

Tritax Symmetry (Hinckley) Limited

HINCKLEY NATIONAL RAIL FREIGHT INTERCHANGE

The Hinckley National Rail Freight Interchange Development Consent Order

Project reference TR050007

Appendix 2 - Sapcote Technical Note

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Planning Act 2008

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TRANSPORT & INFRASTRUCTURE

Tritax Symmetry (Hinckley) Ltd
Hinckley National Rail Freight
Interchange
Sapcote Highway Mitigation Technical
Note

TRANSPORT & INFRASTRUCTURE

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EXECUTIVE SUMMARY

EXECUTIVE SUMMARY	
Introduction	This summary sets out the Applicant's overall response to the proposals within the village of Sapcote against the points made within the Secretary of State for Transport's letter dated 10 th September 2024
Effect of Development on the Village of Sapcote	<p>The B4669 runs west to east through Sapcote. There is no environmental weight restriction in place as the route is a classified B road with HGVs permitted. PRTM (Leicestershire County Council's strategic traffic model) shows that 160 HGVs per day use the route westbound and 35 HGVs per day use the route eastbound in the existing scenario.</p> <p>The B4669 is a prohibited route for HGVs from HNRFI under the proposed HGV management strategy and assuming the successful implementation of the HGV Route Management Plan and Strategy, no development HGVs will use the route.</p> <p>The provision of south facing slip roads at M69 Junction 2 results in PRTM forecasting some 'background traffic' (i.e. existing HGV traffic on the road network) re-routing via the B4669 through Sapcote. Predominantly these route away from existing villages and urban areas such as Sharnford, Hinckley and Burbage, providing betterment at these locations.</p> <p>The PRTM forecasts that at opening year (2026) when the J2 south facing slip roads are opened, excluding development traffic for the reason listed above, there will be an increase of 10 HGVs travelling westbound and 40 HGVs travelling eastbound per day via Sapcote on the B4669 (Link 41). The total forecast increase in HGV traffic is 25.6% daily.</p>
Existing Situation in Sapcote Village	<p>To the eastern and western extents of the village, the B4669 is relatively wide and straight. Within the village there are regular highway features such as traffic islands, Zebra crossings, single file sections and carriageway narrowings to enhance pedestrian connectivity, control vehicle speeds and retain the character of the village.</p> <p>Through the central section of the village, the B4669 is narrow, with substandard highway features, notably:</p> <ul style="list-style-type: none"> • Outside the Co-op at the junctions with Stanton Road and Church Street. This area has several sub-standard highway features including an irregular and inappropriately used bus lay-by, uncontrolled crossing points and very narrow footways; and • East of the Co-op around the New Road junction. The footway on the north of the carriageway is very narrow and the carriageway through this section sufficiently narrow that two large vehicles have limited space to pass easily and are observed to drive with caution through this narrow section as evidenced by the recorded low speeds. <p>The above are common with many historic village settings.</p>
Approach to Sapcote Village during DCO Examination	<p>While the other highway infrastructure works associated with the HNRFI scheme are designed to alleviate capacity issues at various junctions or provide access to the development, the mitigation in Sapcote is <u>not</u> provided to address a peak hour capacity issue but to address an increase in <u>daily</u> traffic through the village.</p> <p>The Applicant made use of the principles within the Traffic in Villages Toolkit¹ which seeks to enhance pedestrian environment, reduce vehicle speeds,</p>

¹ <https://hamilton-baillie.com/villages-and-rural-traffic/>

	<p>increase driver awareness and make routes through villages less attractive. This toolkit was used to inform proposed mitigation in the village of Baginton as part of the Coventry Giga-Factory scheme.</p> <p>The approach is to provide a mitigation scheme to address the increase in traffic at <u>opening year</u> and allow provision within the HGV Route Management Plan and Strategy to monitor HGV numbers through the village quarterly and provide a fund to enable the local councils, in partnership with the local highway authority, to implement further mitigation in future should HGV numbers continue to increase.</p> <p>Given the concerns identified around the area outside the Co-op, improvements included a new Zebra crossing to improve the north to south link between Church Street and Stanton Road, footway widening and an improved area outside the Co-op (which is currently designated as a bus stop, but is illegally used for parking by Co-op customers and deliveries).</p> <p>Further mitigation in Sapcote was not proposed at opening year because the wider aim was to make this route unattractive to HGV traffic, and comprehensive mitigation to enable easy passage of HGVs throughout the village would be contrary to this aim.</p> <p>Any scheme implemented would be subject to Stage 3 and Stage 4 Road Safety Audits in accordance with GG 119² which would enable validation and monitoring of the works implemented from a safety perspective, with the HGV Route Management Plan and Strategy enabling further phases of mitigation to be implemented using the fund provided.</p>
<p>Examining Authority's Interpretation of Sapcote Proposals</p>	<p>The ExA stated that they were not satisfied with the Applicant's response to the Stage 1 Road Safety Audit (RSA1) [REP8-025] in the area outside the Co-op. The response in question related to the use of the area that is currently a bus lay-by as a 'shared surface' with school buses permitted to enter the space as required.</p> <p>The ExA referred to the vehicle tracking drawings produced during the examination [Appendix B to REP5-004] and stated that '<i>as can be seen there has been no realignment to allow HGVs to pass</i>'. This is incorrect as the proposals for the area in question includes substantial kerb realignment to improve pedestrian visibility, and removal of the central island which currently presents a substantial obstacle, with HGVs overrunning the footway. The Applicant's proposals also provide wider footway provision on the north and south sides of the B4669. The realignment in question now permits HGVs to pass each other through this section of carriageway which is not the case at present.</p> <p>The ExA went on to quote the HGV AADT figures in the village, but use the 2036 figures which <u>include</u> HNRFI development traffic. As explained above, this is inappropriate because it does not take into account the Applicant's approach to mitigate HGV effects at <u>opening year</u> and subsequently monitor effects thereafter.</p> <p>The ExA used the 2036 with development HGV numbers to draw the conclusion that '<i>there is a much higher likelihood that two HGVs travelling in opposite directions would coincide in travelling on a specific section of road</i>'. They went on to conclude that there is a high likelihood that rather than waiting to allow oncoming HGVs to pass, they would overrun footways.</p> <p>Furthermore, the ExA concluded that the high number of people who would be waiting for buses and/or using the narrow footways in these areas risk coming into conflict with overrunning HGVs and that this constitutes an unacceptable highway safety risk.</p> <p>It is noted that the ExA made a statement that footways cannot be widened within the extents of the Proposed Development [Recommendation Report</p>

² <https://www.standardsforhighways.co.uk/tses/attachments/710d4c33-0032-4dfb-8303-17aff1ce804b?inline=true>

	<p>para 3.3.533]. There is no acknowledgement of the significant proposed widening and improvement of footways and pedestrian areas proposed as part of the Highway Works.</p> <p>The ExA were also concerned about the use of a small existing traffic island to the west of Stanton Road as an informal crossing point and that its potential removal (not committed to in the design, but offered as a potential option subject to further road safety audit reviews and overseeing organisation agreement) would constitute an unacceptable highway safety risk. This was included in the Stage 1 RSA as an additional consideration but no specific safety risks were raised by the auditor in relation to removal of the island.</p>
<p>Applicant's Further Actions to Address ExA's Comments</p>	<p>Following the SoS's letter, the Applicant has submitted its RSA1 response in respect of the originally proposed works, along with more detailed design proposals in the areas of concern identified by the road safety audit team for comment on the suitability of the response. The independent audit team have confirmed that subject to provision of suitable signage at the detailed design stage, the further details provided mitigate the problems raised in the RSA 1 (see Appendix B).</p> <p>This demonstrates that the scheme as presented at Examination has or could have adequately mitigated any significant safety issues raised by the Stage 1 RSA under the original terms of the DCO.</p> <p>The Applicant has, since the close of Examination, commissioned a non-motorised user survey to understand in detail the users of the area, key desire lines, numbers of users, areas of congregation, school bus and local bus services, and general behaviour in the area. The purpose of this work is to provide a more comprehensive understanding of the number of non-motorised users who could be affected.</p> <p>The results of this survey show that the bus lay-by in front of the Co-op is predominantly used for customer parking, illegally and sometimes unsafely, and as a cut through onto Church Street for westbound traffic, as well as for deliveries to the Co-op. The Co-op has a car park and loading area to the rear which should be used, and Co-op have confirmed to the Applicant that they load at this rear space for their internal deliveries.</p> <p>There is a school bus service which picks up (AM) and drops off (PM) children travelling eastbound and one which picks up (AM) and drops off (PM) children travelling westbound per school day. The average time these buses are stopped within Sapcote is around 90 seconds. There are currently no other passing bus services during the day.</p> <p>Pedestrians predominantly travel north to south through the area and do so via the uncontrolled crossing point. Those travelling west from the Co-op tend to either use the narrow footway around No.9 Church St. or the small island referenced by the ExA to cross the road.</p> <p>The Applicant therefore proposes to leave the hatching and island in place so as not to remove this facility, but considers that the improved pedestrian area and Zebra crossing would make users more likely to cross in suitable locations.</p> <p>Separately from the above, in order to provide additional mitigation for 'future year' HGV traffic volumes, the Applicant has considered and now proposes an 'Enhanced' scheme. This Enhanced scheme comprises the amendments to the area outside the co-op, new zebra crossing and widening of footways on the northern side of the B4669 that formed part of the original scheme. together with further mitigation to address the ExA's concerns.</p> <p>Four options were considered for the mitigation works proposed in the Enhanced scheme around New Walk with signals, single file give way, priority for westbound traffic and an option utilising road markings considered.</p> <p>The scheme utilising road markings was chosen and would provide a length of narrower carriageway around New Walk with cars and light vehicles able to pass each other but HGVs encouraged via signing and road markings to use</p>

	<p>the centre of the road, with oncoming vehicles informally giving way. The markings provided and narrower carriageway mean that large vehicles will be channelled away from the footways using an arrangement seen commonly on bridges with limited clearance where high vehicles must use the middle of the road.</p> <p>The footway to the east of the Co-op on the south side of the B4669 would be widened to 2m minimum to allow space for users on the footway to pass each other.</p> <p>In addition, a bus lay-by would be provided in the verge area to the east of New Road which allows westbound buses to wait off carriageway and allows passengers of buses to wait well away from the carriageway. The upgraded footway provides a safe route from the Co-op area to the bus stop.</p> <p>The Applicant is of the view that the further works proposed under the Enhanced scheme, as well as the previous and continued commitments to ongoing monitoring of HGV traffic and safety and funds for further intervention, if deemed necessary, provide robust mitigation for the schemes impacts in Sapcote into the future and address the highway safety risks raised by the ExA. The Enhanced scheme and the ExA's report have been submitted to two separate, road safety auditors independent of the design team, both of whom have provided an RSA report. The Applicant has agreed with all of the recommendations made by the auditors and updated the proposals accordingly. The auditor teams are both of the view that the changes made to the design mitigate the road safety problems raised in their reports and can be dealt with as part of the detailed design pursuant to the DCO.</p> <p>LCC have been consulted on the scheme as highway authority and have commented that they believe there is a highway safety issue with the proposals around the narrow section of carriageway and disagree that the mitigation of this using vehicle activated signage is appropriate.</p> <p>The Applicant disagrees with LCC's view, noting that independent road safety auditors agree with the mitigation measures put in place in response to their RSA findings and has provided examples of similar instances of narrow carriageways on A roads in Wymeswold and Nether Broughton in Leicestershire, as well as restricted bridges which have warning signage supported by vehicle activated signs (the inclusion of which is recommended by the RSA). No personal injury collisions have been recorded in the last 5 years for which data are available at these locations.</p> <p>The delivery of the Enhanced Sapcote scheme is proposed to be secured through:</p> <ol style="list-style-type: none">1. Updates to the description of Work No. 12 in Schedule 1 of the dDCO;2. Amended highway plans compliance with which is secured through dDCO requirement 5 and the protective provisions (Part 3 of Schedule 13); and3. Where the works to the bus layby fall outside of the Order Limits, by new dDCO requirement 5(4) to enter into a Section 278 agreement with the Local Highway Authority to deliver the works. <p>It is firmly the Applicant's view that the Enhanced scheme in Sapcote provides a betterment to the existing situation, and is deliverable and safe. Further road safety audits through the design, construction and operation of the scheme will provide additional independent checks to support this.</p>
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Appendix C: Details of Enhanced Scheme

Appendix D: Enhanced Scheme Stage 1 RSA and Designer's Response Report

Appendix E: Sapcote Enhanced Scheme Noise Technical Note

Appendix F: Sapcote Enhanced Scheme Air Quality Technical Note

1. INTRODUCTION

- 1.1 Hinckley National Rail Freight Interchange (HNRFI) is the subject of a Development Consent Order (DCO) application which was submitted in 2023. The Examination took place in late 2023 and early 2024 with a decision from the Secretary of State (SoS) for Transport due on 10th September 2024.
- 1.2 On 10th September 2024, the SoS issued a letter stating that while she was minded to agree with the Examining Authority's (ExA) recommendation not to grant Development Consent, she is not yet in a position to decide whether to accept the ExA's recommendation.
- 1.3 A key item on which the SoS invites further comment from the Applicant is the ExA's identified increase to the highway safety risk in Sapcote due to the increased (but still infrequent) likelihood of HGVs travelling in opposite directions coinciding through the village centre and, as a result, overrunning on to the footpaths used by pedestrians.
- 1.4 This report sets out the Applicant's response to these concerns within Sapcote village.

Location

- 1.5 This report relates to the proposed works within Sapcote village centre on the B4669 which runs east to west through the village. The works proposed are focussed around the junctions with Stanton Road and Church Street. Within the DCO, these are referred to as Work No. 12 and are shown on the Applicant's Highway Plans [[REP4-009](#)].
- 1.6 A location plan of the area with the area of the proposed works is shown at Figure 1.1



Figure 1.1 - Location Plan

2. THE EFFECT OF THE DEVELOPMENT ON THE VILLAGE OF SAPCOTE

Transport Assessment Commentary on Sapcote

- 2.1 The Transport Assessment [\[REP3-157\]](#) submitted as part of the DCO application contains detail on the effects of the development on the village of Sapcote.
- 2.2 PRTM 2.2 was used to model the following in the area:
 - i. Traffic without the development and without any highway infrastructure improvements associated (i.e. existing situation)
 - ii. Traffic without the development itself but assuming the highway infrastructure improvements associated with the development are constructed
 - iii. Traffic with both the development itself and its associated highway infrastructure improvements constructed
- 2.3 The above scenarios were modelled both for 2026 (opening year) and 2036 (future year).
- 2.4 The transport assessment sets out that the modelling shows that the provision particularly of new south facing slip roads at M69 Junction 2 generates a redistribution effect of existing traffic (i.e. that which would be elsewhere on the network anyway) to the new infrastructure at J2.
- 2.5 A significant volume of trips in Sapcote originate or have a destination within the village (as evidenced by select link analysis) and the traffic flows resulting from the HNRFI development itself are a relatively small proportion of the change in traffic flow through the village.
- 2.6 The Forecast Model Report shows that traffic in Sapcote is drawn from the immediately surrounding area rather than from significantly further afield as would be expected if the village was predicted to be used predominately as a through-route.

HGVs Within Sapcote

- 2.7 For the purposes of this report and the modelling undertaken to date, the term 'HGV' refers to 'OGV1' and 'OGV2' category vehicles shown in Figure 2.1. It does not follow that all 'HGV' traffic will consist of the largest articulated vehicles, but will be a mix of the vehicle types under the OGV1 and OGV2 categories. However, mitigation measures have been designed to accommodate the infrequent worst case.









Commercial vehicle (cv)	cv class*	cv category
	Buses and coaches	PSV
	2-axle rigid	OGV1
	3-axle rigid	
	3-axle articulated	OGV2
	4-axle rigid	
	4-axle articulated	
	5-axle articulated	
	6 (or more) axle articulated	
*classified by axles in contact with the road PSV = Public service vehicle OGV = Other goods vehicle		

Figure 2.1 - Commercial Vehicle Categories Taken from CD 224

- 2.8 The B4669 to the east of M69 Junction 2 is defined within the HGV Route Management Plan and Strategy (Document 17.4F) as a prohibited route for HGVs originating from or travelling to the development.
- 2.9 Through the implementation of the HGV Route Management Plan and Strategy and the measures therein to control development HGVs and enforcement action against those not complying through the use of automatic number plate recognition (ANPR) cameras placed on the highway network and within the development, no HGVs originating from or travelling to the development should be using the B4669 through the village of Sapcote.
- 2.10 Given the above, the increase in HGV traffic through the village will be entirely as a result of existing HGV traffic from elsewhere on the highway network re-routing via the B4669 either to access a destination within the village or to route through the village.

2.11 The PRTM forecasts the numbers of HGVs using the B4669 in question. The relevant links from the Transport Assessment are Link 41 (B4669 to the west of Stanton Road) and Link 43 (B4669 to the east of Stanton Road) shown in Figure 2.2 and extracted from Figure 8.30 of the Environmental Statement [REP3-031].



Figure 2.2 - PRTM Link IDs Through Sapcote

2.12 Table 2.1 summarises the numbers with scenarios i and ii under paragraph 2.2 considered due to the prohibition of HGV traffic from the development from using this route.

Table 2.1 - HGV AADT in Sapcote Village

Link ID	HGV Annual Average Daily Traffic (AADT)			
	2026 As Existing (scenario i)	2026 With Development (scenario ii)	2036 As Existing (scenario i)	2036 With Development (scenario ii)
41 Eastbound	35	75	37	211
41 Westbound	160	170	160	188
43 Eastbound	45	78	48	214
43 Westbound	92	93	94	112

2.13 The differences in the HGV flows between Link 41 and 43 reinforce the conclusion of the Transport Assessment that a large proportion of the traffic within Sapcote is not through-routing but is using this route to access destinations within or around the village. This is particularly evident westbound as through routing traffic would result in similar HGV numbers predicted on links 41 and 43 as vehicles travel through the village.

2.14 The new J2 slip roads result in an increase in HGV traffic, predominantly in an eastbound direction, seen initially at opening year and then increasing over the intervening period to the future year.

3. EXISTING SITUATION SAPCOTE VILLAGE

Highway Infrastructure

3.1 Along the length of the B4669 through the village of Sapcote there are numerous junctions, crossing points and highway features. These include the following:

- Zebra crossings;
- Uncontrolled crossings;
- Simple priority junctions with side roads;
- Ghost island junctions with side roads; and
- Narrowings including islands and sections for single file traffic.

3.2 The key features present are labelled on Figure 3.1.

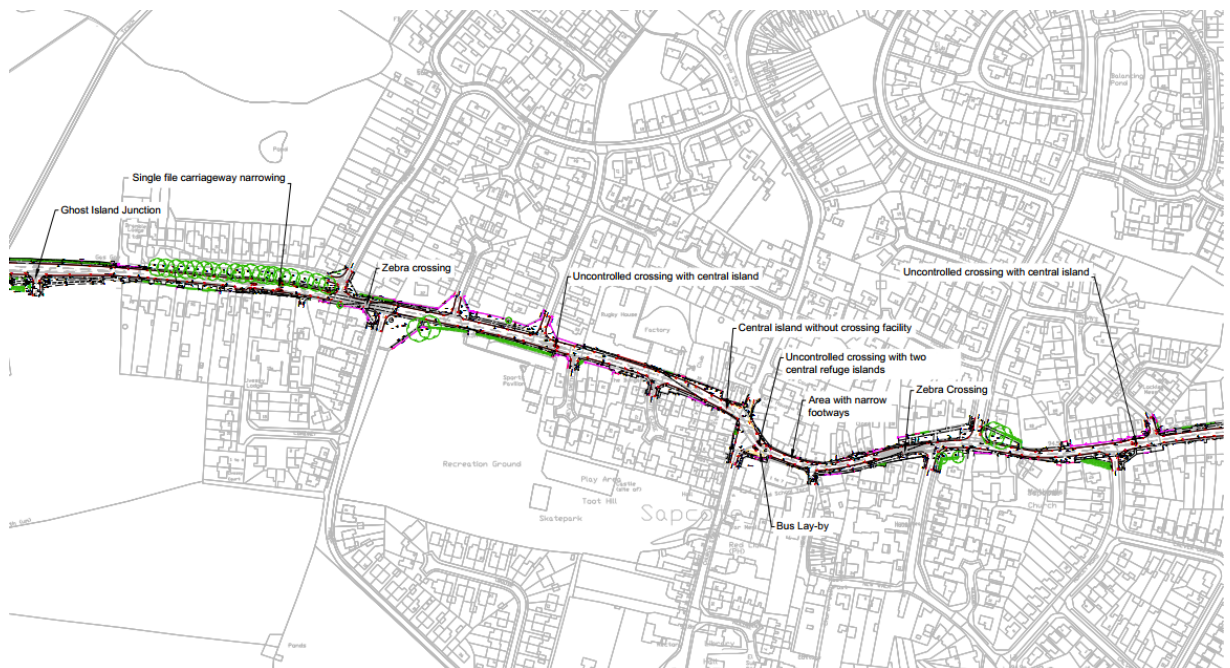


Figure 3.1 - Sapcote Highway Infrastructure

3.3 To the eastern and western extents of the village, the B4669 is relatively wide and straight with carriageway width of between 6 and 7m which is sufficient to allow two large HGVs to pass each other.

3.4 The frequency of parked vehicles, crossing points and other features has a calming effect on traffic, increasing driver awareness, reducing vehicle speeds and enhancing pedestrian connectivity.

3.5 There are two key pinch point areas on the B4669 where the existing carriageway and surrounding infrastructure is narrow and there is not sufficient space to permit two large HGVs to pass each other within the extents of the carriageway. These are highlighted on Figure 3.2 and are as follows:

- Outside the Co-op where the existing 'bendiness' of the road and the presence of central refuge islands means that large HGVs can presently be forced to mount the narrow footways and central refuge islands in order to pass. The central refuge means that this is the case even if there is no vehicle travelling in the opposite direction; and
- To the east of the Co-op around New Walk the carriageway is narrow and two HGVs travelling in opposite directions are presently unable to pass each other.

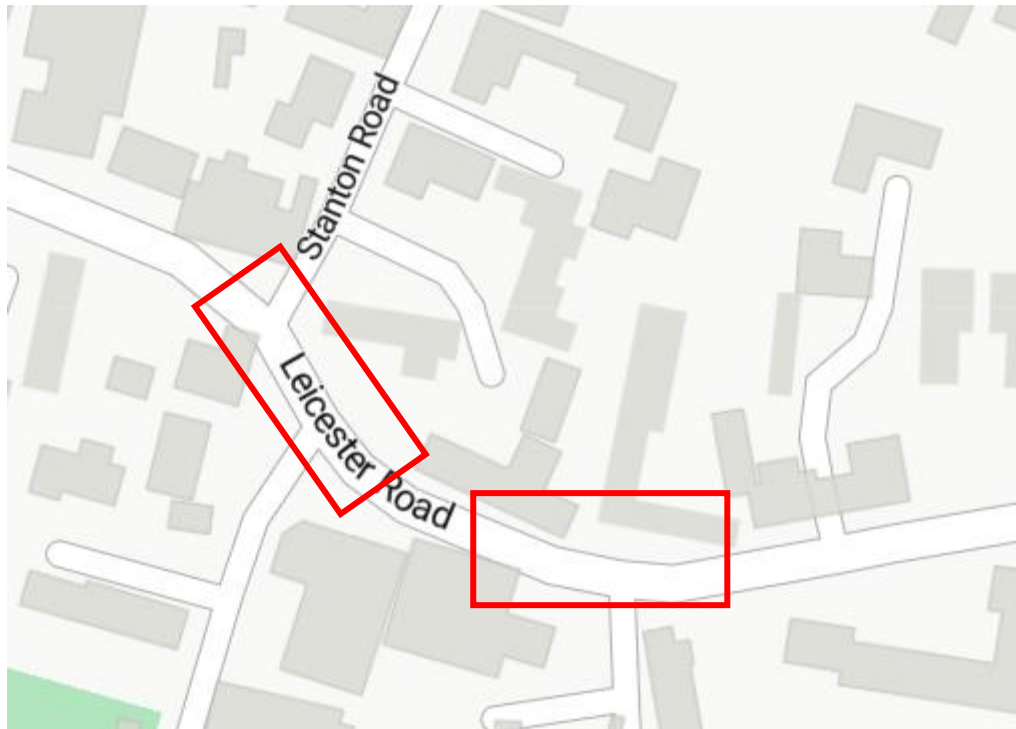


Figure 3.2 - Key Pinch Points in the Centre of Sapcote

- 3.6 These features, constraints and general proportions of traffic within Sapcote are common to many other historic village settings where formal and informal means of traffic control have been implemented to manage and direct vehicles.
- 3.7 The measured 85th percentile speed of vehicles through the village is 23.5mph westbound and 21.9mph eastbound, which is below the speed limit of 30mph.
- 3.8 There is one personal injury collision on the B4669 through the village in the last 5 recorded years which is in the vicinity of Grace Road, involved a single vehicle and did not involve HGV traffic. There are no personal injury collisions in the pinch point areas noted above in the last 5 recorded years.

Road User Behaviour

- 3.9 The Applicant has commissioned a video survey of the area outside the Co-op in the centre of Sapcote to observe the behaviour and desire lines of non-motorised users and vehicles using the area.

- 3.10 The survey was undertaken over a full week during school term time, which included weekdays and weekends, as well as a period of traffic management while works were undertaken in the area on Openreach apparatus.
- 3.11 The survey results and the raw video data have been provided to LCC for review and the results are submitted to the SoS separately from this report for information.
- 3.12 From the survey, the following was observed:
- The main desire lines in the area are to and from the Co-op, and north-south between Church St. and Stanton Road. The Co-op is the main destination in the area with some 600 - 700 pedestrian movements to the Co-op per day.
 - The majority of pedestrian traffic originates from Church St. with some 650 -700 pedestrian movements per day originating there.
 - There are some 75 – 85 pedestrian movements north to south and vice-versa per day between Church St. and Stanton Road predominantly utilising the uncontrolled crossing point over the B4669. There are a further 50 – 60 pedestrian movements from Stanton Road to the Co-op, also predominantly using the uncontrolled crossing point over the B4669.
 - East to West movements along the B4669 are relatively infrequent with around 25-35 such movements in either direction observed per day.
 - The bus lay-by outside of the Co-op is frequently inappropriately used by customers for parking and by delivery vehicles to the Co-op (despite a car park and loading area being available at the back of the Co-op) with around 10-15 such instances per hour, 150 per day, recorded. This use is an offence under the Road Traffic Act 1988 due to the presence of a bus stop clearway and associated signage.



Figure 3.3 - Bus Stop Clearway sign outside Co-op

- There are two school bus services serving secondary school children in the area; one which picks children up in the morning travelling westbound and drops them off

travelling eastbound in the afternoon, and one which picks children up in the morning travelling eastbound and drops them off travelling westbound in the afternoon. Survey information indicates that between 10 and 20 school children use each service on school days.

- Children are observed waiting on the narrow footways on both sides of the B4669 (albeit not at the same times as each other) in the mornings and using the uncontrolled crossing point at the front of the Co-op in the mornings and evenings to access the northern side of the B4669.
- School bus dwell time is approximately 90 seconds. The buses do not wait for a significant period of time in this location.
- There are no local bus services that use the B4669 through Sapcote at present.
- The bus stop area outside of the Co-op is subject to around 15 gathering pedestrians (waiting for the school bus) during the 8am – 9am hour but there are generally few gathering pedestrians in the area otherwise with an average of 26 people gathered per day over the survey period.
- Some pedestrians using the area cut across the B4669 utilising the hatched area in the centre of the carriageway as an informal refuge area as observed by the ExA in para 3.3.534.
- Pedestrians using the area frequently cut across the bus lay-by area to travel east along the footway on the B4669.
- There are very few cyclists using the area with surveys showing around 20 per day through the central area of the village.

4. APPROACH TO SAPCOTE DURING DCO APPLICATION & EXAMINATION

- 4.1 The proposed highway works mitigation in Sapcote is not provided in order to address peak time capacity issues as with other junctions throughout the scheme.
- 4.2 Rather, the mitigation in Sapcote responds to the predicted increase in daily HGVs as a result of the provision of south facing slip roads at M69 Junction 2. Given that these increases were based upon the PRTM, they do not account for changes in driver behaviour established over time, for example choosing one route over another because of its perceived ease for the types of vehicles in question.
- 4.3 The basis of the mitigation measures submitted for Examination [Appendix A to [REP5-004](#)] followed the principles of the Traffic in Villages toolkit which was originally promoted by Dorset County Council³ but which has been cited in numerous other areas since, most notably the West Midlands Giga-Factory application⁴.
- 4.4 Because of the above, the approach taken to Sapcote through the DCO process was broadly as follows:
- Provision of a mitigation scheme to enhance the pedestrian environment in the centre of the village in response to the redistributed HGV traffic at the opening year of the development.
 - Provision, through the HGV Route Management Plan and Strategy, for monitoring of development HGV numbers in Sapcote quarterly using ANPR cameras provided throughout the highway network used in the enforcement of the Strategy.
 - Monitoring of driver behaviour over time to establish whether the predicted increase in daily HGV traffic occurs to the extent modelled due to the various features of the route (including narrow sections of carriageway) which could make it less attractive to HGV drivers than forecast.
 - Establishment of an HGV Steering Group to review HGV numbers within Sapcote (and other villages)
 - Provision of a fund and a suite of potential further mitigation measures which could be used to further mitigate the impacts of HGV traffic in Sapcote (and other villages) with the agreement of the HGV Steering Group and the Local Highway Authority.
- 4.5 The mitigation scheme proposed on the Highway Plans produced for the DCO application was focussed on the central area of Sapcote around the Co-op and included the following mitigation measures:
- Replacement of the uncontrolled crossing of the B4669 with a Zebra crossing.
 - Kerb realignment to provide wider footways on the north side of the B4669 around the Zebra crossing and Stanton Road.

³ <https://hamilton-baillie.com/villages-and-rural-traffic/>

⁴ A 'Traffic in Villages' approach is proposed for mitigation of traffic effects on the village of Baginton. See Appendix 7.1, Transport Assessment Part 1, Chapter 11:
<https://planandregulatory.coventry.gov.uk/planning/index.html?fa=getApplication&id=202249>

- Amendments to the area outside the Co-op store to create a pedestrian focussed area of public realm with limited access for school buses to wait when picking up or setting down school children.
 - Moving the bus stop for passing public services from outside the Co-op to an 'on carriageway' stop.
- 4.6 This scheme was proposed in response to the significant desire lines north to south across the B4669 that is supported by the recently completed pedestrian survey information set out in Chapter 3 of this report.
- 4.7 The provision of the Zebra crossing and removal of the traffic island in the middle of the B4669 resulted in wider footways to the north of the B4669 and meant that two large HGVs were able to pass each other through this section which is not currently possible due to the traffic island.
- 4.8 The bus stop lay-by area outside the Co-op where deliveries and customers currently park illegally was to be converted to a pedestrian focussed space, with a shared area provided for school buses to use on the occasions in the day that they pick up and drop off children. Customers using the Co-op would not be permitted to use this space as is the case now, however the use of kerbs and signage would better discourage misuse of the space.
- 4.9 The proposals put forward during the DCO Examination are included as Appendix A to this report.
- 4.10 These mitigation proposals were submitted to Leicestershire County Council (LCC) as Local Highway Authority during the Examination, discussed in several meetings and written comments received and responded to.
- 4.11 Further mitigation in Sapcote was not proposed at opening year because there was a means to deliver these if required through the future monitor and manage arrangements in the HGV Route Management Plan and Strategy.
- 4.12 Throughout the Examination period, the Applicant engaged with LCC and requested that they accept a Stage 1 Road Safety Audit (RSA1) brief for signing. LCC consistently indicated to the Applicant that they would not consider an RSA because they did not agree to other highway matters (as set out in the Applicant's written statement of oral case for Issue Specific Hearing 2 ("ISH2")) during discussions on highway safety matters [[REP3-045](#)]. LCC only engaged with the RSA process in early February 2024 after the Applicant issued the brief on 23rd January 2024 following those discussions at ISH2. The brief was not signed off by LCC until 20th February 2024.. This left just 13 working days prior to the final examination deadline for the Audit team to complete their audit, provide their report and for the Applicant to provide a response to the points raised therein. Despite the tight timescale, the Applicant provided a response to the problems raised by the auditor but did not have time to provide the additional detailed design drawings to support the response. In addition, with the closure of the Examination on 12th March 2024 there was no opportunity for the Examining Authority to ask questions relating to the RSA process and thereby afford the Applicant an opportunity to understand and respond to any concerns it might have had.

- 4.13 Further to the SoS's letter, the Applicant has provided the audit team with further detailed design drawings in the area outside of the Co-op and received a response from the auditor on this additional detail. The response from the auditor is that subject to provision of signage at the detailed design stage, the proposals mitigate the issues raised and address the issues of unauthorised vehicles using the area as is currently seen. The further information submitted to the audit team and their response to this is included as Appendix B to this report.
- 4.14 Any scheme implemented would be subject to Stage 2, Stage 3 and Stage 4 Road Safety Audits in accordance with GG 119⁵ which would enable validation and monitoring of the works implemented from a safety perspective, with the HGV Route Management Plan and Strategy enabling further phases of mitigation to be implemented using the proposed fund, all of which is secured by and would be deliverable under the DCO.
- 4.15 It is therefore the Applicant's view that the original scheme was acceptable and that there were no highway safety concerns that could not have been sufficiently mitigated through the normal process of detailed design, further Road Safety Audits and technical discussions with LCC.

⁵ <https://www.standardsforhighways.co.uk/tses/attachments/710d4c33-0032-4dfb-8303-17aff1ce804b?inline=true>

5. EXAMINING AUTHORITY'S INTERPRETATION OF SAPCOTE PROPOSALS

- 5.1 The SoS has invited the Applicant to comment upon the ExA's observations around the impacts and mitigation for Sapcote set out during the DCO Examination process. These observations can be found in full in the ExA's Recommendation Report between paragraphs 3.3.518 and 3.3.539 and are summarised below with the Applicant's general commentary included.
- 5.2 The ExA were not satisfied with the Applicant's response to the Stage 1 RSA for the area outside the Co-op store. The ExA's Report includes two figures from the vehicle tracking drawings submitted to the Examination. Figure 9 shows the existing swept paths of large vehicles through the area outside of the Co-op and Figure 10 shows the proposed swept paths of the same vehicles once the works have been completed. Paragraph 3.3.522 states that *'there has been no realignment to allow HGVs to pass'* however as explained in Chapter 4 of this technical note, the original proposals included the removal of the central crossing island and significant realignment of the northern kerb line, meaning that HGVs would be able to pass each other through the section where they cannot at present. Extracts from the relevant drawings are included below as Figures 5.1 and 5.2 with the areas in question highlighted.
- 5.3 These figures show the swept paths of two 'max legal' HGVs (i.e. the largest permitted on UK roads) and therefore represent the very worst case. The term 'HGV' where used in the modelling refers to a number of different vehicles as shown in Figure 2.1.

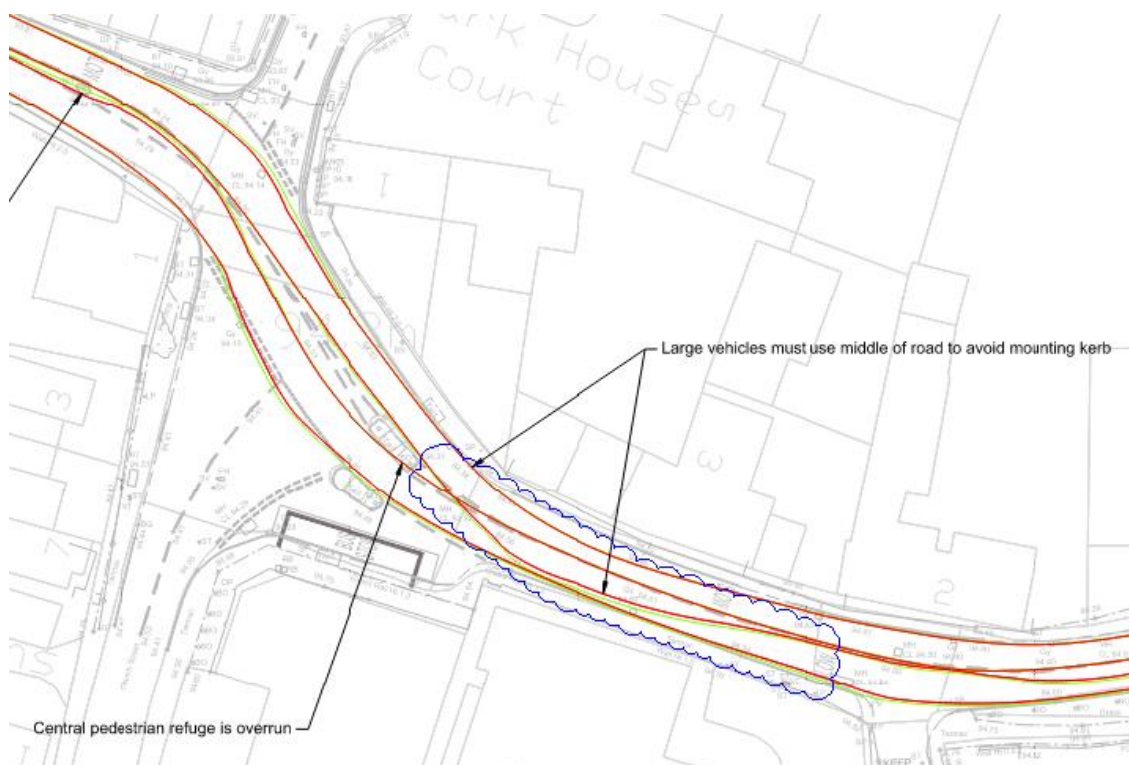


Figure 5.1 - Existing Vehicle Tracking Outside Co-op with conflict area clouded in blue

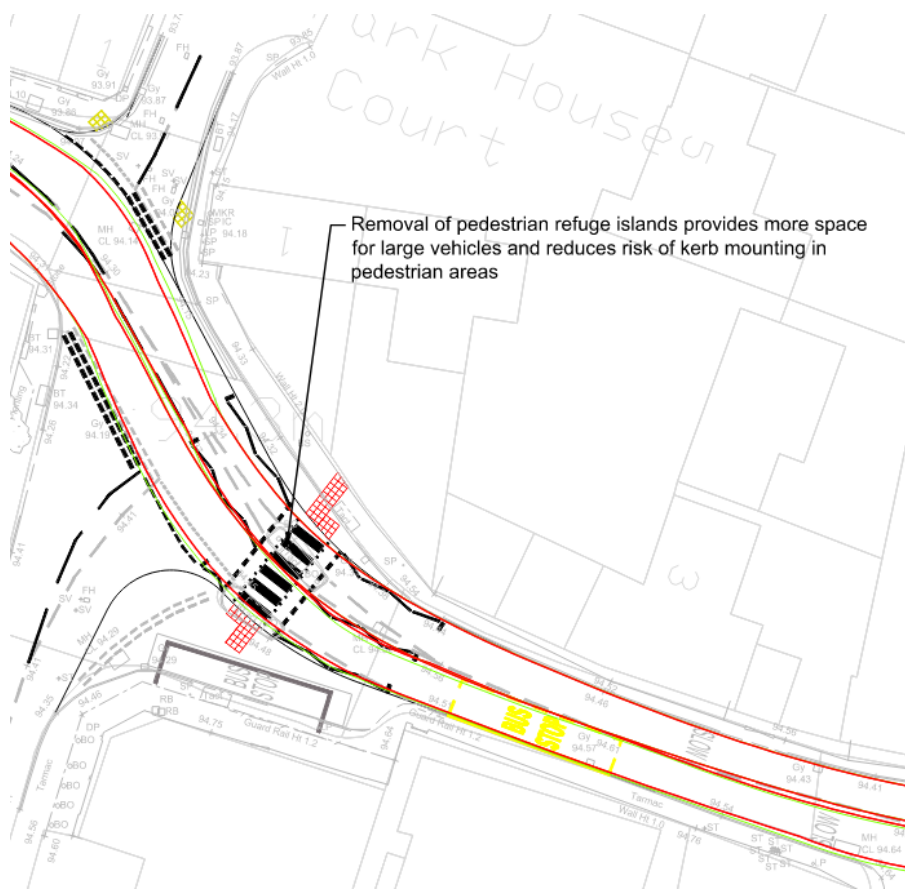


Figure 5.2 - Proposed Vehicle Tracking outside Co-op

- 5.4 As can be seen from the Figures above, the removal of the pedestrian refuge and proposed works in the area result in significant widening of the northern kerb line and enable large vehicles to pass through this area without coming into conflict with each other. This does not appear to have been taken into account by the ExA in their reporting, and as explained in paragraph 5.2 above the ExA's analysis seems instead to have been influenced by a significant factual misunderstanding.
- 5.5 The ExA cite increases in traffic in general but specifically HGVs through the village, with figures quoted in paragraph 3.3.525. Chapter 2 of this report sets out the figures for HGVs in Sapcote and where these originate from, making clear that the HGV Route Management Plan and Strategy would prohibit HNRFI development HGVs from using this route. It should be noted, however, that the numbers quoted in the ExA's report are those from the PRTM which include these prohibited vehicles (see Table 5.1). In other words, the ExA's analysis uses an inappropriate set of figures for the purposes of comparison.

HGV Annual Average Daily Traffic (AADT)		
Link ID	2036 With Development, No HNRFI HGVs	2036 With Development including HNRFI HGVs as Referred to by ExA
41 (two way)	399	472
43 (two way)	326	404

Table 5.1 - HGV traffic in Sapcote as predicted by modelling & as cited by ExA

- 5.6 This notwithstanding, as noted in Chapter 2, the PRTM forecasts an increase in HGV traffic using this route which is comprised of background traffic already on the network choosing to use the B4669 due to the provision of the south facing slip roads at M69 J2.
- 5.7 The ExA states that this increase in HGV numbers means that there is a much higher likelihood that two HGVs travelling in opposite directions would coincide in travelling on a specific section of road, and there is no room for them to pass each other. The ExA concludes that there is a high likelihood that these HGVs would choose to overrun the footway rather than waiting and thus come into conflict with pedestrians.
- 5.8 The ExA draws attention to the narrow footways in the area, but does not appear to give any consideration to either the proposed significant widening on the north side of the B4669 between Stanton Road and the crossing point, or the provision of a fully pedestrian focussed area outside the Co-op which are linked by a Zebra crossing which gives priority to pedestrians.
- 5.9 The ExA also disagrees with the Applicant's response to the Stage 1 RSA. The ExA concludes that there would be insufficient room for those waiting for buses and those travelling on the footway to pass each other and that the culmination of the items raised would result in an unacceptable safety risk. The Applicant's response to this point is covered in Chapter 4 of this technical note and includes further evidence that was not before the ExA when it considered this issue.
- 5.10 The ExA noted that a small area of hatched road markings with a traffic island to the west of the Co-op is being used by pedestrians as an informal refuge when crossing the B4669, the desire for which is triggered by the discontinuous footway on the south side of the B4669.
- 5.11 The Applicant's Highway Plans submitted to the Examination note the potential for removal of this island due to it being frequently overrun by HGVs, however this is not committed to and was to be subject to further consultation with the RSA team and Overseeing Organisation at detailed design pursuant to the DCO and prior to any final decisions being made. The ExA's view is that removal of this area would give rise to an unacceptable safety risk.
- 5.12 The ExA concludes that the Proposed Development would lead to an unacceptable highway safety risk in the village of Sapcote, which could not be mitigated within the terms of the Application. For the reasons set out in this chapter, it is the Applicant's view that this conclusion was not well-founded on the evidence. In any event the evidence now available to the Secretary of State (including the subsequent feedback from the RSA team) shows that there would be no unacceptable safety risk at the opening year

of the development, and that suitable measures were proposed through the HGV Route Management Plan and Strategy to continue to monitor and manage HGV traffic through the village and response to any future safety issues arising.

6. THE APPLICANT'S FURTHER ACTIONS TO ADDRESS THE COMMENTS MADE BY THE EXAMINING AUTHORITY

- 6.1 For the reasons set out elsewhere in this report, the Applicant does not agree with the ExA's assessment that the Proposed Development would lead to an unacceptable highway safety risk in the village of Sapcote. Through submission of more detailed proposals to the Safety Auditor, it has been demonstrated that the concerns raised by the RSA could have been mitigated within the proposed development within the terms of the DCO.
- 6.2 The approach of the Applicant previously was to mitigate the 'opening year' effects of HGV traffic in Sapcote and then 'monitor and manage' future year effects of HGV traffic through the HGV Route Management Plan and Strategy, allowing implementation of further measures if deemed necessary in future. In response to the ExA's concerns the Applicant has proposed an 'Enhanced' scheme in Sapcote which addresses the risks raised by the ExA around the predicted 'future year' HGV traffic in the village and, along with the retention of the 'monitor and manage' provisions, provides a robust approach to the highway mitigation in Sapcote.
- 6.3 The ExA's concerns centred around the 'future year' 2036 predicted volume of HGV traffic and are briefly summarised as follows:
- HGVs meeting each other and having limited space to pass each other easily;
 - Location of the bus stop;
 - Footway widths;
 - Shared area outside Co-op; and
 - Pedestrians crossing by using small island within hatched area of road markings.
- 6.4 In response to the ExA's concerns, the Applicant has designed and proposes to deliver an 'Enhanced' scheme in place of the originally proposed scheme. The Enhanced scheme includes numerous elements of the original scheme with further mitigation proposed to address the ExA's concerns around 'future year' HGV traffic in Sapcote. The Enhanced scheme includes the following:
- Replacement of the uncontrolled crossing of the B4669 with a Zebra crossing (included in the original scheme).
 - Kerb realignment to provide wider footways on the north side of the B4669 around the Zebra crossing and Stanton Road (included in the original scheme).
 - Amendments to the area outside the Co-op store to create a pedestrian only area of public realm (included in the original scheme but developed to exclude all vehicles from this area in the Enhanced scheme)
 - Widening the footway on the south side of the B4669 between the Co-op store and the Zebra crossing near Sharnford Road (new to the Enhanced scheme)
 - Provision of a bus stop layby to the east of New Walk (new to the Enhanced scheme)
 - Reduction of carriageway width, with road markings and associated signage to encourage large vehicles away from footways and to wait for oncoming vehicles to pass (new to the Enhanced scheme).

- Provision of an uncontrolled crossing point over the B4669 to the west of Stanton Road (new to the Enhanced scheme)

6.5 Drawings showing the Enhanced scheme are included as Appendix C to this report and the way in which it addresses each of the ExA's concerns is explained below. The description of Work No. 12 in Schedule 1 of the dDCO has been updated to reflect the above.

Space For HGVs to Pass

6.6 The scheme remains as previously proposed through the area around the Zebra crossing as it has been demonstrated in this report that the previous proposals allowed two HGVs to pass each other through this section.

6.7 The area to the east of the Co-op around New Walk is proposed to be subject to further works with widening of the carriageway into the verge area to the east of New Walk meaning that more carriageway space is available.

6.8 The section of carriageway between New Walk and the Co-op is constrained on both sides by buildings and cannot be widened to allow two HGVs to pass each other. Consideration was given by the Applicant to four mitigation options in total:

- i. Signalisation and one way traffic running through this section;
- ii. Provision of physical build outs to narrow the carriageway to one-way only with priority given to eastbound traffic;
- iii. Provision of physical build outs to narrow the carriageway to one-way only with give way markings on both sides; and
- iv. Provision of a less formal, narrower section of carriageway with cars and light vans able to pass one another but HGVs needing to wait and give way.

6.9 Traffic modelling has been undertaken to assess the options above considered feasible in the form of a Vissim model. This has been provided to LCC for review.

6.10 Signalisation was rejected as there are a number of private means of access, including New Walk which would need to be signal controlled or would be uncontrolled into a signal-controlled area. In addition, the crossing point over the B4669 (which is in the correct location as far as desire line goes) would need to be part of the signalisation as a Zebra crossing in proximity to a signalised area would result in vehicle confusion and blocking back over either the signalised section or the Zebra crossing.

6.11 As a result, the length of the signalised section and the need to incorporate a pedestrian phase would result in significant intergreen periods and traffic modelling shows that this would cause large queues on both sides of this section through the village which would be unacceptable in length.

6.12 A physical build out with priority given to eastbound traffic would formalise an arrangement whereby all vehicles will run single file through the constrained section of carriageway.

- 6.13 This option was rejected because traffic modelling shows that during peak times, the need for westbound traffic to give way would cause significant queues through the eastern half of the village which would be unacceptable in length.
- 6.14 Providing a give way line on both sides of a physical build out was considered to balance the flows and avoid a long queue on one side of the feature, but while traffic modelling shows that this made the queueing more even, the lengths were still significant.
- 6.15 In addition, having both sides of a build out giving way (as opposed to giving priority to one direction) is an unusual arrangement not commonly seen and in the view of the Applicant is likely to cause driver confusion and conflict. As a result, this option was rejected.
- 6.16 The final option considered reduces the width of this section of carriageway to 4.8m in order to provide a better visual cue to drivers of large vehicles that there is insufficient space for them to pass. This width accords with Figure 7.1 of Manual for Streets (shown below as Figure 6.1).

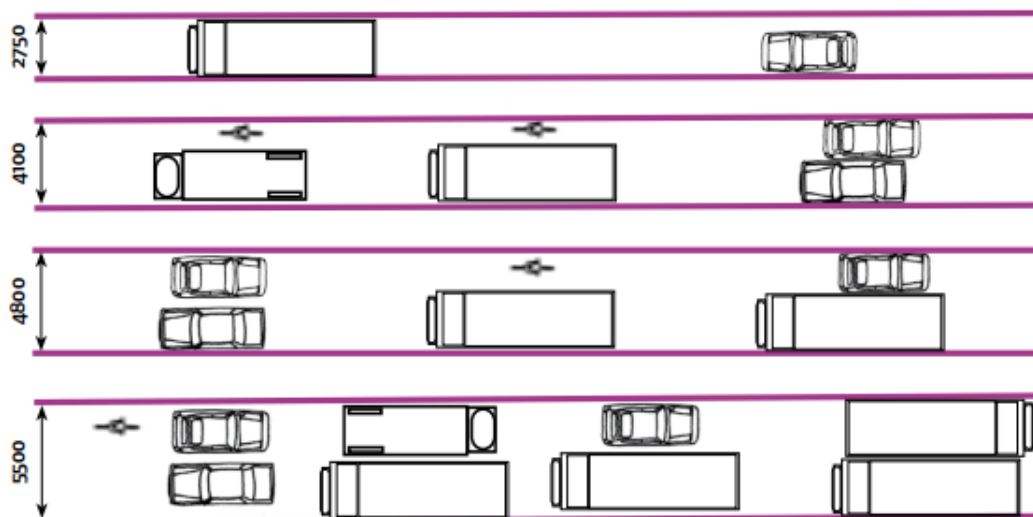


Figure 6.1 - Manual for Streets Illustration of Carriageway Widths

- 6.17 White lining has been shown on the Highway Plans to encourage drivers of large vehicles to use the middle of the road, although the provision of this is subject to Overseeing Organisation agreement at detailed design stage pursuant to the DCO. The realignment of the carriageway to the east and west of this section improves overall forward visibility to oncoming vehicles.
- 6.18 Cars and light vans are still able to pass each other through this section as illustrated by Figure 6.1 and the vehicle tracking drawings at Appendix B, but the reduction in overall carriageway width means that two coincident HGVs are unlikely to try and pass each other due to the carriageway not appearing to be of a suitable width. These vehicles are therefore more likely to wait for oncoming vehicles to pass.

- 6.19 Traffic modelling shows that the ability for lighter vehicles to pass each other means that no significant queueing is seen in the village as a result of these proposals and that when a queue does form due to an HGV waiting for a vehicle in the opposite direction, it dissipates very quickly.
- 6.20 This option has therefore been selected as the preferred solution to ensure that in the infrequent instances where HGVs meet each other in opposite directions, they wait for the oncoming vehicle to pass through the narrow section rather than mounting the footways and coming into potential conflict with pedestrians.

Location of the Bus Stop

- 6.21 While the further detail provided to the Road Safety Auditor was sufficient to satisfy them that the 'shared' area outside the Co-op could be operated safely, the Applicant has sought to go further in addressing the ExA's concerns around pedestrians waiting in this area by moving the bus stop to the east.
- 6.22 The Enhanced scheme includes a dedicated bus lay-by provided in the grass verge area to the east of New Walk which could be used for both passing local services (if these are reinstated in future) and for school bus drop off and pick up.
- 6.23 The movement of the bus stop to a dedicated lay-by means that the area outside the Co-op would be provided as a pedestrian only area in its entirety, significantly enhancing the character and pedestrian environment in this section of the village.
- 6.24 Space for people to wait for buses will be provided by widening the footway in the vicinity of the new bus layby, with pedestrians waiting for the bus being separated from the main carriageway.
- 6.25 The Enhanced scheme therefore addresses the concerns of the ExA around pedestrians waiting for buses on narrow footways and within the area outside the Co-op.
- 6.26 The relocation of the bus stop requires some land outside of the existing DCO Order limits. The delivery of these bus stop works can be secured through an agreement with the local highway authority pursuant to s278 of the Highways Act 1980 since all of the proposed works are within the existing highway boundary. The Applicant has proposed a new DCO requirement (requirement 5(4)) to secure this position, and the works that will be covered by the s278 agreement are shown on the Sapcote Enhanced s278 Works Plan at Appendix C. This plan is also now included in Schedule 15 of the dDCO as a document to be certified.

Footway Widths

- 6.27 The conversion of the space in front of the Co-op to a pedestrian only space provides a significant area of footway in the centre of the village for pedestrians to utilise.
- 6.28 The key desire lines through this section of the village are set out in Chapter 3.

- 6.29 The original DCO scheme provided significantly wider footways on the north side of the B4669 between the Zebra crossing and Stanton Road and these are retained in the Enhanced scheme with widths between 3.6m and 2.3m as shown on the GA Plan.
- 6.30 The footway to the north of the B4669 east of the Zebra crossing is around 0.5m - 1m in width and generally unsuitable for pedestrians to use, resembling more of a hard strip than a footway. Consideration has been given to using physical barriers to prevent access to this length of footway, however the Applicant has concluded that this may encourage people to step into the carriageway to get around any physical barriers, increasing the risk to pedestrians.
- 6.31 This situation can be monitored from the opening of the scheme and subject to Stage 3 and 4 RSA, further measures to deter the use of this section of footway could be implemented in future as part of the monitor and manage provisions in the HGV Route Management Plan and Strategy or through future Road Safety Audits under the DCO.
- 6.32 The Applicant has concluded that leaving this section of footway unchanged and providing better quality and more suitable facilities as alternatives is likely to be the most effective way of discouraging use of the north footway to the east of the Zebra crossing. An existing Zebra crossing around Sharnford Road is available to get users back onto the north side of the B4669 beyond the narrow footway section.
- 6.33 The footway on the south side of the B4669 between the Co-op and the new bus stop lay-by is currently around 1.5m in width and is cited by the ExA as being narrow and unsuitable for pedestrians to pass each other, particularly with prams. However, Manual for Streets diagram 6.8 (reproduced below as Figure 6.2) demonstrates that 1.5m is suitable for a person and a pram to pass each other.

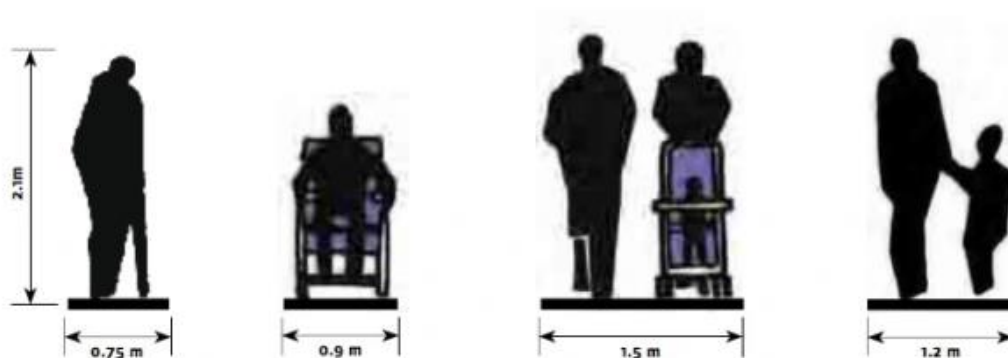


Figure 6.2 - MfS Diagram 6.8 showing footway widths and their suitability for various pedestrian traffic

- 6.34 As part of the Enhanced scheme, in narrowing the carriageway through this section between New Walk and the Co-op, the Applicant has been able to widen the footway on the south side to 2m (the recommended width in Table DG9 of the LCC Design Guide) which provides a suitable width link between the pedestrian area outside the Co-op and the new bus stop lay-by. As noted above, the footway is also widened in

the vicinity of the bus stop layby to 2m minimum, with additional width provided within the extents of the existing grass verge.

- 6.35 It can therefore be seen that the changes made within the Enhanced scheme provide significant additional footway width along the key desire lines within this section of the village and provision of a pedestrian priority Zebra crossing, which means that pedestrians are less likely to use the sub-standard, narrow footways on the north side of the B4669 and more likely to use the suitable facilities provided.

Shared Area Outside Co-op

- 6.36 As noted above, the scheme submitted during the DCO process was seen by the Road Safety Auditor as being an improvement on an existing situation that sees numerous vehicles using the area outside of the Co-op to illegally park.
- 6.37 In response to the concerns of the ExA, the Enhanced scheme converts the area outside the Co-op into an entirely pedestrian space. Detailed design of this space will ensure that vehicular access is suitably restricted.
- 6.38 Subject to agreement with LCC as highway authority, this space could be used for a small public realm scheme with seating, planting and lighting provided accordingly to enhance the character of the centre of the village. This forms part of Work No. 12 in the DCO and would be delivered pursuant to the protective provisions (Part 3 of Schedule 13) with Leicestershire County Council.
- 6.39 The Applicant has consulted with the Heart of England Co-operative who have stated that their deliveries go to the side of the store to utilise the designated loading bay and service entrance (as opposed to using the front of the store). They also stated that they have no objections in principle to the proposals put forward in the Enhanced scheme.
- 6.40 The proposals in the Enhanced scheme eliminate the risk raised by the ExA about conflicts between vehicles and pedestrians in this area by excluding all vehicles from using it.

Pedestrians Crossing by Using Small Island within Hatched Area of Road Markings

- 6.41 The existing hatched road markings and small island would remain as part of the Enhanced scheme so that should pedestrians choose to use this area as an informal refuge as observed by the ExA, they can continue to do so as they do at present. This addresses the ExA's concern about introduction of an unacceptable highway safety risk in this area.
- 6.42 The Applicant intends to go further than this. While the provision of the pedestrian priority Zebra crossing and wider footways on the north side of the B4669 is likely to reduce instances of pedestrians crossing using the small traffic island by providing better, more suitable facilities elsewhere, the Enhanced scheme adds another informal crossing point over the B4669.

- 6.43 This is positioned to the west of the small island, outside the Sapcote Club, and will provide a formal crossing point that people can use to move between the north and south of the B4669 where required.
- 6.44 It is the Applicant's view that the provision of the Zebra crossing, the provision of a new uncontrolled crossing point to the west and the retention of the hatched road markings and the small traffic island fully address the ExA's concern around highway safety in this area.

Road User Safety

- 6.45 The Enhanced scheme was submitted to the independent Road Safety Auditor, Midlands Road Safety, a company independent from the designer, for a Stage 1 RSA. Three road safety "problems" were identified by the audit team.
- 6.46 The first "problem" related to the uncontrolled crossing point outside the Sapcote Club and the potential for vehicles to park on the B4669 and obstruct visibility to this crossing point. The auditor recommended that at detailed design, waiting restrictions are considered in this area. The Applicant agrees with this recommendation.
- 6.47 The second "problem" related to the positioning of a warning sign for eastbound traffic approaching the narrow section of carriageway in an area of narrow footway. The auditor recommended that the sign is relocated to a wider section of footway. The Applicant agrees with this recommendation.
- 6.48 The third "problem" related to the general signing of the narrower section of carriageway given that there is no 'obvious' restriction in width (for example a narrow bridge). The auditor recommended that reference is made to the need for large vehicles to specifically use the centre of the carriageway, for example through the use of a vehicle activated sign (VAS) with large vehicle detection. The Applicant agrees with this recommendation.
- 6.49 In order to further evidence that the Enhanced design is safe, the Applicant submitted the scheme to a second Road Safety Audit team from BWB Consulting - independent of the design team involved in the scheme and regularly utilised for RSAs by both National Highways and LCC. Four road safety "problems" were identified by BWB's audit team.
- 6.50 The first problem related to the potential for inappropriate parking and use of the area outside the Co-op store and on Church St. The auditor recommended that, at detailed design, waiting restrictions are considered on Church St. to ensure that parked vehicles do not obstruct visibility splays. The Applicant agrees with this recommendation.
- 6.51 The second problem related to the potential reduction of junction visibility for vehicles exiting Church St. The auditor recommended that the give way line is positioned to provide maximum visibility. The Applicant agrees with this recommendation.
- 6.52 The third problem related to the location of signage warning of the narrow section of carriageway being obstructed by buses using the lay-by. The auditor recommended

that the location of these signs is reviewed to ensure visibility is maintained at all times. The Applicant agrees with this recommendation.

- 6.53 The fourth problem related to the location and mounting heights of signage causing reductions to footway widths. The auditor recommended that signage is mounted at appropriate heights and positioned to ensure sufficient footway widths are available. The Applicant agrees with this recommendation.
- 6.54 The scheme included at Appendix C includes design updates in line with the recommendations above. The amended scheme and response reports were resubmitted to the respective audit teams who provided their views on how the amendments address the items raised in the their RSA. Both audit teams were of the view that the changes made or proposed at detailed design adequately mitigate the problems in the original RSA reports.
- 6.55 The Applicant therefore considers, and the auditors agree, that these road safety "problems" have either already been mitigated in the design at Appendix C or can be dealt with as part of the detailed design pursuant to the DCO.
- 6.56 Both of the Stage 1 RSA reports completed and the accompanying designer's response reports, including the auditors' comments on the proposed mitigation are appended to this document as Appendix D.
- 6.57 A Cobalt safety assessment has been undertaken on the Enhanced proposals, the findings of which are shown in Table 6.1.

2026 Baseline Typical Annual Accidents	2026 Typical Annual Accidents with Proposed Development	Proposed Development Impact (2026)	2036 Baseline Typical Annual Accidents	2036 Typical Annual Accidents with Proposed Development	Proposed Development Impact (2036)
0.07	0.10	Negligible	0.06	0.09	Negligible

Table 6.1 - Cobalt results for the centre of Sapcote

- 6.58 LCC have been consulted on the Enhanced scheme via submission of information to them and subsequent meetings to discuss their thoughts on the proposals. They submitted written comment to the Applicant on 14th November 2024 stating that they have a 'fundamental highway safety concern' with the proposal.
- 6.59 LCC's view was that Midlands Road Safety RSA problem 3 is not adequately mitigated by the use of vehicle activated signage (as suggested by the independent auditor and agreed to by the Applicant). LCC cite the use of VAS on the A5 approach to the Nutts Lane low bridge which warns high sided vehicles to turn around and yet remains the 'most bashed bridge in Britain'. LCC believe that it is unclear how, in the scenario that one HGV does not stop to let an oncoming HGV through, they could safely reverse to remedy this situation.

6.60 The Applicant notes LCC's example of the Nutts Lane low bridge on the A5, but the Applicant believes that this is an entirely different and non-comparable example and application of VAS from that proposed in Sapcote. On the A5, the VAS is positioned some 1.1km to the north west and south east of the hazard (see figure 6.3) so it is not immediately clear to drivers unfamiliar with the route what it refers to. Furthermore, this requires a definitive action from drivers ('turn back') which requires deviation from a route and is therefore less likely to be complied with. The VAS proposed in Sapcote would comprise a warning sign or message, close to the narrow section of road, reinforced by road markings which will be visible to approaching vehicles. The Applicant, in agreement with the road safety auditor, believes that this will be effective in mitigating any safety concerns in Sapcote.



Figure 6.3 - VAS on the A5 relating to Nutts Lane low bridge

6.61 In addition, the routes in question are significantly different in their character and traffic volume. The A5 is part of the Strategic Road Network and drivers of large vehicles might reasonably expect that they are able to pass through the length of this route uninhibited and therefore may not be expecting a height restriction such as that at the Nutts Lane low bridge. The B4669 passes through a village with, as noted in the chapters above, several other features which enhance driver awareness, slow vehicles and place emphasis on the character of the village, meaning that drivers on this route are more likely to expect features such as the narrow section around New Walk.

6.62 While LCC's disagreement with the opinion of an independent road safety auditor in terms of suitable mitigation to a road safety problem in this location is unusual (particularly given that their cited comparison is not appropriate in the Applicant's view), the Applicant has nevertheless sought examples of similar highway arrangements across Leicestershire and the UK to that proposed in Sapcote. These are detailed below with relevant images of the situation encountered by vehicles on these routes and collision data relating to the area for the last 5 recorded years.

A6006 Wymeswold, Leicestershire

6.63 The A6006 is a route used by HGVs which links Melton Mowbray and the A46 to the east of the village of Wymeswold to the A6 and M1 to the west of the village.

6.64 In the location in question, an overhanging building means that a section of carriageway is significantly narrower than the approaches either side. There is no formal give way arrangement, however deflection arrows and white lining direct vehicles away from the hazard into the middle of the road, relying on oncoming traffic giving way to allow other vehicles through.

6.65 Fixed warning signs and vehicle activated signs are provided on the approaches to the narrow section. Figure 6.4 shows the approach from the east of the village.



Figure 6.4 - A6006 in Wymeswold

- 6.66 The Applicant understands that the warning signs and white lines were installed in response to incidents involving HGVs and the overhanging building a number of years ago and in the last 5 recorded years there are no reported personal injury collisions (PIC) on this section of carriageway, indicating that the measures seen here (which are very similar to those proposed in Sapcote) are effective and do not pose a significant highway safety risk.

A610 Ambergate, Derbyshire

- 6.67 The A610 links the A38 to the A6 through Ambergate and is frequently used by HGVs. An arched bridge means that large vehicles are directed to the middle of the road in order to pass through by signage and road markings. Vehicle activated signs are present on the approach to the bridge as shown in the image below to warn of oncoming vehicles in the middle of the road, similar to the sort of arrangement that could be implemented within Sapcote through the narrow section. Figure 6.5 shows the arrangement on the approach to the bridge.



Figure 6.5 - A610 in Ambergate

- 6.68 In the last 5 recorded years there are no reported PICs involving this bridge which suggests that the road markings and VAS are working effectively to direct large vehicles to the centre of the road under the archway.

A606 Nether Broughton, Leicestershire

- 6.69 The A606 links the A46 to Melton Mowbray and is regularly trafficked by HGVs. There are a number of instances where this route passes through villages with narrow carriageway and tight bends reducing the ability of large vehicles to pass each other. The specific example below is in the village of Nether Broughton and relates to narrow carriageway caused by buildings constraining the available width around a sharp bend.
- 6.70 Vehicles travelling westbound approach a series of tight bends with buildings protruding into the carriageway. Historically, these were demarcated by road markings however in recent years kerbing has been installed to divert vehicles away from the buildings and dedicate space to pedestrians.
- 6.71 Vehicle activated signage with an illuminated 'series of bends ahead' warning sign to Diagram 513 and the text SLOW DOWN is used in support of fixed signage. In the opposite direction, diagram 513 with an 'oncoming vehicles in the middle of the road' plate is used. Figure 6.6 shows the narrow section, VAS and fixed signage.

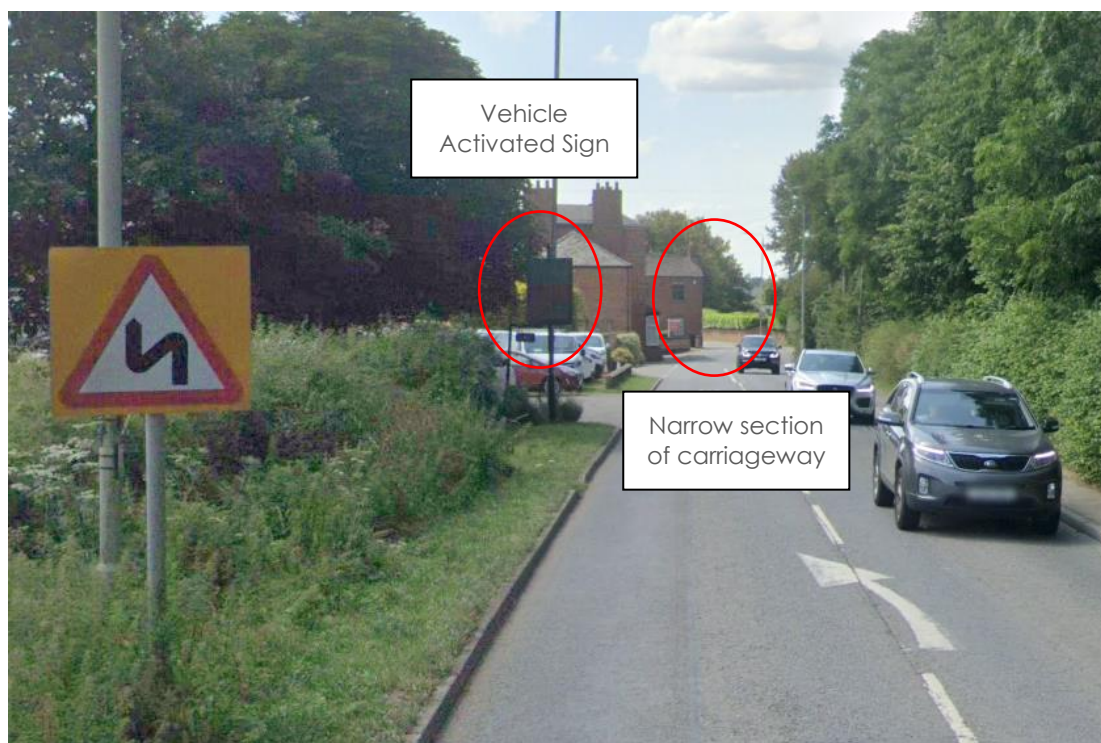


Figure 6.6 - A606 in Nether Broughton, Leicestershire

- 6.72 In the last 5 reported years there have been no recorded PICs on this stretch of the A606.
- 6.73 It is the Applicant's view that the examples given above, along with the numerous other examples of narrow roads through villages across the UK which do not have VAS and the independent road safety auditor's view that the designer's response and updates mitigate the road safety issues raised demonstrate that the Enhanced scheme in Sapcote does not have any fundamental highway safety issues associated with it and can be delivered to operate safely for both motorists and non-motorised traffic.

Noise and Air Quality Considerations

- 6.74 The Enhanced scheme has been considered by the Applicant's noise and air quality consultants.
- 6.75 Full technical notes on these subjects are included as Appendices E and F to this report.
- 6.76 The noise technical note concludes that noise modelling and assessment of the Enhanced Scheme has been undertaken in accordance with the accepted methodology with reference to the guidance detailed within the Chapter assessment, which has been examined and accepted. The results of the noise modelling indicate that the proposals do not change the magnitude of impact in the short-term or long-term and the effect remains as minor, adverse in the short-term and negligible adverse for the long-term, both of which are not significant.
- 6.77 The bus stop, which is currently located near to the junction of Church Street and Leicester Road, is to be relocated further east along Leicester Road. Given the infrequency of bus services through Sapcote, it is considered unlikely that adverse noise impacts would be experienced from vehicular noise at nearby receptors. There is a potential for noise associated with pupils gathering at the bus stop, but it is considered unlikely that a significant adverse impact would arise at adjacent receptors.
- 6.78 The air quality technical note concludes that a comparison was undertaken of the pollutant concentration changes predicted between the Original Scheme and the Enhanced Scheme. Whilst the Enhanced Scheme is predicted to result in some higher concentration changes when compared to the Original Scheme, the overall impacts remain negligible and not significant. In addition, a robust Enhanced Scheme was modelled where the queue period was applied to all vehicles for 24 hours a day, 365 days a year, along the length of the B4669 whereas in reality, queueing will not be constantly present.
- 6.79 It is therefore considered that the Enhanced Scheme will not result in any additional adverse impacts with regards to air quality.

7. CONCLUSIONS

- 7.1 This report demonstrates that the scheme submitted by the Applicant during the DCO process would have been suitable for development during the detailed design process to provide a safe mitigation scheme based on the 'opening year' HGV traffic, with a future 'monitor and manage' regime in place to address 'future year' impacts. That scheme delivered:
- Improvements to the carriageway around the Co-op to enable two large vehicles to pass each other by removal of the pedestrian island
 - A pedestrian priority Zebra crossing to replace the uncontrolled crossing point on the B4669, providing improved pedestrian facilities and connectivity on a key desire line in the village
 - Widening of the footways on the north side of the B4669 and improvement of the pedestrian facilities around Stanton Road
- 7.2 In response to the SoS's letter and the ExA's Recommendation Report, the Applicant has submitted updated highway plans for the delivery of an Enhanced scheme which, in addition to the above, provides:
- Warning signs, road markings and visibly narrow carriageway to encourage HGVs to wait when infrequently confronted with another HGV in the opposite direction in the section between the Co-op and New Walk;
 - Widening of the carriageway around New Walk to enable large vehicles to pass each other and enhance forward visibility
 - Widening of footways on the south side of the B4669
 - A large, fully pedestrianised area outside the Co-op
 - A dedicated bus lay-by to the east of the Co-op with widened footways to enable suitable access and space for waiting passengers
 - Retained road marking hatching and traffic island to the west of the Co-op
 - A new uncontrolled crossing point to the west of the Co-op to discourage the informal use of the small traffic island
- 7.3 The Enhanced scheme, which is proposed in place of the original scheme and delivers the measures proposed by the original scheme while adding significant additional works to the area, provides mitigation of the 'future year' effects of HGV traffic as raised by the ExA and provides a robust and comprehensive improvement scheme in the centre of Sapcote.
- 7.4 In addition to the Enhanced scheme, the provisions within the HGV Route Management Plan and Strategy to further monitor and manage HGV traffic in the village of Sapcote remain in place with the financial commitment to further measures in future should they be necessary now secured through planning obligation rather than being part of the HGV Route Management Plan and Strategy itself (please see the updated HGV Route Management Plan and Strategy (Document 17.4F).
- 7.5 The Enhanced scheme has been subject to two independent Stage 1 RSAs and all recommendations have been agreed. Furthermore, no fundamental safety problems

were identified by either RSA team. As the design progresses, the scheme will be subject to Stage 2, 3 and Stage 4 Road Safety Audits⁶ and these enable the situation with large vehicles, pedestrians and any other potential safety issues within this section of Sapcote to be assessed and further action taken to address any unforeseen issues that may arise.

- 7.6 The Enhanced scheme is proposed to be secured through amendments to Work No. 12 described in Schedule 1 of the dDCO and through updates to the highway plan which is secured by dDCO requirement 5 and the protective provisions with Leicestershire County Council (Part 3 of Schedule 13). Where the Enhanced scheme falls outside of the Order Limits, it is wholly within the existing highway boundary and can therefore be delivered by agreement with the local highway authority pursuant to s278 of the Highways Act 1980. This process is secured by a new dDCO requirement (requirement 5(4)) to ensure that the Applicant enters into this agreement and delivers the Enhanced scheme in full.

⁶ The requirement for road safety audits is set out in the Provisions for the Protection of LCC within the DCO

APPENDICES

APPENDIX A: Sapcote Proposals Put Forward at DCO Stage

APPENDIX B: Additional Information Provided to Auditor and Auditor Response

APPENDIX C: Details of Enhanced Scheme

APPENDIX D: Enhanced Scheme Stage 1 RSA and Designer's Response Report

APPENDIX E: Sapcote Enhanced Scheme Noise Technical Note

APPENDIX F: Sapcote Enhanced Scheme Air Quality Technical Note



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