposals, such as powers to acquire land, undertake works to streets, trees and hedgerows and divert utility services.

3. This chapter has been prepared by Hydrock Consultants Ltd and describes the approach taken to assess the highway and transportation impacts of the development proposal.

Structure

4. The structure of this Transport topic paper is as follows:

- Introduction
- Law, policy and guidance
- The site – a summary of baseline conditions
- Development proposal – access strategy
- Our approach to assessment
- The likely main effects of the proposals

- Proposed approach to mitigation
- Next steps
- Glossary of terms

LAW, POLICY AND GUIDANCE

Introduction

5. This section sets out the national, regional and local policy background for the proposed development relating to transport.

National Policy

Infrastructure Planning (Environmental Impact Assessment) Regulations 2017

6. The process of Environmental Impact Assessments (EIA's) in the context of town and country planning in England is governed by the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017.

7. These regulations set out the procedures to be followed in relation to environmental impact assessments linked to Nationally Significant Infrastructure Projects (NSIP) in England and Wales.

8. The objective is to provide a high level of protection of the environment and to help integrate environmental considerations into the preparation of proposals for development to reduce their impact on the environment.

9. It has been agreed that a detailed EIA will be required in this instance. Consultation has been held with both Leicestershire County Council and Highways England to inform the contents of the EIA assessment. The DCO application has been formally scoped under the EIA Regulations and this topic paper engages with the points raised.

National Policy Statement (NPS) for National Networks – December 2014

10. The NPS provides transport guidance to guide individual development for Nationally Significant Infrastructure Projects (NSIP).

11. The key aim of the NPS are to deliver:

- Networks with the capacity, connectivity and resilience to support national and local economic activity and to facilitate growth and create jobs
- Networks which support and improve journey quality, reliability and safety
- Networks which support the delivery of environmental goals and the move to a

low carbon economy

- Networks which join up our communities and link effectively to each other

12. The NPS also identifies the economic and environmental benefits of Rail Freight Interchanges.

13. The main objectives of Government policy for Strategic Rail Freight Interchanges is to facilitate development of the intermodal rail freight industry thereby encouraging modal shift from road to rail. This helps to:

- Reduce road congestion
- Address climate change as part of a low carbon economy
- Support long-term development of efficient rail freight distribution logistics
- Support local growth and create employment

14. The government aims to meet these objectives by encouraging the development of an expanded network of Strategic Rail Freight Interchanges.

15. The NPS states that if a development is likely to have a significant transport impact the supporting Transport Assessment should be developed in line with WebTAG methodologies as set out in DfT guidance. This should lead on from scoping discussions with key stakeholders.

16. A Travel Plan will be prepared to support the sustainable development of the site and any mitigation measures proposed where the development is likely to have a material impact on the operation and / or safety of the surrounding highway network.

National Planning Policy Framework (NPPF) March 2018

17. NPPF advocates that planning policies and decisions should consider whether:

- The opportunities for sustainable transport modes have been taken up depending upon the nature and location of the site to reduce the need for major transport infrastructure
- Safe and suitable access to the site can be achieved for all people
- Improvements can be undertaken within the transport network that cost-effectively limits the significant impacts of the development. Development should only be prevented or refused on transport grounds where the residual impacts of development are severe

18. The NPPF stresses the importance of providing a Travel Plan for all developments that

generate significant amounts of movement. It also gives priority to provision for low emission vehicles, including in particular provision of electric car charging facilities.

19. It also states that transport issues should be considered from the earliest stages of plan making and development proposals, so that:

- the potential impacts of development on transport networks can be addressed
- opportunities from existing or proposed transport infrastructure, and changing transport technology and usage, are realised – for example in relation to the scale, location or density of development that can be accommodated
- opportunities to promote walking, cycling and public transport use are identified and pursued
- the environmental impacts of traffic and transport infrastructure can be identified, assessed and taken into account – including appropriate opportunities for mitigation and for net gains in environmental quality
- patterns of movement, streets, parking and other transport considerations are integral to the design of schemes, and contribute to making high quality places

20. NPPF goes on to state that the planning system should actively manage patterns of growth in support of these objectives. Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. This can help to reduce congestion and emissions and improve air quality and public health.

21. With regard to the accommodation of sites the NPPF also states that planning policies and decisions should recognise and address the specific locational requirements of different sectors – in the interests of '*Building a strong, competitive economy'* (section 6). This includes '*making provision for… storage and distribution operations at a variety of scales and in suitably accessible locations*' (NPPF paragraph 82).

Regional

Leicestershire Local Transport Plan 3 (2011-2026)

22. The Leicestershire Local Transport Plan 3 (LTP3) seeks to give certainty to transport planning and policy in developing a strategic framework.

23. The LTP3 recognises that planning policies will be grounded in the reality that most people will wish to own and use cars; but as far as possible, new development will be planned to avoid increasing traffic pressure by ensuring that a choice of attractive alternatives is available.

24. The LTP3 implementation plan 2014 – 2017 states that improvements to walking, cycling and public transport network were planned within the urban area of Hinckley within the three-year period.

25. The LTP states that evidence suggests that without additional rail freight capacity, road freight traffic will increase by 58% to 2020 (against 2000 traffic levels). Whilst improvements have been made to increase capacity on the rail network to carry freight (such as the gauge improvements on the line between Felixstowe and Nuneaton), there remains a dependency on the road network to transport goods to and through Leicester and Leicestershire. Specific reference is made to a Strategic Rail Freight Interchange at Castle Donnington (known as East Midlands Gateway) which would seek to further promote the transfer of freight movements from road to rail. This has recently received a Development Consent Order (DCO) and is under construction.

26. It also makes specific reference to benefits associated with rail freight interchanges which could include improved traffic conditions and air quality enhancements in and around the city of Leicester.

27. Chapter 5 of the LTP3 states that Leicestershire CC will:

'Continue to work with authorities across the East Midlands and other bodies to support and promote rail freight initiatives, including the delivery of further improvements to enable the movement of freight traffic through the Leicester area.'

Leicester & Leicestershire 2050: Our Vision for growth (September 2018)

28. The Leicester and Leicestershire 2050 Our Vision for growth document prioritises taking advantage of proposals to improve national and regional networks. It recognises Hinckley as a key area for growth.

29. The vision for growth includes road and rail improvements within the surrounding area of Leicestershire. This includes key improvements to the A5, M42 / A42 and A46 to expressway standard.

30. The following provides a short summary of improvements proposed on the A5 within the vicinity of Hinckley:

- Improvement of the A5 corridor is essential to reduce congestion in the area, to deliver already planned housing growth and to support delivery of major industrial sites which already have Local Plan allocations and/or planning permission. Managing the delivery of consented/allocated sites in and around Hinckley will be achieved through Local Plans. There are long-standing proposals, promoted by the A5 Partnership, to improve the A5 from Dodwells to Longshoot, widening to dual-carriageway a short section of the A5 near Hinckley, which carries the traffic of both the A5 and the A47. The A5 Partnership proposals also call for improvements to upgrade the A5 between the A38 and the M1 to

'expressway' standard. This is supported by the Midlands Connect Strategy and will provide much needed relief to local roads, and provide an efficient alternative route to the M6, between J12 and the M1.

31. The expressway corridors are likely to be fully built out by the early 2030s with increased capacity on the railways proposed within the same timeframes.

Leicester & Leicestershire Strategic Distribution Sector Study (September 2016)

32. The Leicester and Leicestershire Strategic Distribution Sector Study (2016) examines the strategic distribution sector in the county. It provides a better understanding of the sector and an objective assessment of future need to 2036, together with advice on developing a strategy to manage change and support sustainable economic growth over the next 15 to 20 years.

33. The study concludes that 274 hectares of rail served land will need to be developed (in the preferred scenario) by 2036 across Leicestershire, and identifies the Hinckley to Leicester corridor as a Key opportunity area with the potential to develop a strategic rail linked distribution in the area subject to improvements to the highway network surrounding the site.

Midlands connect strategy (March 2017)

34. The Midlands Connect strategy sets out proposals for achieving the untapped economic potential of the midlands.

35. It also recognises an economic growth corridor between Coventry and Leicester, and a chance to facilitate agglomeration in these areas.

36. In addition, it also states that it supports the development of new Strategic Rail Freight Interchange (SRFI) proposals, particularly where rail and road access is good.

37. To avoid conflicts the following principal interventions would be proposed in the local area of Leicester:

- Restoration of four tracks through Leicester to eliminate any unnecessary conflict
- Modern signalling along the Peterborough – Leicester line

Leicestershire Highway Design Guide (December 2007)

38. Part 3 of the Leicestershire Highway Design Guide is intended to help design development layouts that provide safe and free movement for all road users, including cars, lorries, pedestrians, cyclists and public transport.

39. It provides guidance on 'the overall development concept in terms of site access and highways and transportation impacts', and sets out the car parking and servicing requirements for new developments.

40. This guidance as well as operational requirements will be taken into account in developing the highways and transportation strategy for the proposal.

Local Policy

41. Whilst the site and application is being promoted through the DCO/NSIP process the local development plan is considered relevant for consideration nonetheless.

Blaby District Core Strategy February 2013

42. The core strategy sets out the overarching strategy and core policies to guide future development in the district up to 2029.

43. It recognises that 'One of the key obstacles affecting the economic success of the District is its transport network.' (Paragraph 4.18).

44. A key policy aim is to 'deliver the transport needs of the District and to encourage and develop the use of more sustainable forms of transport' (section 5).

45. With regard to rail freight enhancements Policy CS10 of the Blaby District Core Strategy states:

'Within strategic (including national and regional) and financial constraints, Blaby District Council will support the exploration of realistic opportunities for improving rail-based movement of goods and people'.

Blaby District Saved Policies 1999

46. The current Development Plan for the District of Blaby includes several 'saved' policies of the Blaby District Local Plan (1999). The remaining saved policies of the Local Plan (1999), along with the adopted Core Strategy (and the emerging Local Plan Delivery Development Plan Document) will provide the basis for making decisions on planning applications.

47. The previous saved policies included a number of policies. This included the following:

- T1: Planning permission for major new development will only be granted if, where appropriate, the internal road layout is designed to a standard sufficient to enable the development to be served by Public Transport. Planning permission may be subject to a planning condition that these standards are achieved.

- T3: Where the district council is the determining authority for development involving new access, road scheme or improvement, planning permission will only be granted if the proposed access road scheme or improvement incorporated:

- Appropriate facilities for pedestrians and cyclists; and

- Safeguards for living and working conditions and the environment in general including considerations of visibility, access , layout, privacy, light, noise, disturbance, emissions, congestion, overbearing effect and the character or appearance of the area.

Hinckley and Bosworth Local Development Framework 2009 Core Strategy

48. The core strategy sets out the overarching strategy and core policies to guide the future development in the Borough up to 2026.

49. The local plan is gradually being replaced by Development Plan Documents (DPDs) which form part of the Local Development Framework. The majority of the Local Plan Policies from the 2006 local plan have been saved until they are replaced by policies in the DPDs.

50. Spatial objective 13 for transportation and the need to travel reads:

'To reduce the high reliance on car travel in the borough and to increase the opportunities for other forms of transport by focusing the majority of development in the Hinckley urban area where there is a range of transport options available and through securing improvement to public transport infrastructure and facilities that promote walking and cycling and through the use of travel plans.'

Additional Guidance

Design Manual for Roads and Bridges (DMRB)

51. The *Design Manual for Roads and Bridges* provides guidance on the *General Principles and Guidance of Environment Impact Assessment* (Volume 11) for larger development schemes, and the assessment methodology is compliant with this guidance.

52. Further, DMRB also provides guidance on highway design matters for application to motorway and trunk road schemes. Where applicable the highway design standards are applied.

Manual for Streets 2

53. *Manual for Streets 2* (MfS2) - Wider Application of the Principles, is a companion guide to MfS and builds on the philosophies set out in MfS and demonstrates how they can be extended beyond residential streets.

THE SITE

Site Location

54. The land within the Draft DCO Boundary ("the site") is located to the northeast of Hinckley, Leicestershire which has a population of 45,249 (2011 Census). The wider surrounding area (including the areas of Blaby, Leicester, Hinckley and Bosworth and Nuneaton and Bedworth) has a total population of around 300,000.

55. The site is bound by the Felixstowe to Nuneaton railway that forms its north-western boundary and the M69 motorway to the east (including Junction 2 at the southeast corner of the site).

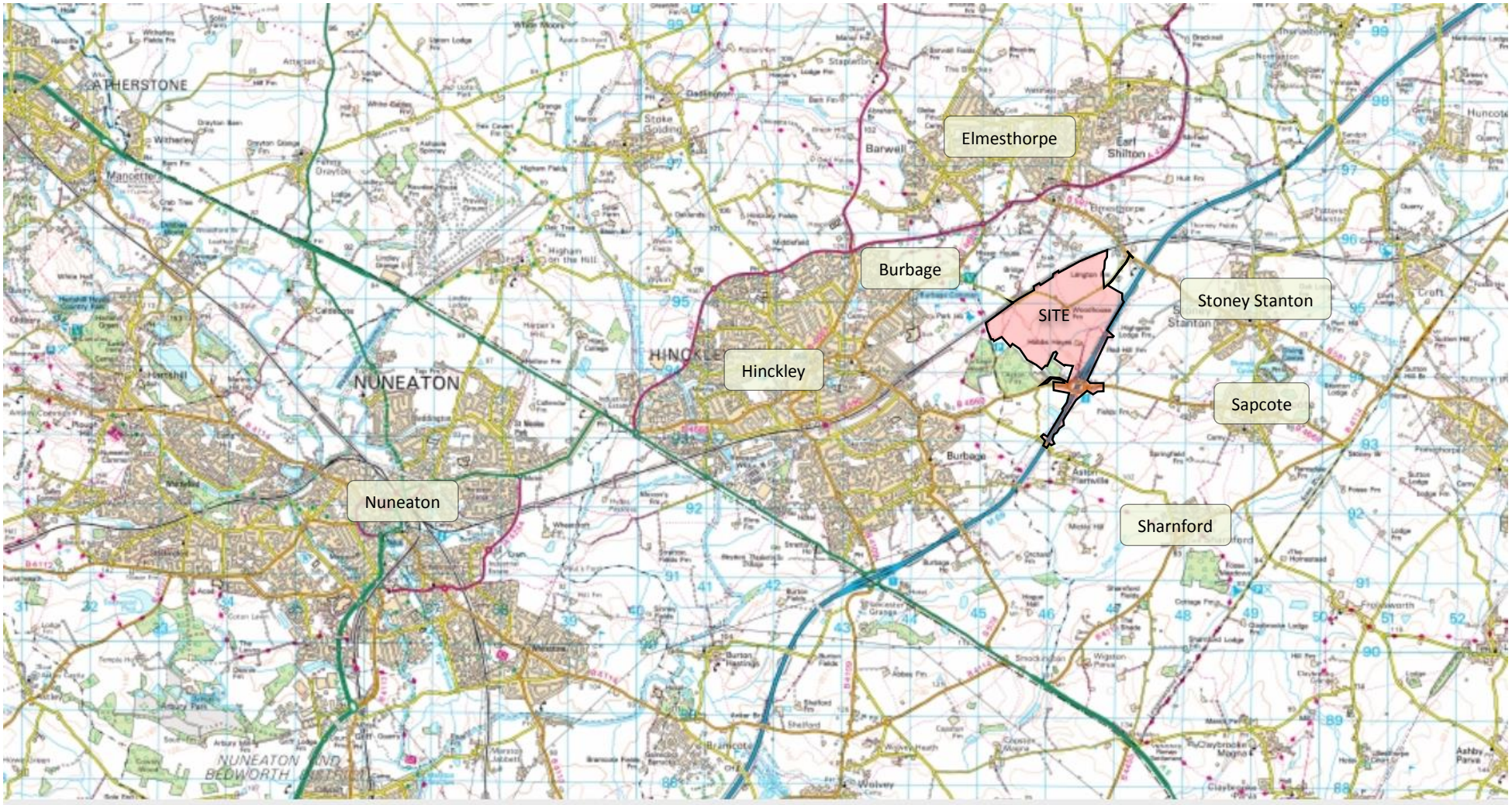
56. The B4669 Hinckley Road runs in an east-west alignment to the south of the site.

57. Burbage Common Road routes through the site and enters/exits at two separate locations to the east (B581 Station Road) and north (B4668 Leicester Road) of the site.

58. The site in its local context including reference to the surrounding local highway network can be seen in Figure 1.

59. At present, the site is primarily agricultural fields and a small number of properties and farms.

Figure 1 - Site location plan



Highway network

60. The following section describes the strategic and local highway network within the vicinity of the site and the accessibility of the site for road based movements.

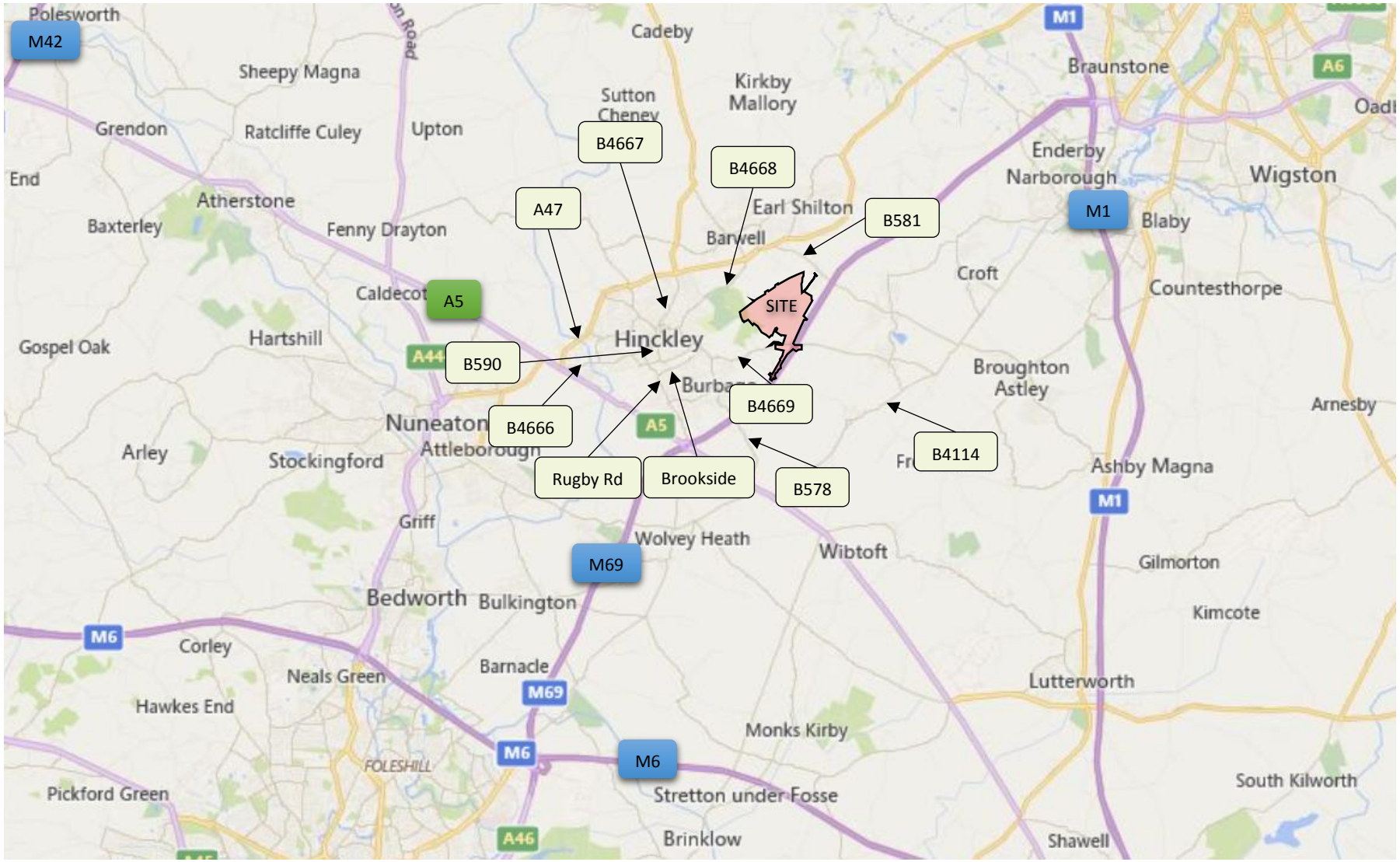
61. The highway network can be broadly categorised as (i) the 'Strategic Road Network' (SRN) (which consists of motorways and trunk roads) and (ii) the 'local highway network'. It is the responsibility of Highways England (HE) to operate, maintain and improve the SRN, and likewise Leicestershire County Council (LCC) in respect of the local highway network. A summary of the pertinent roads/highways and their respective categorisation is summarised below:

Table 1 - Category of effects

Highways England maintained roads: the Strategic Road Network	Leicestershire County Council maintained roads: the local highway network
• M69 • A5 • M6 • M1 • A42 & M42	• B4669 • Hinckley: A47; B578; B590; B4666 Coventry Road; B4667 Ashby Road; B4668 Leicester Road; Rugby Road; Hollycroft Road • Elmesthorpe: A47; B581 Station Road; Leicester Road; The Common • Stoney Stanton: B581; Hinckley Road; Long Street; Sapcote Road • Sapcote: B4669 Leicester Road; Grace Road; Sharnford Road • Sharnford: B4114 Leicester Road; Aston Lane • B4114 Coventry Road • Frolesworth Road

62. An overview of the highway network in the vicinity of the site is provided in Figure 2.

Figure 2 - local and strategic road network in the immediate vicinity of the site



63. We are in liaison with HE and LCC to agree the extent of assessment and the methodologies to be applied in order to assess and understand the impacts of the development. The impacts, and any associated mitigation strategy will need to be agreed with LCC/HE through the application process.

Strategic road network: motorways and trunk roads

64. The site is currently well served by road as well as rail, with direct access onto the M69 motorway via Junction 2 and thereafter the wider Strategic Road Network (SRN).

65. The location of the site in the context of average drive journey time across the wider network is shown in Figure 3.

Figure 3 – Average drive journey time catchment area (45 minute)

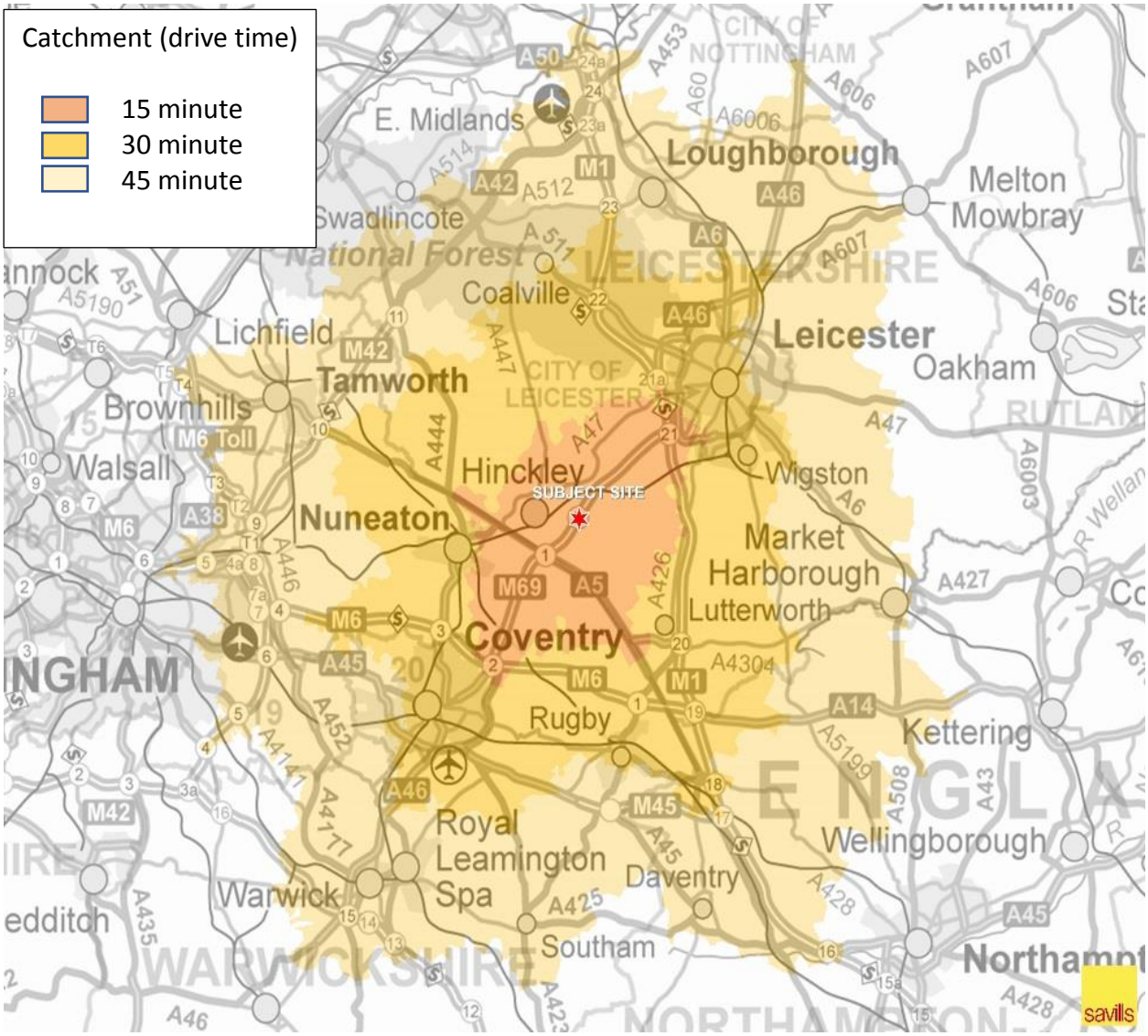


Image courtesy of Savills plc.

66. The following sections provide a brief summary of the SRN within close proximity of the site.

M69 motorway

67. The M69 affords the site with an immediate connection to the strategic road network, which runs directly adjacent to the east of the site. A new access serving the site directly onto Junction 2 is to be created.

68. To the south the M69 connects with junction 2 of the M6 on the outskirts of Coventry and to the north it connects with junction 21 of the M1 on the outskirts of Leicester.

69. M69 Junction 2 currently only has northern slip roads (northbound on-slip, and southbound off-slip). As part of the development access strategy, it is proposed to deliver a strategic improvement by delivering the southern slip roads (southbound on-slip, and northbound off-slip).

M6 Motorway

70. The M6 motorway is a major arterial route in the western side of England. To the east it provides a link to the M1 and Kettering (via the A14) and to the north with the A74 (M) at Carlisle (196 miles/316km).

71. More locally the M69 joins the M6 at junction 2 on the outskirts of Coventry which then continues onto the key regional conurbations of Birmingham (26 miles/42km) and Manchester (84 miles/135km).

M1 Motorway

72. The M1 is another key arterial route which runs up the central spine of England. To the south it provides a link to London (96 miles/154km) and to the north it links with Leeds (98 miles/158km).

73. More locally the M69 joins the M1 at M69 junction 3/M1 junction 21 on the outskirts of Leicester. The M1 then continues onto the key regional conurbations of Nottingham (35 miles/56km) to the north and Northampton (33 miles/52km) to the south.

A5

74. The A5 trunk road connects with M69 Junction 1 approximately 2.6 miles/4.2km south of the site access (and Junction 2), and acts as a key north – south link between the M42/Tamworth and the M1/M45/Milton Keynes.

75. The A5 is a single carriageway road within the vicinity of Hinckley. To the north of the M69 the road is subject to a speed limit of 40mph and to the south it is subject to a speed limit of 60mph (national speed limit).

76. Around 2 miles/3.2km to the south of the M69 the A5 turns into a grade separated dual carriageway.

77. To the north the A5 provides access from the M69 to both the recently developed Hinckley Commercial Park and the Teal Business Park.

78. Highways England have a scheme proposed for widening the section of the A5 between Dodwalls roundabout and the Longshoot junction, to create a dual carriageway and a shared use foot/cycleway[1]. The aims of the scheme are to relieve congestion, improve traffic flow and safety for all users.

79. Highways England is committed to delivering the scheme which is due to commence in 2020-21. The timescales for completion are currently unknown.

Local highway network

80. Access to the site is to be derived directly from M69 Junction 2, and the introduction of southerly slip roads ensures that the SRN can be fully utilised for travel to and from the site. Nonetheless, a comprehensive assessment of the local highway network is being undertaken, and this section describes the local highway network within the vicinity of the site.

B4669 Sapcote Rd/Hinckley Road

81. The B4669 runs in an east-west alignment immediately south of the site, and forms a grade-separated junction with the M69 motorway at Junction 2.

82. To the west the B4669 Sapcote Road provides a connection into Hinckley and to the east the B4669 Hinckley Road provides connections to the villages of Sapcote and Stoney Stanton.

83. The B4469 is a single carriageway road and within the vicinity of the site is subject to the national speed limit (60mph). On entry to the urban area of Hinckley this reduces to 40mph and then 30mph.

84. There are various side road junctions along the B4469 including the B578, Brookside and Park Road which serve residential areas in the southern part of Hinckley.

85. At the side road junction with Park Road the B4469 continues as the B590.

86. In the urban area of Hinckley there is generally footway provision on both sides of the road, and in the vicinity of the site a footway on the northern side of the carriageway links Hinckley with M69 Junction 2.

87. The carriageway is generally well lit in the urban area of Hinckley and at key junctions but is generally unlit in the rural environment between Hinckley and M69 Junction 2.

[1] https://highwaysengland.co.uk/projects/a5-dodwells-to-longshoot-widening/

88. To the east of M69 Junction 2 the B4669 provides a connection with the village of Sapcote and the B4114 Coventry Road to the south.

89. In this location the road is generally rural in nature and is subject to the national speed limit. When the road enters the village of Sapcote the speed limit reduces to 30mph.

90. Footway provision is generally provided on both sides of the carriageway within the urban area of Sapcote.

91. In Sapcote and at key junctions the carriageway is lit. However, in the rural settings the carriageway is generally unlit.

Burbage Common Road

92. Burbage Common Road is a rural lane which links the B4668 and the B581 passing through the northern part of the site.

93. The majority of the carriageway consists of a single track lane (3m wide) with intermittent passing places. It is primarily fronted by open fields with the occasional residential property and Woodhouse farm butchery. It is unlit and pedestrians/vehicles share the space.

94. On the northern boundary of the site it passes over the Felixstowe to Nuneaton railway via a railway bridge.

95. It is proposed that as part of the development Burbage Common Road will be stopped-up within the site boundary, with access to the site being retained for emergency vehicles only.

96. Access will be retained for existing properties along Burbage Common Road outside the limits of the Development Consent Order. Through movements, and those to and from the site, will be restricted.

97. The extent of Burbage Common Road to be stopped-up can be seen indicatively in Figure 12.

B590

98. The B590 connects with the arterial routes into the town of Hinckley including the B4669, Leicester Road, Hollycroft, B466 and Rugby Road. These roads act as the local distributor roads from the surrounding residential areas.

99. The B590 forms a circular route around the town centre. Therefore, this road prevents vehicles from having to pass through the town centre to travel from the south to the north or the east and the west of Hinckley.

100. The carriageway varies in width and generally connects with side roads via signalised or priority junctions with ghost island right turn lanes. The road is subject to a 30mph

speed limit.

101. The carriageway is generally well lit with footways on both sides which connect the Town Centre with the surrounding residential environment.

102. Along Hollier's Walk to the north of Hinckley Town Centre there is a time limited HGV restriction in place for vehicles over 7.5 tonnes between 1600 and 1000 except for loading.

103. The B590 where it is known locally as Hawley Road provides a connection with Hinckley Rail Station.

A47

104. The A47 is a major road which runs along the northern boundary of Hinckley. This is likely to act as a local route for vehicular movements accessing the site from the surrounding area which are not as well connected to the strategic road network. This would include villages such as Barwell and Kirkby Mallory and industrial sites such as the Caterpillar UK Ltd plant in the village of Peckleton.

105. To the west the A47 connects with the A5 and Nuneaton with Leicester City Centre to the east.

106. Within the area of Hinckley, the A47 is a 9 metre wide single carriageway road with no direct frontage. It has a segregated walking and cycling route on its southern boundary.

107. The A47 connects with amongst others the B4666, Stoke Road, B4667, B4668 and B581 via either roundabout or signalised junctions.

B581

108. The B581 runs from the A47 and the village of Barwell to the village of Stoney Stanton passing over the M69.

109. The road is primarily rural in nature with some intermittent residential frontage. It is subject to a 40mph speed limit to the north of the M69, the national speed limit (60mph) to the south of the M69 and 30mph within the village of Stoney Stanton.

110. It provides emergency vehicle access to the site via Burbage Common Road or via a connection with Hinckley Road/B4669 to the south of the site.

B4114 Coventry Road

111. The B4114 is an arterial road to the south of the site. It connects with the A5 to the west via a complex priority junction and to the east with the outskirts of Leicester and M1 Junction 21.

112. The B4114 provides access to a number of villages along the route including

Sharnford, Primethorpe, Croft, Littlethorpe, Sapcote, Stoney Stanton and Narborough.

113. The road is generally a single carriageway road with the exception of a small section within the vicinity of the village of Croft which widens to a dual carriageway with a central reservation.

114. Where there is no direct frontage to the carriageway it is generally unlit with no footway provision. Where the road passes through the villages of Sharnford and Narborough the road is generally well lit with footway provision in place.

115. The speed limit along the road varies from 30mph to 70mph national speed limit. There are no weight limit restrictions on the road with various lay-bys along the side of the carriageway.

B4668

116. The B4668 links the A47 with Hinckley Town Centre and passes Burbage Common. The road then continues into Hinckley where it is directly fronted by residential properties.

117. The B4668 is a single carriageway road with a minimum width of around 8 metres. It is generally well lit and has footway provision on both sides of the carriageway within the urban area.

118. Within Hinckley the road is subject to a 30mph speed limit. Outside the urban area the speed limit increases to 40mph and then 60mph. No weight or height restrictions are in place along the road.

B4667/Derby Road

119. The B4667 is a major arterial road which links the A47 with Hinckley Town Centre. Derby Road then provides a connection with the A590 which in turn connects with the B4669 and the site. Within Hinckley the road is directly fronted by residential properties.

120. Both roads are single carriageway with a minimum width of around 8 metres and are subject to 30mph speed limits. They are well lit and have footway provision on both sides. No weight restrictions are in place along either road.

Hollycroft/Stoke Road

121. Hollycroft and Stoke Road provides another connection into Hinckley Town Centre and to the A590 from the A47 and residential suburbs in north-western Hinckley. This connects with the development site via the B590 and B4669.

122. These roads pass through residential suburbs with direct residential frontage. Stoke Road has been traffic calmed, with speed reducing features in the form of speed

cushions, cycle lanes, and tiger teeth road markings.

123. The carriageways are a minimum of 6 metres wide, generally well-lit and have footway provision on both sides. The road is subject to a 30mph speed limit.

124. This road is also a major bus route into Hinckley.

B4666

125. The B4666 connects the B590 with the A5. This road therefore acts as a major route into Hinckley from the west and connects the western areas of Hinckley with the development site via the B590 and B4669.

126. This is a single carriageway road which is well lit. There is a shared use walking and cycling route which runs along the northern side of the carriageway and is a major bus route into the town.

127. The road is fronted directly by residential properties as well as commercial properties including Tungsten Park and Harrowbrook Industrial Estate.

Rugby Road

128. Rugby Road is another key link road which connects residential areas to the south-east of Hinckley to M69 Junction 1.

129. Again, this road has limited direct frontage and is subject to a 30mph to 40mph speed limit. The carriageway is generally well lit with a footway on the western side of the carriageway and a shared use walking and cycling path on the eastern side of the carriageway.

Brookside

130. Brookside is a local road which connects Rugby Road with the B4669. This connects the site with residential areas to the south-west of Hinckley and runs parallel to the B590.

131. The carriageway is generally around 6 metres wide with traffic calming measures in the form of speed humps in place. Off-road lay-bys for residential parking are generally provided on both sides of the carriageway.

132. The carriageway is well lit with pedestrian footways on both sides of the carriageway. The carriageway is also identified as suitable for on-road cycling by the provision of road markings on the carriageway edge.

Highway Safety

133. Preliminary personal injury accident (PIA) information has been derived from STATS19

data made publicly available by the Department for Transport (DfT) on an annual basis. The most recent five years of data available accounts for the period between 01st January 2012 and 31st December 2016.

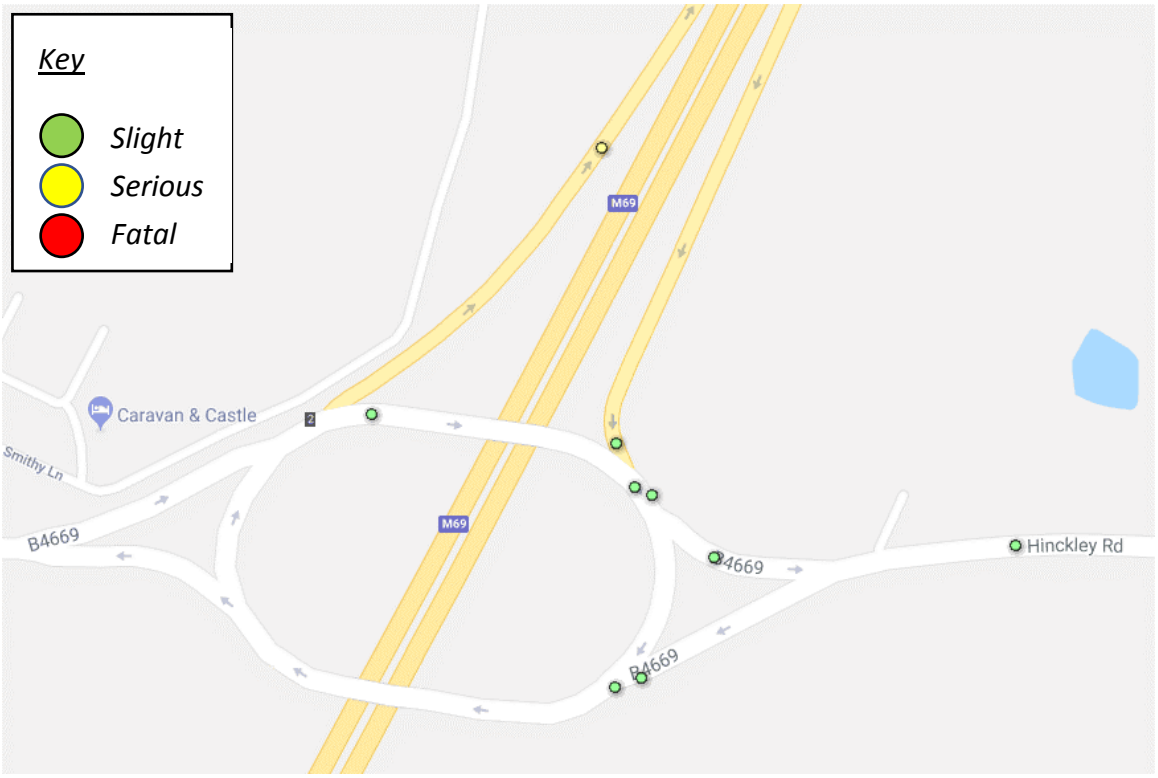
134. This information will be updated using more recent data once information has been derived from the Leicestershire County Council as the local highway authority.

135. The study area in which PIA's have been assessed and the PIA's which occurred therein are shown in Figure 4.

Figure 4 – Location and severity of personal injury accidents within the study area

136. A more detailed breakdown of the incidents which occurred at M69 Junction 2 directly adjacent to the site is shown in Figure 5.

Figure 5 - M69 Junction 2 PIAs



137. Figure 5 demonstrates that 9 incidents have occurred at M69 J2. These primarily occurred on the eastbound B4669 exit and approach.

138. One serious incident also occurred on the northbound slip road. This was a single vehicle incident.

139. The following provides a brief summary of the remaining incidents which occurred at the roundabout:

- Vehicle changing lanes collided with neighbouring vehicle
- Rear end shunt on approach to roundabout (x3)
- Vehicle failed to give way on entry to roundabout (x2)
- Vehicle lost control. Single vehicle incident (x2)

140. Whilst all incidents are regrettable, the relatively low number of incidents and the causation factors do not amount to a cluster or a pattern of incidents occurring. As such, it is not considered that there is an inherent highway safety concern that exists at M69 Junction 2.

141. As part of the Transport Assessment to be prepared in support of the proposed development PIA data will be obtained from Leicestershire CC as the local highway authority.

142. This will include a full assessment of PIA's in the study area where it is identified that a cluster of accidents have occurred. A more detailed review will also be undertaken where serious or fatal accidents have occurred.

143. This review will include causality factors with any obvious patterns / problems arising from the analysis raised. Where necessary, and the development is identified to have a material impact on operation and safety, mitigation measures will be developed.

Accessibility

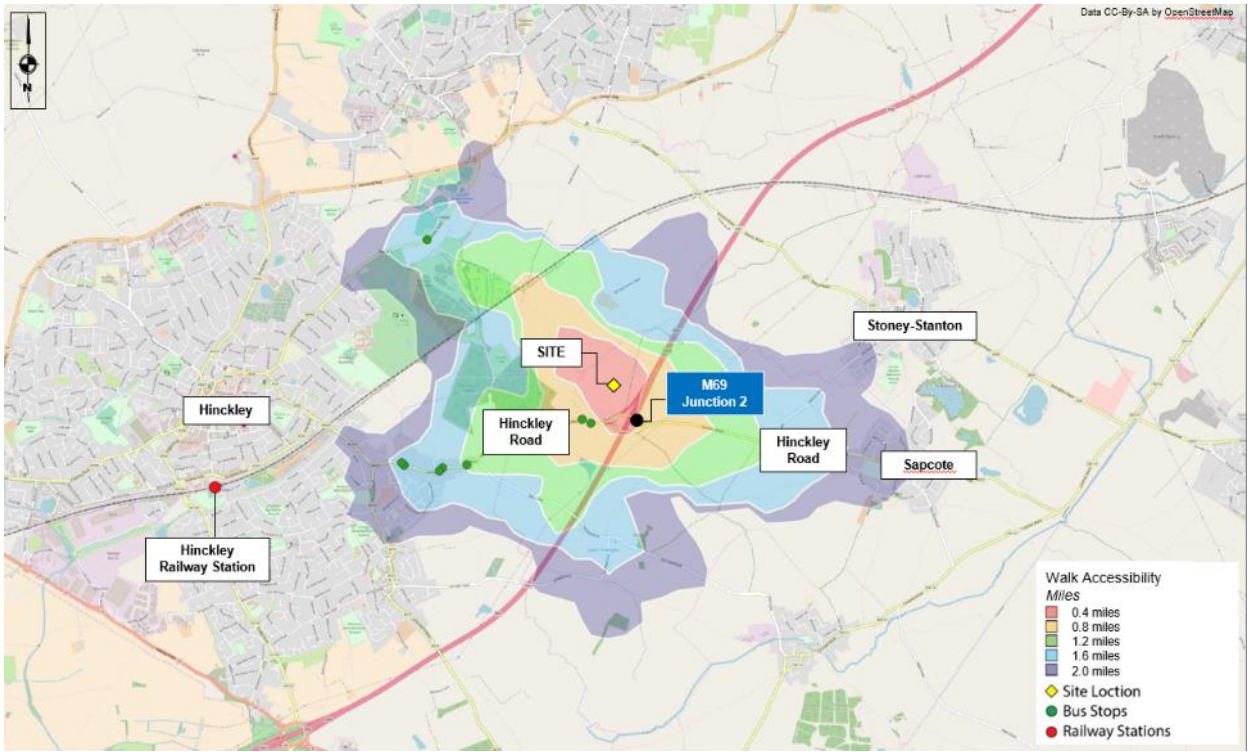
Accessibility on Foot

144. Paragraph 2.2 of TA91/05 Provision for Non-Motorised Users (Design Manual for Roads and Bridges, February 2005) states that 2 miles/3.2km is 'a distance that could easily be walked by the majority of people'. Paragraph 2.3 also continues by stating that 'Walking is used to access a wide variety of destinations including educational facilities, shops, and places of work, normally within a range of up to 2 miles' (3.2km).

145. In relation to shorter trips in particular, the CIHT publication Planning for Walking (section 2.1) states that across Britain about '*80% of journeys shorter than 1 mile (1.6km) are made wholly on foot*'.

146. Figure 6 provides an extract of the indicative walking catchment plan using GIS software - Basemap's Visography (TRACC) program which provides sustainable travel mapping. A copy of the full plan is provided in Appendix A.

Figure 6 – Walking distance isochrone plan



147. As demonstrated, the eastern edge of Hinckley and the specifically the residential areas of Lash Hill/Burbage are accessible by foot, and a continuous footway exists on the northern side of the B4669 Sapcote Road carriageway. This footway continues east into Sapcote which is also positioned within an acceptable walking distance.

148. Given the current low pedestrian demand, pedestrian facilities such as signalised pedestrian crossings, pedestrian refuge islands, dropped kerbs and tactile paving are limited in the vicinity of the site.

149. In summary, the infrastructure currently in place allows for pedestrian access to the site from the neighbouring residential areas within 2 miles (3.2km) of the site. It is therefore considered that walking provides a genuine alternative option to using the private car.

Accessibility by Cycle

150. Guidance set out in TA91/05 states in paragraph 2.11 that 'Cycling is used for accessing a variety of different destinations, including educational facilities shops and places of work, up to a range of around 5 miles (8km). Cycling is also undertaken as a leisure activity, often over much longer distances.'

151. Paragraph 2.9 also states that 5 miles (8km) is a distance '*that could easily be cycled by the majority* of people'.

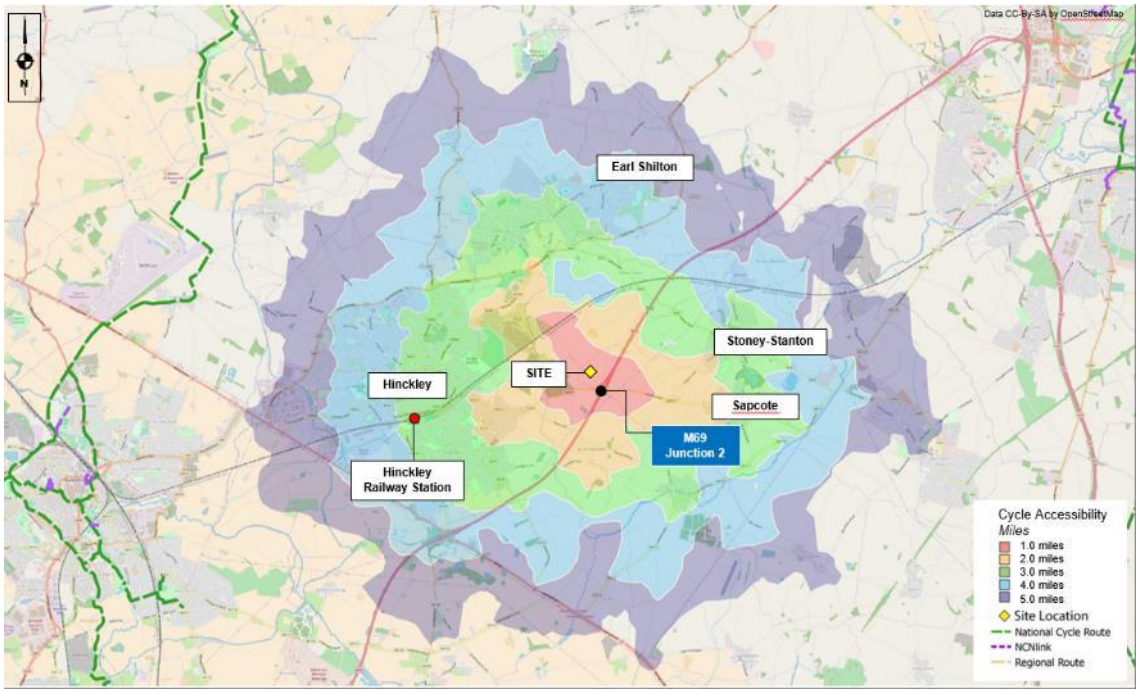
152. This is consistent with the statement in LTN02/08 Cycle Infrastructure Design

(paragraph 1.5.1) that '*for* commuter *journeys, a trip distance of over 5 miles (8km) is not* uncommon', and that '*Novice and occasional leisure cyclists will cycle longer distances where the cycle ride is the primary purpose of their journey. A round trip on a waymarked leisure route could easily involve distances of 20 to 30 miles (32 to 48km). Experienced cyclists will often be prepared to cycle longer distances for whatever journey purpose.*'

153. There are currently no dedicated cycle facilities in the immediate vicinity of the site. However, cycling on-road is considered a genuine option given the travel distances from nearby residential areas.

154. Figure 7 presents an extract of the 5 miles/8km cycling isochrone from the site. A copy of the cycling isochrone is provided in Appendix A.

Figure 7 – Cycling distance isochrone plan



155. As can be seen from Figure 7 above, Hinckley and the surrounding villages are situated within 5 miles/8km of the site. With the potential employment opportunities at the new development this provides an attractive alternative access option for residents.

156. Cycling is therefore considered to be a viable mode of transport for residents commuting to and from the site, and cycling offers a genuine alternative option to using the private car.

Accessibility by Public Transport

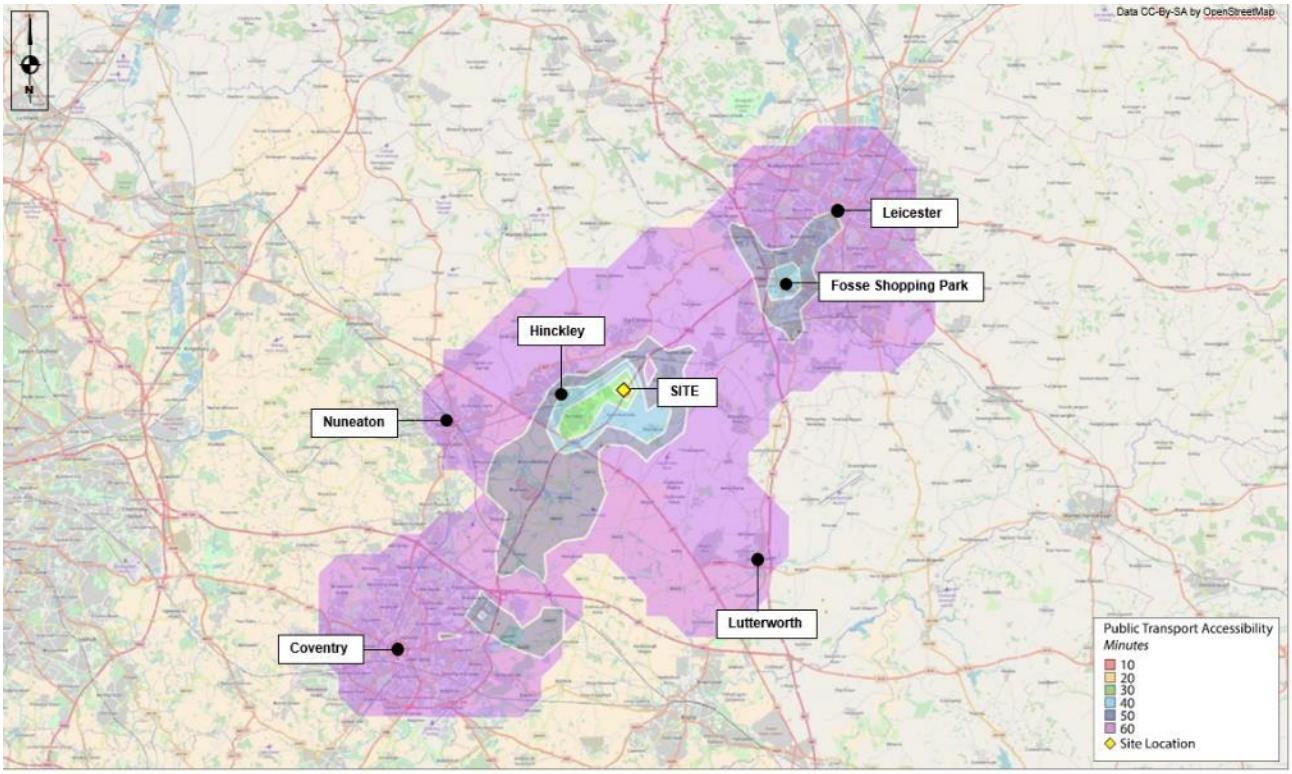
157. The location of development, within reach of the public transport network, is particularly important in terms of encouraging travel by this mode and supporting the

viability of public transport services.

158. With this in mind a calculation has been undertaken, again using GIS software - Basemap's Visography (TRACC) program, to illustrate the distance that can be travelled within 60 minutes by public transport (bus and rail) to and from the proposed development site. The time includes walking to/from the bus stops or railway station.

159. Figure 8 provides an extract of the public transport 60 minute catchment area. A copy of the full plan is provided in Appendix A.

Figure 8 – Existing public transport (60 Minute) isochrone plan



160. Figure 8 demonstrates that key areas such as Leicester, Coventry and Lutterworth amongst others are within a 60 minute public transport journey.

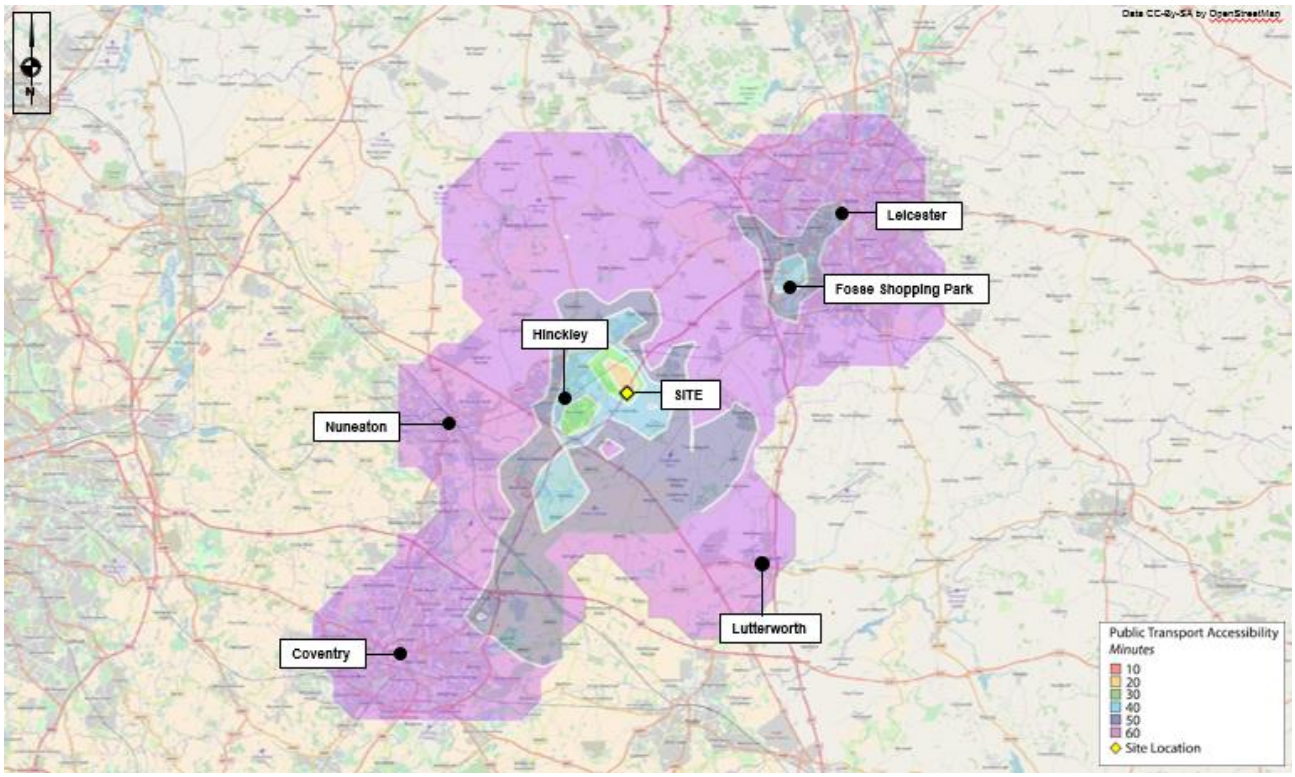
161. Public transport frequency, and journey times to and from the surrounding area would be improved as part of the development proposal. It is intended that bus services would serve the site directly and appropriate infrastructure would be provided within the site.

162. With the inclusion of bus stops within the site itself, accessibility is improved with journey time improved by around 15 – 20 minutes by virtue of not having to walk from the existing bus stops on the edge of the site.

163. The revised public transport accessibility plans, reflecting the proposed improved bus

services, is shown in Figure 9 and the full plan is included at Appendix A.

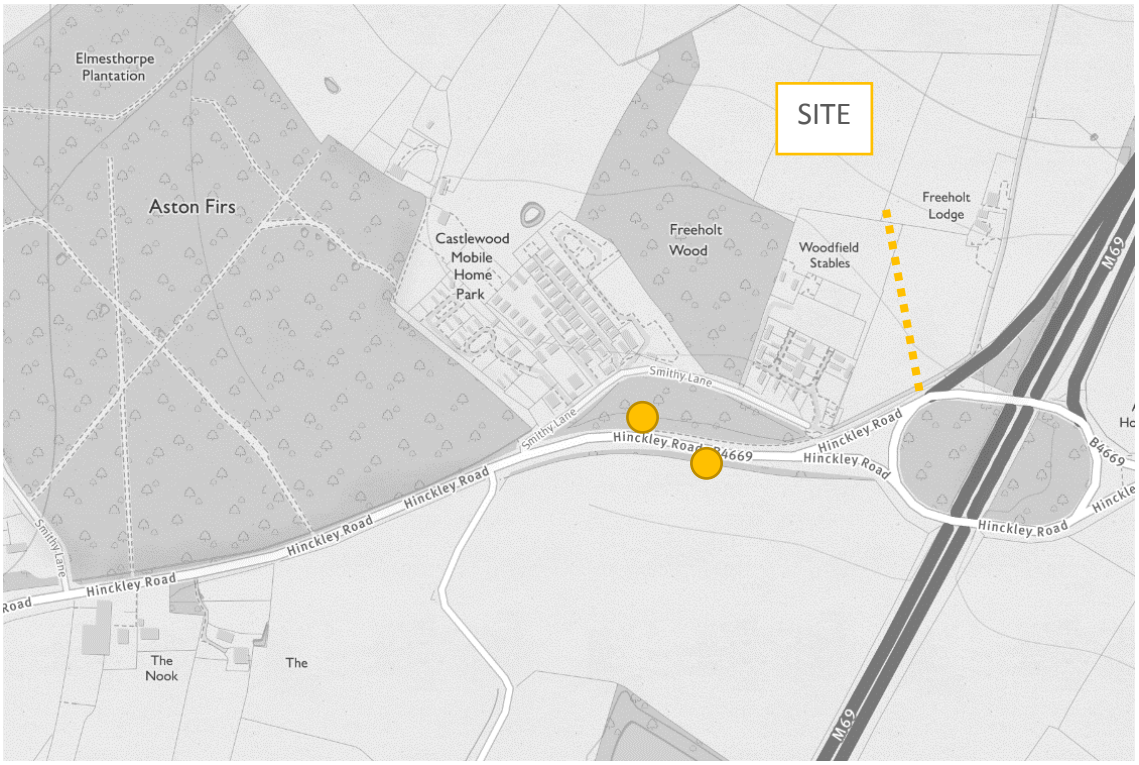
Figure 9 – Revised public transport (60 Minute) isochrone plan



Existing bus services

164. This site is accessible by bus, with the nearest bus stops located on the B4669 Hinkley Road approximately 100m to the south of the site, providing services in both directions. These bus stops benefit from a lay-by, timetable information and bus stop flag with their location shown in Figure 10.

Figure 10 – Location of existing bus stops



165. Table 2 summarises the services which operate from these stops.

Table 2 - Bus Timetable Summary – X6

Service Number	Route	Monday – Friday					Saturday			
		First	AM Peak (08:00-09:00)	PM Peak (17:00-18:00)	Last	Per Day	First	Peak (12:00 – 13:00)	Last	Per Day
X6	Leicester - Coventry	10:07	0	0	16:07	3	09:27	1	15:27	3
	Coventry - Leicester	09:42	0	0	15:42	3	09:32	1	15:32	3
Total		-	0	0	-	6	-	0	-	6

166. The X6 bus service provides a service to Leicester and Coventry with a number of intermediate stops including Hinckley and Burbage.

167. There is significant scope in extending this service as the full X6 service operates hourly and passes within close proximity to the site on a regular basis.

168. Currently, access to the centre of Hinckley can be obtained from stops approximately 1.2 miles/2km to the west along Sapcote Road which are serviced by the X55 service. This equates to a 25 minute walk or 6 minute cycle. The services offered from the Winchester Drive and Flamville Road bus stops is summarised in Table 3.

Table 3 - Bus Timetable Summary – X55

Service Number	Route	Monday – Friday					Saturday			
		First	AM Peak (08:00-09:00)	PM Peak (17:00-18:00)	Last	Per Day	First	Peak (12:00 – 13:00)	Last	Per Day
X55	Leicester – Hinckley	08:03	1	1	19:39	6	08:03	0	19:38	6
	Hinckley – Leicester	05:44	0	0	18:06	6	09:38	0	18:06	4
Total		-	1	1	-	12	-	0	-	10

169. It is therefore concluded that although limited there are bus services which can be used to access the site. At present the site is rural in nature and therefore the demand for bus service provision is currently not in place.

170. It is considered that with the introduction of employment opportunities which will be generated by the site there will be demand for enhanced bus services. The demand will ensure that competitive bus service provision can be introduced which in turn will ensure that the sustainable accessibility of the site is enhanced.

171. Direct connections with Hinckley Rail Station would be encouraged to ensure that interchange between bus and rail is a genuine alternative to travel by private car.

172. Should a new station be introduced at Stoney Stanton public transport connections between the site and the new station will be encouraged as this would provide alternative access to the site from the passenger rail network.

Rail

173. The nearest operational rail station to the proposed development site is currently

Hinckley Railway Station, located approximately 2.5 miles/4.0km to the west.

174. The station is located on the Felixstowe to Nuneaton railway and offers hourly regional services to Birmingham and Leicester, from where connections can be made to additional national destinations. It is served by CrossCountry Trains, with an average service frequency of 1 train per hour. Additional services in the peak hour run to Stansted Airport via Cambridge.

175. The Midlands Connect Strategy (as discussed above and further in the Rail topic paper) reports aspirations to increase the number of passenger trains on this section of line from the current 2 trains per hour in each direction up to 4 trains per hour.

176. This is outside of the likely walking distance threshold of 2 miles/3.2km but is within the cycling distance with average cycling time between the station and the site of around 13 minutes (based on cycling speed of 12 miles per hr or 19.2km/hr2). This is supported by the presence of 16 secure sheltered storage spaces for bicycles at the station.

177. The station also makes provision for a station building, ticket office, toilets, disabled access and a 70 space car park for which a charge applies. A plan of the station is shown in Figure 11.

Figure 11 - Hinckley Station Layout Plan

178. From the development site the station can also be accessed via the X55 bus service from Acton Flamville Road. This journey, including walking time from the site and from

[2] DfT Local Transport Note LTN2/08: Cycle Infrastructure Design

the Regent Street bus stop, takes around 30 minutes.

DEVELOPMENT PROPOSAL – ACCESS STRATEGY

Development proposal overview

179. The site will comprise of a national rail freight interchange and up to 850,000sqm of B8 warehousing facilities, with a combined footprint of up to 650,000sqm and up to a further 200,000sqm of mezzanine floor space.

180. The rail freight interchange operations are described under a separate chapter titled Rail Freight Terminal prepared by WSP and Baker Rose.

181. Ancillary facilities including office space, a lorry park with stop-over facilities (toilets, showers, café etc) will also be provided.

182. The illustrative site master plan and parameters plan for the site are included in Appendix B.

Site Access

M69 Junction 2

183. The site access is to be created directly onto the north-western side of M69 Junction 2, via a dual-carriageway connecting to the junction and extending in to the site.

184. M69 Junction 2 is a grade separated roundabout connecting the M69 motorway and the B4669 Hinckley Road. The capacity of the junction is high. With flows through the junction being relatively low, there is residual capacity to accommodate a significant increase in movements.

185. The junction currently only has northern slip roads (northbound-on, southbound-off) and this development will deliver the southern slip roads (southbound-on, northbound-off) and make the junction an 'all-movements' junction.

186. The introduction of southern slip roads enables development traffic to travel along its desire line and acts to more effectively distribute traffic across the junction and the wider strategic road network – minimising the potential impact the site may otherwise have on the local highway network.

187. The proposed junction is shown indicatively on the drawing included as Appendix A. The design is subject to further review following completion of detailed traffic modelling but presents a design on the basis of our current understanding.

188. There are opportunities to make further amendments to the junction should additional capacity modelling change the requirements. It is envisaged that this may consist of the following:

- Additional lanes/flaring at give-way points
- Signalisation (partial or whole)
- Circulatory signing/lining improvements
- Segregated left-turn lanes
- Pedestrian/cycling infrastructure upgrades

Emergency Access

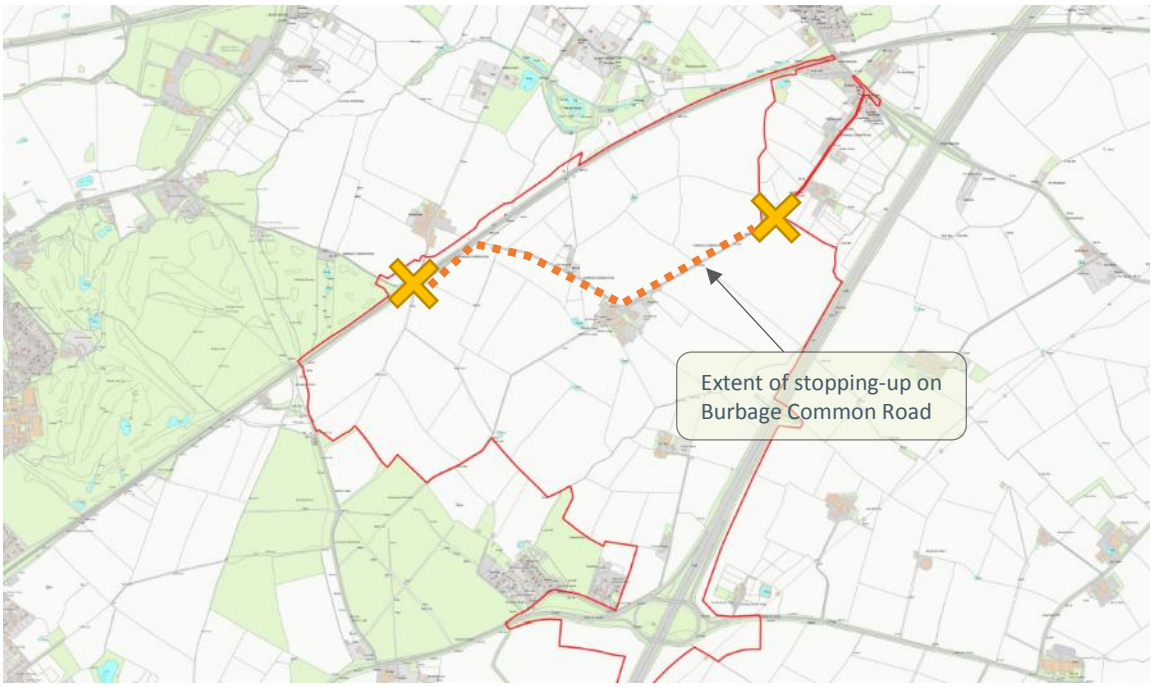
189. Primarily, access for emergency vehicles will be via the main site access at M69 Junction 2. The proposed dual-carriageway arrangement affords good capacity and flexibility for managing traffic in the event of an emergency.

190. However, in the unlikely event that an emergency occurs on site at a time when both sides of the carriageway of the M69 Junction 2 access are also unpassable, then Burbage Common Road naturally provides a highway connection in two locations along the site boundary. Burbage Common Road will therefore be available for use by emergency vehicles to serve the site as and when required.

191. Burbage Common Road will not be open to motor vehicles, and physical restrictions will be installed to enforce this such as lockable bollards and/or gates.

192. The location of these emergency access locations is shown in Figure 12.

Figure 12 – Extent of Burbage Common Road to be stopped-up



Construction Access

193. It is considered that construction vehicles would access the site via M69 Junction 2, as per the primary access. This will therefore be built out in the first instance to accommodate vehicular movements from the outset.

194. A construction traffic management plan and method statement will be agreed through the application process, and this will identify the full construction strategy and any other means of access that might be necessary during certain phases of the construction – such as along Smithy Lane for the initial construction phase (before/whilst the access is being constructed for example). This is to be confirmed in agreement/to the approval of the approving authorities.

Site layout/operation

195. The layout/operation of the site will be finalised with regard to the following principles:

- Dual-carriageway access which continues within the site up until the point that a 'loop road' is introduced
- The access roads will be designed to adoptable standards in accordance with local guidance/standards (LCC Highways Design Guide/DMRB)
- Pedestrian, equestrian and cycling infrastructure will be provided adjacent to the internal highway network. This will include crossing facilities.
- All PRoW routes running through the site will be retained or diverted.
- An emergency/traffic management plan will be prepared, this will enable contra-flow running on the dual carriageway access road in the event of an obstruction or the need to close one side of the carriageway
- Internal road junctions and visibility splays (at junctions and forward visibility) will be designed to ensure that they meet the required operational and safety standards
- The number of culs-de-sac within the site will be limited. Where these are however necessary appropriate turning areas, minimising reversing manoeuvres, will be provided.
- The suitability of the internal estate roads, servicing yards, turning heads and various access points will be checked by carrying out detailed swept path analysis of the internal site layout.

Parking

General Use

196. Car parking within the site will be provided in line with requirements set out in Section DG14 of part 3 of the LCC Highways Design Guide. This states that for sites in and around urban towns (Policy RPG8 includes Hinckley as an urban town in Leicestershire) the following car parking provision should be provided on-site:

- B8 Warehousing: 1 space for every 180sqm

Disabled car parking

197. Disabled car parking within the site will be provided in line with requirements set out in Table DG12 of the LCC Highway design guide states that provision for the following disabled car parking should be accounted for:

- For car parking areas under 200 spaces = 5% of total parking space
- For car parking areas over and above 200 spaces = 6 bays + 2% of total parking spaces.

Service/Lorry Parking

198. Lorry parking within the site will be provided in line with requirements set out in Table DG13 of the LCC Highway design guide. This states that one lorry space for every 400sqm of either B2 general industrial or B8 storage and distribution warehousing should be provided.

199. In addition, a lorry parking area will be provided on the south-eastern boundary of the site to accommodate additional lorry demand and for waiting/resting purposes.

200. Parking provision for the rail freight terminal will require a more bespoke approach, and an appropriate level of parking for the expected level of operation will be demonstrated.

OUR APPROACH TO ASSESSMENT

201. A comprehensive assessment is currently being undertaken in order to understand and mitigate the impacts of the development upon the local highway network.

202. This assessment follows the current EIA regulations (2017) and other pertinent local and national guidance/policy documents as set out earlier in this chapter. A fully compliant Transport Chapter will be prepared for inclusion in the Environmental Statement (ES) with the submission consisting of:

- ES Transport Chapter
- Transport Assessment (TA)
- Framework Travel Plan (TP)
- Draft Construction Traffic Management Plan (CTMP)
- Operational HGV Routing Strategy

203. The above documents will all be submitted to the Planning Inspectorate (PINS) as part of the Development Consent Order (DCO) application.

204. In preparation, and to agree the assessment methodologies, thorough consultation is being undertaken. This includes the submission of an EIA Scoping Report for which comments have been received and will continue to be considered through the process, and regular highway meetings with local authorities are being held. Attendees include Highways England (HE), Leicestershire County Council (LCC) as the local highway authority (LHA), Blaby District Council as the local planning authority, and planning/highway representatives from the neighbouring Hinckley and Bosworth Borough Council.

205. Further meetings/submissions will continue to be made to local councils and stakeholders.

Scope of reports

Scope of the ES Transport Chapter

206. The scope of the ES Transport Chapter will include:

- Introduction
- Scope and methodology
- Consultation

- Statutory and planning context
- Existing environment
- Predicted impacts
- Mitigation
- Residual effects and mitigation
- Summary of effects

207. In line with guidance set out in the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 the effects as set out in Table 4 will be considered within the transport chapter for the ES.

Table 4 - Category of effects

Effects scoped in and considered within the Transport Chapter	Effects scoped in and considered in chapters elsewhere in the ES
• Severance • Driver Delay • Pedestrian Delay • Pedestrian Amenity • Fear and Intimidation • Accidents and Safety • Climate change	• Air Quality • Noise • Landscape • Ecology • Cultural Heritage • Flood Risk • Hydrogeology • Ground Conditions • Materials and Waste • Energy

Scope of Transport Assessment

208. The Transport Assessment will be subdivided into the following sections:

- Introduction
- Local, Regional and National Policy

- Existing Highway Conditions (SRN/local highway network and surrounding villages)
- Accessibility
- Development Proposal
- Transport Strategy
- Trip Generation and Distribution
- Traffic Impact Analysis
- Mitigation
- Summary and Conclusions

Scope of the Framework Travel Plan

209. As well as a Transport Assessment a Travel Plan will also be prepared for the site which will set out initiatives and measures to be brought forward to promote and enhance the sustainable accessibility of the site for staff and visitors.

210. The scope of the travel plan will include:

- Introduction
- Accessibility/baseline review
- Aims/objectives
- Mode shift target setting
- Measures and initiatives
- Programme of monitoring and review

Scope of the Draft Construction Traffic Management Plan

211. In support of the proposed development a Framework Construction Traffic Management Plan (CTMP) will be produced. All construction activities will be obliged to follow the procedures as set out herein. The Framework CTMP would be expanded by the lead contractor (once appointed) who would produce a Full CTMP in line with their operational procedures and additional information.

212. The scope of the CTMP is set out as follows:

- Introduction

- Existing Situation
- Construction Programme and Vehicle Movements
- Construction Traffic Routes
- Construction Traffic Management
- Construction Workforce
- Noise, Environment Conditions and Waste Management
- Monitoring and Mitigation

Scope of the Operational HGV Routing Strategy

213. A Framework Logistics Management plan (operational HGV routing strategy) will be prepared for the site as a whole. The purpose is to ensure that traffic and travel in respect of route choices and timing of movements is controlled as far as practical, in agreement with the LPA/HA/HE, and enforceable in planning.

214. It is recognised that each organisation within the site is likely to have different requirements with regard to their operational procedures. Therefore, in the future all organisations on the site would be expected to develop their own Logistics Management Plans that accord with the framework.

215. The scope of the LMP is set out as follows:

- Introduction
- Site Layout including servicing arrangements
- Rail operations, likely frequency and load capacity
- HGV routing on the local highway network including vehicle types, frequency and restrictions
- Internal on-site procedures including external HGV's waiting for rail terminal capacity

Modelling of traffic impacts

216. Leicestershire County Council hold a strategic traffic model which is used for the purposes of assessing changes to the road network. Two versions of this model exist, the Leicester and Leicestershire Integrated Transport Model (LLITM) and the Pan Regional Transport Model (PRTM). For all intents and purposes, the PRTM and LLITM

are comparable, however the PRTM covers a wider area and is used to assess impacts beyond the Leicestershire administrative boundaries.

217. The Leicester CC modelling team, with support from AECOM, have been commissioned to assess the impacts of the development using the PRTM.

218. The LCC website provides a useful summary of what the LLITM model is, and this text is reproduced below but adjusted for PRTM context:

What is PRTM?

219. The PRTM is a computer-based programme, which can predict what will happen if we make changes to the road or transport network in Leicester and Leicestershire. Data is fed into the model and it tells us what will happen for example, to traffic patterns if we built a new bypass, a new bus station or make changes to bus fares. PRTM is made up of 8 different components which can be run together or independently depending on the type of policy or scheme you are testing.

What can PRTM be used for?

220. Over the next 20 years, thousands more houses will be built across the county to meet the demands of a growing population. Building houses in one town will affect travel to Leicester and other towns and may impact large areas of the strategic road network (SRN). PRTM can help in planning sustainable locations where housing and employment should be located to minimise this impact.

221. Amongst other things the PRTM can be used to:

- Inform development of transport and land-use policies/strategies
- Provide input into the appraisal of individual transport schemes/strategies under different land-use/economic scenarios
- Assist with developing business cases that will be acceptable to the Department for Transport for central government funding
- Look at proposed housing growth and transport infrastructure to assess the environmental impacts, namely air quality, noise and CO2 emissions

222. The model contains all roads in the area and will provides us with an indication of change/impact arising as a result of the proposals.

223. The future years of 2026 and 2036 are being assessed. These include traffic and congestion growth arising from other key committed developments and plan allocations as included in the PRTM model, the LTP and permitted through the planning system. The scenarios that are being tested for which outputs will be provided include:

1. Baseline conditions without development, without M69 J2 slip roads – for comparison purposes

2. Baseline conditions without development, **with** M69 J2 slip roads – this will allow for an understanding of the changes in background traffic distribution arising from the new southern slip roads and M69 J2 becoming an 'all-movements' junction.

3. Baseline conditions **with** development, **without** M69 J2 slip roads - this will provide us with an assessment of impacts arising from the development before the inclusion of any associated infrastructure improvements

4. Baseline conditions **with** development, **with** M69 J2 slip roads - this will provide us with an assessment of impacts arising from the development and inform where mitigation is necessary

5. Baseline conditions **with** development, **with** M69 J2 slip roads, **with** mitigation - this will assess the highway network with mitigation schemes in place, and demonstrate the effectiveness of the mitigation strategy

224. The above PRTM looks at the effects of congestion across the network as a whole and informs further detailed junction modelling with respect to the operation of the individual junctions. Where further detailed modelling is identified to be required this will be carried out using industry-standard software packages (dependent on type of junction) including Junctions 9, Linsig v3 and VISSIM microsimulation software.

225. The assessment will consider its impacts during any/all sensitive periods across the day. This will include the network peak hours of 08:00-09:00 and 17:00-18:00 which are anticipated to be the periods where the cumulative traffic levels (network peak + development trips) are highest. Assessment of other notable periods (such as shift changeover times) will be identified and agreed with the approving authorities.

226. The provision of an all-movements junction at M69 Junction 2 will act to redistribute background traffic on the network, and provide greater accessibility to the strategic road network. This is a scenario that is being modelled so that the level of background traffic diversion is fully understood.

227. As a general rule, the introduction of the slip roads will act to redistribute background traffic, resulting in traffic reductions in some locations and an increase in others. The development will generate traffic and with the introduction of the slip roads we expect a high proportion of development traffic to use the SRN.

228. The modelling study area is extensive, and we anticipate the impacts to be contained broadly within the area between Leicester to the north, Coventry to the south, and the M1 and M42 motorways east and west respectively.

229. The mitigation strategy will be prepared once the outcome of the impact assessment is understood, and the model re-run with the mitigation schemes incorporated.

230. The results of the analysis will be quantified as part of the Transport Assessment.

THE LIKELY MAIN EFFECTS OF THE PROPOSALS

231. The EIA will assess the effects of the proposals upon the following receptors:

- Severance
- Driver Delay
- Pedestrian Delay
- Pedestrian Amenity
- Fear and Intimidation
- Accidents and Safety
- Climate change

232. The extent/scope of assessment will be informed by the PRTM, which will inform where and at what level changes in traffic levels are expected to occur.

Trip Generation

233. The proposed strategic rail freight terminal and the associated warehousing would generate the following trip types:

- Rail freight terminal:
  - HGV trips internal
  - HGV trips external
  - Employee/visitor trips
- B8 Warehousing with rail freight terminal operational:
  - HGV trips internal
  - HGV trips external
  - Employee/visitor trips
- B8 Warehousing with rail freight terminal not operational (early phase

development):

- HGV trips external
- Employee/visitor trips

234. The design and assessment of the rail freight terminal is being led by WSP and Baker Rose, who have also undertaken a bespoke trip generation exercise linked directly to the estimated terminal handling capacities.

235. A number of factors impact the capacity of a terminal:

- Track Capacity = the number of trains that can be unloaded at one time
- Track Utilisation = the number of trains per day that can be unloaded on each track
- Installed Crane Capacity = Lifts per hour X operational hours per day X number of cranes
- Container storage capacity
- Train length
- Operating days per annum
- Operating efficiency

236. To ascertain trip rates for the Hinckley NRFI development proposal, a review of relevant planning history has been undertaken to identify other rail freight interchange proposals, and the following sites are considered as comparable to the Hinckley proposal:

- Daventry International Rail Freight Terminal (DIRFT III)
- West Midlands Interchange
- East Midlands Gateway
- Rail Central
- Northampton Gateway

237. The trip generation of the proposal at Hinckley will be calculated and agreement will be sought from LCC and HE.

Initial extent of assessment

238. The PRTM assessment will determine the impact of the development across the network, and in turn this will determine which junctions/links might be adversely and materially affected, and requiring more detailed analysis.

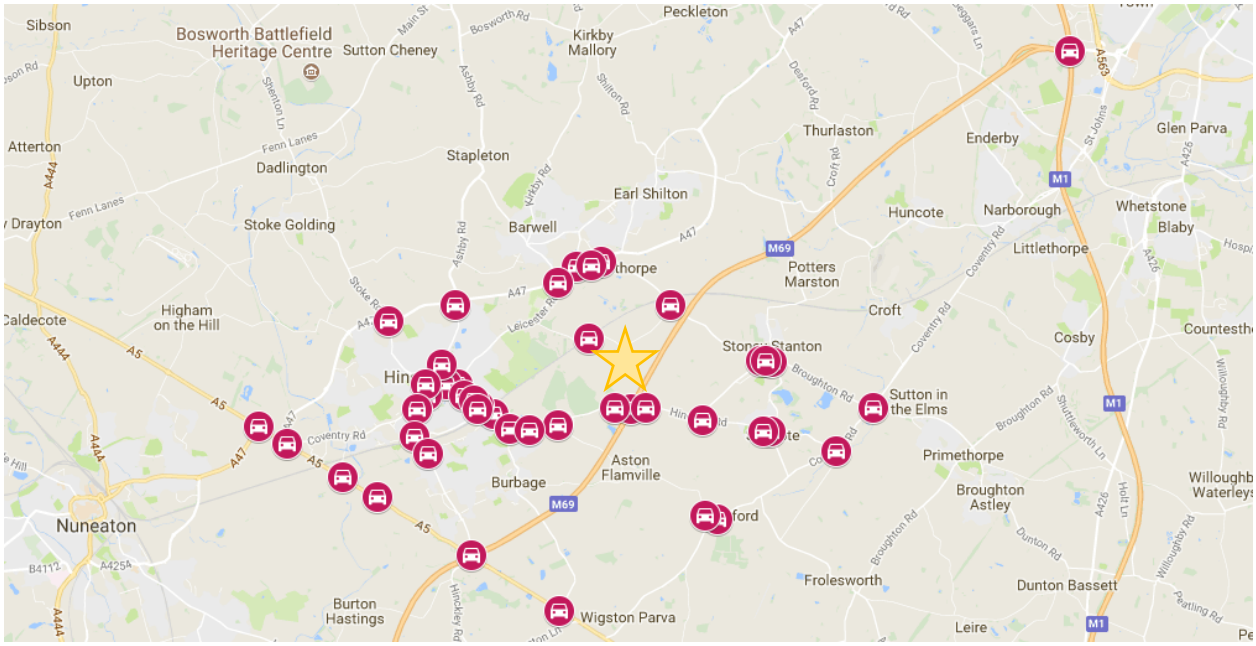
239. To undertake a more detailed analysis, we will need to collect traffic data – this typically takes the form of junction turning and queue counts. The modelling is a lengthy process, and so in advance of the outputs we have sought to pre-empt where the effects of the proposal might reasonably be expected, so that we can begin collecting data ahead of the consultation and begin considering the impacts.

240. Whilst the PRTM will provide the conclusive need (or not) for detailed modelling of individual junctions, in advance of this, we have considered the following sources of information in order to identify which junctions may require modelling:

- Engineering judgement
- EIA scoping comments received from local authorities and stakeholders
- Review of typical traffic conditions
- PRTM initial baseline outputs: indicative Volume to Capacity ratios (base traffic conditions only)
- Comments/discussion with LCC, HE and HBBC

241. Taking into account the above, we have identified a number of junctions/links that may require further/more detailed analysis upon completion of the PRTM. These indicative locations are shown in Figure 13 and set out in Table 5.

Figure 13 - Traffic survey locations



242. Data will be collected by numerous means – from the PRTM model itself and supplemented with specifically commissioned traffic surveys using an independent and specialist traffic survey company or through purchasing data that LCC hold (if relevant/appropriate).

Table 5 - junction and link traffic survey locations

Junction Turning Counts – manual or video surveys carried out at junctions followed by analysis by enumerators of vehicles turning to/from individual arms of the junction. These counts will also include queue surveys at the individual arms of the junctions, and journey time information across the larger grade separated junctions.		
• B4669 Burbage Rd/Brookside • B4668 Leicester Rd/B590 • Derby Rd/Holliers Walk/Leicester Rd • Mansion St/B590/Lower Bond Street • Upper Bond St/Derby/Ashby Rd • Upper Bond St/Hollycroft/Trinity Lane • B4667/Coventry Rd/B590/B4666	• Burbage Common Rd/B581 • A5/Logix Rd • A5/Hammonds Way • A5/B4666/A47 • A47/A5 • Rugby Rd/Brookside • Stoke Rd/A47 • B4669 Sapcote Rd/Aston Flamville Rd • B578/B4669 Sapcote Rd/B4669 Burbage Rd	• The Common Barwell/A47/B4668 Leicester Rd • Hinckley Rd/New Rd/B581 • New Rd/Long St/Broughton Rd • B4669/Stanton Lane • Leicester Rd/Grace Rd/Sharnford Rd • Coventry Rd/B581 Broughton Rd

• Westfield Rd/B590/Hawley Rd/Rugby Rd • Ashby Rd/A47 • M69 J1/A5	• B4669/B590 Park Rd/B590 • London Rd/B590 • Leicester Rd/A47 • A47/B581	• B4669 Leicester Rd/B4114 Coventry Rd • A5/B578 Lutterworth Rd • M1 J21/M69 J3 • M69 J2/B4669
Automated Traffic Counts - two rubber tubes laid across the carriageway linked to a road side recorder box. These tubes can measure both speed and number of vehicle movements sorted by classification		
• A47 • New Rd, Stoney Stanton • B4668 Leicester Rd • B590 • Park Rd • Sapcote Rd	• B4114 East • Aston Lane • B4669 Sapcote Rd • B4669 Hinckley Rd • Burbage Common Road	

PROPOSED APPROACH TO MITIGATION

243. Our approach to mitigation is informed by over-arching planning policy tests, as set out in the NPPF, which states:

54. Local planning authorities should consider whether otherwise unacceptable development could be made acceptable through the use of conditions or planning obligations. Planning obligations should only be used where it is not possible to address unacceptable impacts through a planning condition.

55. Planning conditions should be kept to a minimum and only imposed where they are necessary, relevant to planning and to the development to be permitted, enforceable, precise and reasonable in all other respects. Agreeing conditions early is beneficial to all parties involved in the process and can speed up decision making. Conditions that are required to be discharged before development commences should be avoided, unless there is a clear justification23.

56. Planning obligations must only be sought where they meet all of the following tests:

- *necessary to make the development acceptable in planning terms;*
- *directly related to the development; and*
- *fairly and reasonably related in scale and kind to the development.*

244. The approach to mitigation must therefore be led by the assessment of impacts, with a package of measures arising that are necessary to make the development acceptable and directly related to the scale of impact.

245. The development mitigation package will take a three-pronged approach:

- Inherent design/operational matters
- Imposed operational/management measures
- Scheme/package of off-site highway improvements

Inherent design/operational matters

246. Matters such as:

- Site access design
- M69 Junction 2 southern slip road provision

- Internal road design (dual carriageway/loop roads)
- Management of alternative access options (emergency accesses for example)
- On site facilities (lorry park with stop-over facilities (toilets, showers, café etc))
- Parking provision
- Typical operating hours/shift times
- Synergies of rail freight terminal and associated warehousing operations
- Provision of on-site public transport infrastructure

Imposed operational/management measures

247. Matters such as:

- Construction Traffic Management Plan
- Logistics Management Plan
- Vehicle routing plans/restrictions
- Travel Plan

Off-site highway improvements

248. Matters such as:

- Pedestrian/cycle infrastructure upgrades
- Public transport provision/upgrades
- Junction capacity improvements, e.g.:
  - Lane management
  - Additional lane/flares
  - Signalisation (full or partial)
- Traffic calming/safety measures
- Traffic management measures

NEXT STEPS – WORK PROGRAMMED TO INFORM THE PEIR AND THE ES

249. A significant amount of assessment is now needed following the consultation and in advance of submission. This includes:

- Collate all comments received at public consultations and formulate an understanding of local areas of concern
- Continue to liaise with stakeholders and approving authorities
- Agree key modelling parameters with approving authorities (assessment methodologies, trip generation, distribution etc)
- Instruct strategic modelling (PRTM) and obtain results
- Using the above to identify detailed modelling requirements (individual junctions), undertake detailed analysis of impacts and formulate mitigation package
- Re-run strategic modelling (PRTM) with mitigation packages
- Finalise M69 Junction 2 (site access design)
- Masterplanning inputs
- Non-motorised user strategies/design progressing
- Progression of all application documents, including:
- Environmental Statement Transport Chapter
- Transport Assessment
- Travel Plan
- Construction Traffic Management Plan
- Operational HGV routing strategy
- Ongoing stakeholder engagement throughout

Hydrock - October 2018

GLOSSARY OF TERMS

ATC	Automatic Traffic Count
BDC	Blaby District Council
CTMP	Construction Traffic Management Plan
DCO	Development Consent Order
DMRB	Design Manual for Roads and Bridges
DPD	Development Plan Documents
EIA	Environmental Impact Assessment
ES	Environmental Statement
HBBC	Hinckley and Bosworth Borough Council
HE	Highways England
LCC	Leicestershire County Council
LHA	Local Highway Authority
LLITM	Leicester and Leicestershire Integrated Transport Model
LMP	Logistics Management Plan
LPA	Local Planning Authority
LTP	Local Transport Plan
MfS	Manual for Streets
NPPF	National Planning Policy Framework
NPS	National Policy Statement
NRFI	National Rail Freight Interchange
NSIP	Nationally Significant Infrastructure Project
PINS	Planning Inspectorate
PPG	Planning Practice Guidance
PRTM	Pan Regional Transport Model
SRFI	Strategic Rail Freight Interchange
SRN	Strategic Road Network
TA	Transport Assessment
TP	Travel Plan

APPENDIX A – PREFERRED ROUNDABOUT LAYOUT