



DCO Submission

Environmental Statement

**Chapter 3:** Transport  
**Appendix 3.10:** Assessment of Potential Environmental Effects  
and Residual Effects 2042 Sensitivity Test

Document 6.3J

On behalf of  
**Oxfordshire Railfreight Limited**

Prepared by ADC Infrastructure Ltd  
**March 2026**

Link	Potential Effects/Embedded Mitigation/Residual Effects (Significance)	
<p><b>Link 2</b></p> <p>M40 J10 SB diverge</p> <p><b>Sensitivity:</b></p> <p>Negligible</p>	<p><b>Potential Effects</b></p>	<ul style="list-style-type: none"> <li>• Severance: no change</li> <li>• Driver Delay: major magnitude (beneficial)</li> <li>• NMU Delay: no change</li> <li>• NMU Amenity: no change</li> <li>• Fear and Intimidation: no change</li> <li>• Road User and Pedestrian Safety: minor magnitude (beneficial)</li> </ul> <p>Link 2 has no adjacent WCH receptors; furthermore, WCH access will be prohibited in both the RC4A and DS4A scenarios. Consequently, there would be no discernible change in; severance, NMU delay, NMU amenity, fear and intimidation, or pedestrian safety, between scenarios. Accordingly, there would be <i>no change</i> in these criteria.</p> <p>In terms of driver delay, the transport modelling shows that the southbound diverge at J10 experiences an increase in traffic flow in the DS4A scenario (36% increase in total vehicle flow) when compared to the RC4A. This is because the embedded highway mitigation at J10 (along with the Ardley Bypass and the MSRR), provide a significantly improved route to Bicester, while additional lanes on the link alleviate a pre-existing bottleneck. These improvements contribute to an overall reduction in journey times, which constitutes a beneficial impact of <i>major magnitude</i> in terms of driver delay.</p> <p>In terms of road user safety, the PIC analysis undertaken as part of the TA concluded that there were no trends in collision data suggestive of a highway safety issue at Junction 10. Nevertheless, the embedded highway mitigation on this link would provide an improvement in Road User safety as it addresses the existing capacity constraint at the M40 J10 and provides a significantly improved route to Bicester. However, given no pre-existing highway safety issue was identified; while these improvements are beneficial, they are assessed as having a <i>minor magnitude</i> of impact on road user safety.</p>
	<p><b>Embedded Mitigation</b></p>	<p>This link is part of the embedded highway works at the M40 J10. The M40 SB diverge would be increased to three lanes for A43 SB entry, with a designated left turn lane for A43 NB entry.</p>
	<p><b>Effects (Significance)</b></p>	<ul style="list-style-type: none"> <li>• Severance: <b>Neutral (No effect)</b></li> <li>• Driver Delay: Slight permanent beneficial (<b>Not Significant</b>)</li> <li>• NMU Delay: <b>Neutral (No effect)</b></li> <li>• NMU Amenity: <b>Neutral (No effect)</b></li> <li>• Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>• Road User and Pedestrian Safety: Slight permanent beneficial (<b>Not Significant</b>)</li> </ul>
	<p><b>Additional Mitigation</b></p> <p><b>Effect of Travel Plan</b></p>	<p>None</p> <p>Not applied</p>

	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Neutral (No effect)</b></li> <li>• Driver Delay: Slight permanent beneficial (<b>Not Significant</b>)</li> <li>• NMU Delay: <b>Neutral (No effect)</b></li> <li>• NMU Amenity: <b>Neutral (No effect)</b></li> <li>• Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>• Road User and Pedestrian Safety: Slight permanent beneficial (<b>Not Significant</b>)</li> </ul>
<b>Link 4</b>  M40 J10 NB merge  <b>Sensitivity:</b>  Negligible	<b>Potential Effects</b>	<ul style="list-style-type: none"> <li>• Severance: no change</li> <li>• Driver Delay: minor magnitude (beneficial)</li> <li>• NMU Delay: no change</li> <li>• NMU Amenity: no change</li> <li>• Fear and Intimidation: no change</li> <li>• Road User and Pedestrian Safety: minor magnitude (beneficial)</li> </ul> <p>Link 4 has no adjacent WCH receptors; furthermore, WCH access will be prohibited in both the RC4A and DS4A scenarios. Consequently, there would be no discernible change in; severance, NMU delay, NMU amenity, fear and intimidation, or pedestrian safety, between scenarios. Accordingly, there would be <i>no change</i> in these criteria.</p> <p>Transport modelling shows the new NB merge would experience similar traffic flows to currently observed, with a slight reduction in background traffic in the morning peak hour. This, coupled with the embedded highway works at J10 which are facilitated by the changes to Link 4, would lead to a reduction in overall journey times. Consequently, it is considered that the beneficial effect on driver delay would be of <i>minor magnitude</i>.</p> <p>In terms of road user safety, the collision analysis undertaken as part of the TA concluded that there were no trends in collision data that suggested the presence of a highway safety issue at Junction 10 (two slight collisions were recorded in a 5-year period on this link). As part of the embedded highway mitigation at J10, Link 4 would be fundamentally altered. The embedded highway mitigation addresses the capacity constraint at the existing M40 junction and provides a significantly improved route to Bicester, in terms of congestion and thus safety for road users. However, given no pre-existing highway safety issue was identified; these beneficial improvements are only considered to have a <i>minor magnitude</i> of impact on road user safety.</p>
	<b>Embedded Mitigation</b>	This link is part of the embedded highway works at the M40 J10 and would be subject to a fundamental redesign and moved further north. This is to facilitate other embedded highway mitigation works at J10.
	<b>Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Neutral (No effect)</b></li> <li>• Driver Delay: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• NMU Delay: <b>Neutral (No effect)</b></li> </ul>

		<ul style="list-style-type: none"> <li>• NMU Amenity: <b>Neutral (No effect)</b></li> <li>• Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>• Road User and Pedestrian Safety: <b>Slight permanent beneficial (Not Significant)</b></li> </ul>
	<b>Additional Mitigation</b>	None
	<b>Effect of Travel Plan</b>	Not applied
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Neutral (No effect)</b></li> <li>• Driver Delay: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• NMU Delay: <b>Neutral (No effect)</b></li> <li>• NMU Amenity: <b>Neutral (No effect)</b></li> <li>• Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>• Road User and Pedestrian Safety: <b>Slight permanent beneficial (Not Significant)</b></li> </ul>
<p><b>Link 5</b></p> <p>New Link - M40 J10A NB diverge loop and M40 overbridge</p> <p><b>Sensitivity:</b></p> <p>Negligible</p>	<b>Potential Effects</b>	<ul style="list-style-type: none"> <li>• Severance: negligible magnitude (adverse)</li> <li>• Driver Delay: major magnitude (beneficial)</li> <li>• NMU Delay: negligible magnitude (adverse)</li> <li>• NMU Amenity: negligible magnitude (adverse)</li> <li>• Fear and Intimidation: minor magnitude (beneficial)</li> <li>• Road User and Pedestrian Safety: major magnitude (beneficial)</li> </ul> <p>Link 5 has no adjacent WCH receptors; furthermore, WCH access will be prohibited in the DS4A scenario. As Link 5 is a new link, there may be a very minor change in conditions or circumstances in terms of severance, NMU delay, NMU amenity, and pedestrian safety, resulting from its construction, as NMUs would be prohibited from accessing the location of link. As the link is new, this impact is potentially adverse but would nevertheless be slight; and thus, has been assessed as a <i>negligible magnitude</i>.</p> <p>To confirm there would be limited impact in terms of fear and intimidation; a Degree of Hazard score has been determined using the IEMA Guidelines' weighting system for the link in the DS4A scenario. This is compared to the existing M40 NB diverge slip (Link 3) in RC4A. The new loop and overbridge would be subject to a 40mph speed limit. In DS4A the average vehicle/hour over 18 hours is 936 vehicles and the 18-hour HGVs is 1774 vehicles. Accordingly, the DS4A fear and intimidation degree of hazard score is 40 (10+10+20), which equates to a 'Moderate' level of fear and intimidation. Comparing the RC4A scenario; the average speed of vehicles on the existing M40 NB diverge slip is over 40mph. In RC4A, the average vehicle/hour over 18 hours is 1089 vehicles and the 18-hour HGVs is 2205 vehicles. Accordingly, the RC4A fear and intimidation degree of hazard score is 60 (10+20+30), which equates to a 'Great' level of fear and intimidation. Therefore, there is one step change in level. In terms of traffic flows there is a less than 400 vehicle decrease in average 18-hour vehicle flow (153 vehicles) and a decrease, and a less than 500 HGV decrease in total 18-hour HGV flow (431 HGVs). Therefore, the magnitude of impact can be</p>

		<p>considered low, and thus a <i>minor magnitude</i>. The impact is beneficial due to the decrease in level between scenarios.</p> <p>In terms of driver delay, the new NB link between the M40 and A43 reduces the journey time for drivers, particularly in the morning peak hour where congestion at the Ardley Roundabout leads to delay. This reduction in journey times is considered to have a <i>major magnitude</i> beneficial impact in terms of driver delay.</p> <p>As a new link, there are no collision clusters associated with this link. However, it would provide an improvement in Road User safety as it addresses the capacity constraint at the existing M40 NB diverge during the morning peak hour, which is forecast to see queuing traffic blocking back to the M40 mainline in the RC4A scenario. The new link will cater for M40 NB to A43 NB traffic and eliminates the queuing issue at the existing slip. These benefits are considered to have a <i>major magnitude</i> beneficial impact on road user safety.</p>
	<b>Embedded Mitigation</b>	This link is part of the embedded highway works and addresses the existing congestion at the Ardley Roundabout and removes traffic from the Ardley and Cherwell junctions at M40 J10 thereby providing capacity to accommodate the OxSRFI development traffic.
	<b>Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Neutral (No Effect)</b></li> <li>• Driver Delay: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• NMU Delay: <b>Neutral (No Effect)</b></li> <li>• NMU Amenity: <b>Neutral (No Effect)</b></li> <li>• Fear and Intimidation: <b>Neutral (No Effect)</b></li> <li>• Road User and Pedestrian Safety: <b>Slight permanent beneficial (Not Significant)</b></li> </ul>
	<b>Additional Mitigation</b>	None
	<b>Effect of Travel Plan</b>	Not Applied
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Neutral (No Effect)</b></li> <li>• Driver Delay: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• NMU Delay: <b>Neutral (No Effect)</b></li> <li>• NMU Amenity: <b>Neutral (No Effect)</b></li> <li>• Fear and Intimidation: <b>Neutral (No Effect)</b></li> <li>• Road User and Pedestrian Safety: <b>Slight permanent beneficial (Not Significant)</b></li> </ul>
<p><b>Link 12</b></p> <p>A43 WB on M40 J10 bridge</p> <p><b>Sensitivity:</b></p> <p>Low</p>	<b>Potential Effects</b>	<ul style="list-style-type: none"> <li>• Severance: negligible magnitude (beneficial)</li> <li>• Driver Delay: minor magnitude (beneficial)</li> <li>• NMU Delay: negligible magnitude (beneficial)</li> <li>• NMU Amenity: negligible magnitude (adverse)</li> <li>• Fear and Intimidation: negligible magnitude (adverse)</li> <li>• Road User and Pedestrian Safety: minor magnitude (beneficial)</li> </ul> <p>Link 12 represents the A43 westbound over the M40 bridge. Between the RC4A and DS4A scenarios, Link 12 would be subject to a 44% increase in 24-hour total</p>

		<p>vehicle traffic, indicating a 'slight' impact. However, there are no WCH receptors adjacent to Link 12, and there is no need for NMUs to cross this link. Currently there is limited WCH infrastructure provision on this link and as part of the embedded highway works shared footway/cycleways would be provided at each end of the link, with informal provision over the bridge itself. Elsewhere signalised crossings would be provided at the Ardley roundabout: facilitating NMU crossings over the A43. Therefore, given the mitigation provided elsewhere at the Ardley roundabout, it is considered that there would be a <i>negligible magnitude</i> beneficial impact in terms of severance between RC4A and DS4A scenarios, on the link.</p> <p>Similarly, the increase in traffic flows suggests a possible slight impact upon NMU delay. However, because of the lack of WCH receptors adjacent the link and the mitigation provided elsewhere at the Ardley roundabout, it is deemed there would be a beneficial, but <i>negligible magnitude</i> impact in terms of NMU delay.</p> <p>Daily total vehicle traffic flows do not double (44% increase); nevertheless, the HGV flows increase by 159% over 24 hours, and therefore the changes in total traffic flows may be non-negligible in accordance with IEMA Guidelines. There would be an additional 1616 HGVs on the link within a 24-hour period, which equates to approximately one a minute: not a significant amount. However, because of the lack of WCH receptors adjacent the link and the mitigation provided elsewhere at the Ardley roundabout, it is deemed that the adverse impact would be limited to <i>negligible magnitude</i>.</p> <p>Link 12, as existing, is subject to the national speed limit of 60mph and it is considered likely that average vehicle speeds could exceed 40mph. In RC4A the average vehicle/hour over 18 hours is 617 vehicles and the 18-hour HGVs is 889 vehicles. Accordingly, the RC4A fear and intimidation degree of hazard score is 40 (10+0+30), which equates to a 'Moderate' level of fear and intimidation. In the DS4A, the speed limit would be reduced to 40mph, and thus speeds are expected to average 40mph. In DS4A, the average vehicle/hour over 18 hours is 854 vehicles and the 18-hour HGVs is 2227 vehicles. Accordingly, the DC3A fear and intimidation degree of hazard score is 50 (10+20+20), which equates to a 'Great' level of fear and intimidation.</p> <p>Therefore, there is one step change in level. In terms of traffic flows there is less than a 400 vehicle change in average 18-hour vehicle flow (237 vehicles), and more than a 500 HGV change in total 18-hour HGV flow (1338 HGVs). Therefore, in accordance with IEMA guidelines, the magnitude of impact can be considered low or medium. Therefore, considering the lack of WCH receptors there would be a <i>minor magnitude</i> adverse</p>
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		<p>impact on fear and intimidation as a result of the change in traffic flows. As the traffic flows increase, this impact has been assessed as adverse.</p> <p>The changes to J10 and the Ardley Roundabout results in an increase in in peak hour flows on Link 12, and the BTM modelling shows the link operating within capacity in both peak hours in the RC4A and DS4A scenarios. The modelling would operate close to capacity in both peak hours in the DS4A scenario. However, the embedded highway works at J10 would lead to a reduction in overall journey times and this is considered to be a beneficial effect in terms of driver delay, of <i>minor magnitude</i>.</p> <p>In terms of road user safety, the collision analysis undertaken as part of the TA concluded that there were no trends in collision data that suggested the presence of a highway safety issue at J10. The embedded highway mitigation addresses the capacity constraint at the existing J10 and provides improvements in terms of congestion and thus safety for road users. However, given no pre-existing highway safety issue was identified; these beneficial improvements are only considered to have a <i>minor magnitude</i> of impact on road user safety.</p>
	<b>Embedded Mitigation</b>	Whilst there are no changes to the bridge over the M40 specifically; the M40 J10 is part of the embedded highway works which address the existing congestion at the junction thereby providing capacity to accommodate the OxSRFI development traffic.
	<b>Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Neutral (No effect)</b></li> <li>• Driver Delay: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• NMU Delay: <b>Neutral (No effect)</b></li> <li>• NMU Amenity: <b>Neutral (No effect)</b></li> <li>• Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>• Road User and Pedestrian Safety: <b>Slight permanent beneficial (Not Significant)</b></li> </ul>
	<b>Additional Mitigation</b>	None
	<b>Effect of Travel Plan</b>	Not applied
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Neutral (No effect)</b></li> <li>• Driver Delay: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• NMU Delay: <b>Neutral (No effect)</b></li> <li>• NMU Amenity: <b>Neutral (No effect)</b></li> <li>• Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>• Road User and Pedestrian Safety: <b>Slight permanent beneficial (Not Significant)</b></li> </ul>
<b>Link 19</b>  New link - B430 arm of B430/HPLR junction	<b>Potential Effects</b>	<ul style="list-style-type: none"> <li>• Severance: major magnitude (beneficial)</li> <li>• Driver Delay: minor magnitude (beneficial)</li> <li>• NMU Delay: moderate magnitude (adverse)</li> <li>• NMU Amenity: major magnitude (beneficial)</li> <li>• Fear and Intimidation: minor magnitude (beneficial)</li> <li>• Road User and Pedestrian Safety: No change</li> </ul>

<p><b>Sensitivity:</b></p> <p>Low</p>	<p>Although Link 19 is a new Link, it effectively forms an extension to the B430 Link 20 (DS4A flows are the same on both links) and forms the northeastern arm of a new traffic signal junction between the B430 and the HPLR. Therefore, to provide an appropriate comparison to the RC4A scenario, the traffic flows for the existing B430 to the south of Camp Road can be used. Accordingly, between the RC4A and DS4A scenarios, Link 19 would be subject to a 231% increase in 24-hour total vehicle traffic when compared to the existing B430. A 3m shared use pedestrian/cycle would be provided along the eastern edge of the B430. At the HPLR junction, crossing points would be provided over Link 19, greatly improving the ability for pedestrians and cyclists to cross the link. In the RC4A scenario, no provision for NMUs is provided on the link, and thus this represents a notable improvement. Thus, there would be a <i>major magnitude</i> beneficial impact on severance for Link 19, despite the increase in traffic flows.</p> <p>The provision of NMU facilities adjacent and across the link at the B430/HPLR junctions, means that NMUs would have to wait to cross the link. In the RS3A scenario, NMUs would be on a free-flowing link and would have no need to stop and cross. Thus, there would be a <i>moderate magnitude</i> adverse impact in terms of NMU delay in the DS4A scenario.</p> <p>In terms of NMU amenity, the provision of a 3m shared use pedestrian/cycle link and signalised crossing facilities, would comprise a significant improvement for the experience of NMU travelling along and across Link 19. Although total vehicle traffic flows and HGV flows double, appropriate mitigation for NMU is proposed and therefore, it is considered that there would be a <i>major magnitude</i> beneficial impact on NMU amenity.</p> <p>The B430 as existing, and within the RC4A scenario is/would be subject to the national speed limit of 60mph, and it is considered highly likely that average vehicle speeds could exceed 40mph. In RC4A, on the B430 south of Camp Road, the average vehicle/hour over 18 hours is 348 vehicles and the 18-hour HGVs is 1180 vehicles. Accordingly, the RC4A fear and intimidation degree of hazard score is 40 (0+10+30), which equates to a 'Moderate' level of fear and intimidation. In the DS4A, average vehicle speeds are to be between 30-40mph, as vehicles travel slower in the proximity of HPLR junction and consistent with the proposed 40 mph speed limit. In DS4A, the average vehicle/hour over 18 hours is 1123 vehicles and the 18-hour HGVs is 2264 vehicles. Accordingly, the RC4A fear and intimidation degree of hazard score is 50 (10+20+20), which equates to a 'Great' level of fear and intimidation. Therefore, there is one step change in level. In terms of traffic flows there is a more than 400 vehicle increase in average 18-hour vehicle flow (775 vehicles) and a decrease, and a</p>
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	<p>more than 500 HGV increase in total 18-hour HGV flow (1084 HGVs). Therefore, the magnitude of impact can be considered medium. However, the scheme would provide a 3m shared use pedestrian/cycle link for the length of Link 19 which would be a significant improvement for the experience of NMUs travelling along Link 19. Therefore, it is considered that overall, there would be a <i>minor magnitude</i> beneficial impact on fear and intimidation.</p> <p>Although the link is replacing a free-flowing section of the B430, there would be limited delay for drivers in the DS4A scenario. Approaching the junction, the link would operate at 65% and 70% of capacity in the morning and evening peak hours respectively in the DS4A scenario. Therefore, the link would operate without significant congestion or delay. Link 19 is the northeastern arm of a new traffic signal junction between the MSRR and HPLR. This junction is part of the embedded highway works associated with OxSRFI, designed to reduce congestion on the local highway network, particularly within Middleton Stoney and thus providing capacity to accommodate the OxSRFI traffic. Overall, this link would have a <i>minor magnitude</i> beneficial impact on driver delay.</p> <p>In terms of road user safety, the PIC analysis undertaken as part of the TA recorded no incidents on the existing B430 in the location of Link 19. It is considered that there would be no change with regards to road user safety.</p>
<b>Embedded Mitigation</b>	<p>Link 19 forms the northeastern arm of a new traffic signal junction between the MSRR and HPLR. This junction is part of the embedded highway works associated with OxSRFI, designed to reduce congestion on the local highway network, thus providing capacity to accommodate the OxSRFI traffic. In terms of NMU provision, a 3m shared use pedestrian/cycle way would be provided along the northern edge of the link. A crossing for NMU would be provided across the western extent of the link, as part of the signalised junction.</p>
<b>Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• Driver Delay: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• NMU Delay: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• NMU Amenity: <b>Moderate permanent beneficial (Potentially Significant)</b></li> <li>• Fear and Intimidation: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• Road User and Pedestrian Safety: <b>No effect (Neutral)</b></li> </ul>
<b>Additional Mitigation</b>	None
<b>Effect of Travel Plan</b>	Not applied
<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Slight permanent beneficial (Not Significant)</b></li> </ul>

		<ul style="list-style-type: none"> <li>• Driver Delay: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• NMU Delay: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• NMU Amenity: <b>Moderate permanent beneficial (Significant)</b></li> <li>• Fear and Intimidation: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• Road User and Pedestrian Safety: <b>No effect (Neutral)</b></li> </ul>
<p><b>Link 20</b></p> <p>B430 between HPLR and Principal Site Access</p> <p><b>Sensitivity:</b></p> <p>Low</p>	<p><b>Potential Effects</b></p>	<ul style="list-style-type: none"> <li>• Severance: major magnitude (beneficial)</li> <li>• Driver Delay: minor magnitude (beneficial)</li> <li>• NMU Delay: moderate magnitude (beneficial)</li> <li>• NMU Amenity: major magnitude (beneficial)</li> <li>• Fear and Intimidation: major magnitude (beneficial)</li> <li>• Road User and Pedestrian Safety: minor magnitude (beneficial)</li> </ul> <p>In terms of traffic flows, between the RC4A and DS4A scenarios. North of Camp Road, Link 20 would be subject to a 74% increase in 24-hour total vehicle traffic. Currently there are limited WCH receptors adjacent Link 20 and no formal WCH infrastructure provided on or across link, with limited demand to cross the link. In the DS4A scenario, OxSRFI would be a significant generator of WCH trips and the promoted routes to and from the site would add to the number of pedestrian and cycle trips along and across this link. To mitigate this, a 3m shared use pedestrian/cycle would be provided along the eastern edge of the B430 and a two-way signalised toucan crossing over the link is proposed adjacent to the Public Bridleway 367/21. This would significantly aid NMUs in crossing Link 20 and therefore, despite the increase in traffic flows, there would be a <i>major magnitude</i> beneficial impact on severance in the DS4A scenario.</p> <p>Similarly, the provision of a toucan crossing would allow NMUs to cross the link promptly, whereas in the RC4A scenario they would have wait for sparse gaps in the traffic. This is deemed a <i>moderate magnitude</i> beneficial impact in terms of NMU delay.</p> <p>In terms of NMU amenity, the provision of a 3m shared use pedestrian/cycle link for the length of would be a significant improvement for the experience of NMUs travelling along Link 20. HGV flows double and therefore the changes in total traffic flows should be considered non-negligible in accordance with IEMA Guidelines. However, significant mitigation is proposed for NMUs and therefore, it is considered that there would be a <i>major magnitude</i> beneficial impact on NMU amenity.</p> <p>Link 20, as existing, is subject to the national speed limit of 60mph and it is considered highly likely that average vehicle speeds could exceed 40mph. In RC4A the</p>

		<p>average vehicle/hour over 18 hours is 663 vehicles and the 18-hour HGVs is 942 vehicles. Accordingly, the RC4A fear and intimidation degree of hazard score is 40 (10+0+30), which equates to a 'Moderate' level of fear and intimidation. In the DS4A, average vehicle speeds are unlikely to change and would still exceed 40mph. In DS4A, the average vehicle/hour over 18 hours is 1123 vehicles and the 18-hour HGVs is 2264 vehicles. Accordingly, the DS4A fear and intimidation degree of hazard score is 60 (10+20+30), which equates to a 'Great' level of fear and intimidation.</p> <p>Therefore, there is one step change in level. In terms of traffic flows there is more than a 400 vehicle increase in average 18-hour vehicle flow (460 vehicles), and more than a 500 HGV change in total 18-hour HGV flow (1601 HGVs). Therefore, in accordance with IEMA guidelines, the magnitude of impact can be considered medium. However, the scheme would provide a 3m shared use pedestrian/cycle link for the length of Link 20 which would be a significant improvement for the experience of NMUs travelling along Link 20. Therefore, it is considered that overall, there would be a <i>major magnitude</i> beneficial impact on fear and intimidation.</p> <p>There are no points on the link where traffic is able to make a turning movement. The stopping up of Camp Road (and removal of this junction) would reduce delay for drivers routing through this junction. BTM modelling shows the link operating at a maximum of 50% of capacity in the DS4A scenario, indicating limited delay. The stopping up of Camp Road would provide a <i>minor magnitude</i> beneficial impact in terms of driver delay on the link.</p> <p>In terms of road user safety, the PIC analysis undertaken as part of the TA concluded that there were no trends in collision data that suggest the presence of a highway safety issue on Link 20. Nevertheless, three incidents were observed on the link in the 5-year period studied (one serious and two slight). Two incidents, including the serious one, occurred at the Camp Road junction. This junction is to be removed, which while not constituting a highway safety issue itself, would eliminate collisions occurring in similar circumstances again. This is deemed a <i>minor magnitude</i> beneficial impact on road user safety.</p>
	<b>Embedded Mitigation</b>	Link 20 would not be subject to any major redesign in the DS4A scenario. However, Camp Road would be stopped up, leading to the removal of the Camp Road/B430 junction. In terms of NMU provision, a 3m shared use pedestrian/cycle link would be provided along the western length of the B430.
	<b>Effects (Significance)</b>	<ul style="list-style-type: none"> <li>Severance: <b>Slight permanent beneficial (Not Significant)</b></li> <li>Driver Delay: <b>Neutral (No effect)</b></li> </ul>

		<ul style="list-style-type: none"> <li>• NMU Delay: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• NMU Amenity: <b>Moderate permanent beneficial (Potentially Significant)</b></li> <li>• Fear and Intimidation: <b>Moderate permanent beneficial (Potentially Significant)</b></li> <li>• Road User and Pedestrian Safety: <b>Slight permanent beneficial (Not Significant)</b></li> </ul>
	<b>Additional Mitigation</b>	None
	<b>Effect of Travel Plan</b>	Not applied
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• Driver Delay: <b>Neutral (No effect)</b></li> <li>• NMU Delay: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• NMU Amenity: <b>Moderate permanent beneficial (Significant)</b></li> <li>• Fear and Intimidation: <b>Moderate permanent beneficial (Significant)</b></li> <li>• Road User and Pedestrian Safety: <b>Slight permanent beneficial (Not Significant)</b></li> </ul>
<p><b>Link 21</b></p> <p>New Link - B430 NB approach and SB exit to/from Principal Site Access</p> <p><b>Sensitivity:</b></p> <p>Low</p>	<p><b>Potential Effects</b></p>	<ul style="list-style-type: none"> <li>• Severance: minor magnitude (adverse)</li> <li>• Driver Delay: minor magnitude (beneficial)</li> <li>• NMU Delay: negligible magnitude (adverse)</li> <li>• NMU Amenity: major magnitude (beneficial)</li> <li>• Fear and Intimidation: moderate magnitude (beneficial)</li> <li>• Road User and Pedestrian Safety: no change</li> </ul> <p>Link 21 is a new link with the BTM, and thus there are no RC4A traffic flows to compare with the DS4A scenario, when considering severance. Nevertheless, the link falls within the existing footprint of the B430 north of Camp Road, and there would be an increase in traffic flows on Link 21 when compared to the existing B430 (Link 20). Currently there are limited WCH receptors adjacent the link (it is expected that the Recycling Facility generates limited NMU trips), and no formal WCH infrastructure is provided on or across link. In the DS4A scenario, OxSRFI would be a significant generator of WCH trips and the promoted routes to and from the site would add to the number of pedestrian and cycle trips travelling along this link, although limited NMU crossings would be expected. Nevertheless, there is an increase in traffic flows on Link 21 in the DS4A scenario (compared to the existing link) and no new crossing points provided, thus it is considered that there would be a <i>minor magnitude</i> adverse impact on severance in the DS4A scenario on Link 21.</p> <p>Although there is limited provision for NMUs crossing the link, there would be limited demand for crossings and thus the increase in traffic flows would comprises a <i>negligible magnitude</i> adverse impact on NMU delay as a result of the change in traffic flows between RC4A and DS4A.</p>

		<p>In terms of NMU amenity, the provision of a 3m shared use pedestrian/cycle track, would comprise a significant improvement for the experience of NMUs travelling along Link 21. Although HGV flows double, substantial mitigation for NMU is proposed. Therefore, it is considered that there would be a <i>major magnitude</i> beneficial impact on NMU amenity.</p> <p>Link 21 is a new link, and thus there are no RS3A traffic flows to compare with the DS4A scenario, when considering fear and intimidation. Nevertheless, the assessment undertaken for Link 20 can be drawn on as the traffic flows are the same on both links. There would be an increase in traffic flows on Link 21 when compared to the existing B430 north of Camp Road. Nevertheless, despite this increase, the provision of a 3m shared use pedestrian/cycle track, would comprise a significant improvement for the experience of NMUs travelling along Link 21, and although no crossings are proposed, there would be a <i>moderate magnitude</i> beneficial impact on fear and intimidation.</p> <p>Although the link is replacing a free-flowing section of the B430, there would be limited delay for drivers in the DS4A scenario. BTM modelling show the link operating within capacity and thus without congestion or delay. Link 21 is part of the Principal Site Access; part of the embedded highway works associated with OxSRFI allowing development traffic to route without congestion from the site to the M40. Therefore, overall, this link would have a <i>minor magnitude</i> beneficial impact on driver delay.</p> <p>In terms of road user safety, the PIC analysis undertaken as part of the TA recorded no incidents on the existing B430 in the location of Link 21. It is considered that there is no change in road user safety.</p>
	<p><b>Embedded Mitigation</b></p>	<p>Link 21 forms the southern arm of a new the Principal Site Access. This roundabout is part of the embedded highway works associated with OxSRFI, designed to reduce congestion on the local highway network, particular between the site and the M40, thus providing capacity to accommodate the OxSRFI traffic. In terms of NMU provision, a 3m shared use pedestrian/cycle way would be provided along the western edge of the link. At the link's northern extent, formal NMU crossings of the Principal Site Access Arm are proposed.</p>
	<p><b>Effects (Significance)</b></p>	<ul style="list-style-type: none"> <li>• Severance: <b>Slight permanent adverse (Not Significant)</b></li> <li>• Driver Delay: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• NMU Delay: <b>Neutral (No effect)</b></li> <li>• NMU Amenity: <b>Moderate permanent beneficial (Potentially Significant)</b></li> <li>• Fear and Intimidation: <b>Slight permanent beneficial (Not Significant)</b></li> </ul>

		<ul style="list-style-type: none"> <li>Road User and Pedestrian Safety: <b>No effect (Neutral)</b></li> </ul>
	<b>Embedded Mitigation</b>	<p>Link 21 is a new link within the and operates as a roundabout circulatory between the B430 NB entry, and the Site Access Arm. This junction is part of the embedded highway works associated with OxSRFI, designed to reduce congestion on the local highway network, particular between the site and the M40, thus providing capacity to accommodate the OxSRFI traffic.</p> <p>In terms of NMU provision, a 3m shared use pedestrian/cycle way would be provided along the northern edge of the link. At the link's northern extent, formal NMU crossings of the Principal Site Access Arm are proposed.</p>
	<b>Effect of Travel Plan</b>	Not Applied
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>Severance: <b>Slight permanent adverse (Not Significant)</b></li> <li>Driver Delay: <b>Slight permanent beneficial (Not Significant)</b></li> <li>NMU Delay: <b>Neutral (No effect)</b></li> <li>NMU Amenity: <b>Moderate permanent beneficial (Significant)</b></li> <li>Fear and Intimidation: <b>Slight permanent beneficial (Not Significant)</b></li> <li>Road User and Pedestrian Safety: <b>No effect (Neutral)</b></li> </ul>
<p><b>Link 39</b></p> <p>B430 Northampton Road A34 off slip</p> <p><b>Sensitivity:</b></p> <p>Low</p>	<b>Potential Effects</b>	<ul style="list-style-type: none"> <li>Severance: no change</li> <li>Driver Delay: negligible magnitude (beneficial)</li> <li>NMU Delay: no change</li> <li>NMU Amenity: no change</li> <li>Fear and Intimidation: negligible magnitude (adverse)</li> <li>Road User and Pedestrian Safety: negligible magnitude (adverse)</li> </ul> <p>Between the RC4A and DS4A scenarios, Link 39 would be subject to a 8% increase in 24-hour total vehicle traffic. This, therefore, suggests that there may be a negligible impact upon severance. Link 39 comprises an off slip from the A34 and therefore NMU would not cross the link in both scenarios and there are no WCH receptors adjacent to the link. Therefore, it is considered there would be a <i>no change</i> on severance in DS3A.</p> <p>Similarly, as NMU would not cross the link, there would also be a <i>no change</i> of impact on NMU delay and NMU amenity as a result of the change in traffic flows between RC4A and DS4A. Further, it is noted that neither total vehicle flows or HGV flows double.</p> <p>In terms of driver delay, the BTM modelling shows that the link would operate at a maximum of 5% of capacity in the RC4A scenario, increasing to 4% of capacity in the DS3A scenario. Therefore, the impact on driver delay on this link is considered to be of <i>negligible magnitude</i>. As the increase in operating capacity</p>

		<p>reduces between scenarios, this impact is assessed as beneficial.</p> <p>Link 39 is subject to the national speed limit, and vehicles would likely average over 40mph. This would be the case in both scenarios. For RC3A, the average vehicle/hour flow over 18 hours is 86 vehicles, and the total number of HGVs over 18 hours is 76. Accordingly, the RC3A fear and intimidation degree of hazard score is 30 (0+0+30), which equates to a 'Moderate' level of fear and intimidation. For DS3A, the average vehicle/hour flow over 18 hours is 118, and the total number of HGVs over 18 hours is 77. Accordingly, the DS3A fear and intimidation degree of hazard score is 30 (0+0+30), which equates to a 'Moderate' level of fear and intimidation. Therefore, there is no step change between scenarios and hence the impact is of <i>negligible magnitude</i>. As traffic flows increase, this impact has been assessed as adverse.</p> <p>From the PIC assessment included in the TA, one slight collision was recorded within the five-year study period on Link 39. One incident in a five-year period does not indicate the presence of a highway safety issue and the minimal increase in traffic on this link (245 vehicles in 24 hours) between the two scenarios would have a <i>negligible magnitude</i> of impact on the link. As traffic flows increase, this impact has been assessed as adverse.</p>
	<b>Embedded Mitigation</b>	None
	<b>Effects (Significance)</b>	<ul style="list-style-type: none"> <li>Severance: <b>Neutral (No effect)</b></li> <li>Driver Delay: <b>Neutral (No effect)</b></li> <li>NMU Delay: <b>Neutral (No effect)</b></li> <li>NMU Amenity: <b>Neutral (No effect)</b></li> <li>Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
	<b>Additional Mitigation</b>	None
	<b>Effect of Travel Plan</b>	Not applied
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>Severance: <b>Neutral (No effect)</b></li> <li>Driver Delay: <b>Neutral (No effect)</b></li> <li>NMU Delay: <b>Neutral (No effect)</b></li> <li>NMU Amenity: <b>Neutral (No effect)</b></li> <li>Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
<p><b>Link 40</b></p> <p>B430/B4030 Middleton Stoney crossroads (internal link)</p> <p><b>Sensitivity:</b></p>	<b>Potential Effects</b>	<ul style="list-style-type: none"> <li>Severance: moderate magnitude (beneficial)</li> <li>Driver Delay: moderate magnitude (beneficial)</li> <li>NMU Delay: moderate magnitude (beneficial)</li> <li>NMU Amenity: moderate magnitude (beneficial)</li> <li>Fear and Intimidation: minor magnitude (beneficial)</li> <li>Road User and Pedestrian Safety: no change</li> </ul> <p>Between the RC4A and DS4A scenarios, Link 40 would be subject to a 39% reduction in 24-hour total vehicle traffic, equating to 7425 vehicles. In accordance with</p>

<p>High</p>		<p>IEMA Guidelines, this would suggest a slight impact on severance, however, embedded mitigation is provided on this link. To facilitate pedestrian crossings of the link, a signalised pedestrian crossing would be provided over the link in the DS4A scenario, upgrading the current uncontrolled facilities. Frequent NMU crossings of the link are expected, with a key desire line along the B4030 crossing the link. It is considered that the provision of a signalised crossing and the reduction in traffic flows would have a <i>moderate magnitude</i> beneficial impact upon severance.</p> <p>Similarly, the provision of a signalised crossing indicates a positive impact on NMU delay. Furthermore, the decrease of 7425 vehicles on Link 40 within a 24-hour period, or approximately six fewer vehicles each minute on the link, would aid NMUs in crossing, and travelling along the link. Therefore, there would be a <i>moderate magnitude</i> of impact on NMU delay in the DS4A scenario.</p> <p>Total vehicle flows and HGV flows do not double or halve between the RC4A and DS4A scenarios, and therefore the changes in traffic flows are negligible in accordance with IEMA Guidelines. However, the provision of an upgraded 2m footway on the western edge of the link, a signalised crossing over the link, as well as other provision within the vicinity of the link, would have a beneficial impact on NMU amenity. Overall, it is considered that there would be a <i>moderate magnitude</i> impact on NMU amenity in the DS4A scenario.</p> <p>In the RC4A scenario, the link would be governed by a by a 20mph speed limit, and therefore vehicles are expected to be travelling at 20mph on the link. This limit would remain in place in the DS4A scenario. In terms of traffic flows, in RC4A, the average vehicle/hour flow over 18 hours is 981, and the total number of HGVs over 18 hours is 933. Accordingly, the RC4A fear and intimidation degree of hazard score is 10 (10+0+0), which equates to a 'Small' level of fear and intimidation. For DS4A, the average vehicle/hour flow over 18 hours is 593, and the total number of HGVs over 18 hours is 542. Accordingly, the DS4A fear and intimidation degree of hazard score is 0 (0+0+0), which equates to a 'Small' level of fear and intimidation. Therefore, there is no step change between scenarios suggesting a negligible impact. Nevertheless, mitigation for NMUs is provided on and adjacent the link and thus there would be a notable improvement in WCH experience. This is deemed to constitute a <i>minor magnitude</i> beneficial impact.</p> <p>The detailed modelling in the TA shows that in the RC4A scenario the Middleton Stoney crossroads would operate significantly over capacity. The construction of</p>
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		<p>the MSRR would reduce traffic and congestion at the crossroads, with the junction operating within capacity in the DS4A scenario. It is considered that there would be a <i>moderate magnitude</i> beneficial impact upon driver delay between the scenarios.</p> <p>The collision data analysis found that no collisions were recorded on this link between January 2015 and December 2023, therefore there is no indication of an existing road user and pedestrian safety issue. Thus, there would be a <i>no change</i> on conditions as a result of the proposals.</p>
	<b>Embedded Mitigation</b>	In the DS4A scenario a 2m footway would be constructed along the western edge of the link. And a signalised pedestrian crossing would be provided over the link at its southern extent.
	<b>Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Moderate permanent beneficial (Potentially Significant)</b></li> <li>• Driver Delay: <b>Large permanent beneficial (Significant)</b></li> <li>• NMU Delay: <b>Moderate permanent beneficial (Potentially Significant)</b></li> <li>• NMU Amenity: <b>Moderate permanent beneficial (Potentially Significant)</b></li> <li>• Fear and Intimidation: <b>Slight permanent beneficial (Significant)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
	<b>Additional Mitigation</b>	None
	<b>Effect of Travel Plan</b>	Not applied
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Moderate permanent beneficial (Significant)</b></li> <li>• Driver Delay: <b>Large permanent beneficial (Significant)</b></li> <li>• NMU Delay: <b>Moderate permanent beneficial (Significant)</b></li> <li>• NMU Amenity: <b>Moderate permanent beneficial (Significant)</b></li> <li>• Fear and Intimidation: <b>Slight permanent beneficial (Significant)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
<p><b>Link 41</b></p> <p>B4030 Middleton Stoney Road between A4095 Roundabout and Empire Road</p> <p><b>Sensitivity:</b>  Medium</p>	<b>Potential Effects</b>	<ul style="list-style-type: none"> <li>• Severance: minor magnitude (adverse)</li> <li>• Driver Delay: moderate magnitude (adverse)</li> <li>• NMU Delay: minor magnitude (adverse)</li> <li>• NMU Amenity: minor magnitude (adverse)</li> <li>• Fear and Intimidation: negligible magnitude (adverse)</li> <li>• Road User and Pedestrian Safety: negligible magnitude (adverse)</li> </ul> <p>Between the RC4A and DS4A scenarios, Link 41 would be subject to a 54% increase in 24-hour total vehicle traffic, implying a potential slight adverse impact on severance. Frequent crossings of the link are expected, with a key desire line along the A4095 crossing Link 41 adjacent to the A4095 roundabout, where an</p>

	<p>uncontrolled pedestrian/cycle crossing with a refuge island is provided. Therefore, this increase in traffic flows would indeed produce a <i>minor magnitude</i> adverse impact on severance.</p> <p>Similarly, the increase in traffic flows indicates an impact on NMU delay. While a 54% increase in total vehicle traffic suggests the possibility of a moderate impact; this increase comprises an actual increase of 6889 vehicles in a 24-hour period, or approximately four vehicles per minute. Given the presence of a two-stage uncontrolled pedestrian/cycle crossing, an increase of four vehicles per minute would only have a <i>minor magnitude</i> adverse impact on NMU delay.</p> <p>The BTM modelling show the link operating at a maximum of 89% of capacity in the RC3A scenario increasing to 118% of capacity in the DS3A scenario. This is the eastbound approach into the A4095/B4030 roundabout. There would therefore be an increased in driver delay, which would represent a <i>moderate magnitude</i> adverse impact.</p> <p>Although total traffic flows do not double and therefore the traffic changes in total traffic are negligible in accordance with IEMA Guidelines, there is a 153% increase in HGV flows indicates that there is a non-negligible impact on NMU Amenity. There would be an additional 383 HGVs on Link 41, over a 24-hour period (an average increase of 16 HGV an hour). A shared footway/cycleway is provided on the northern edge of Link 41, separated from the carriageway by a wide grass verge, offering a relatively pleasant experience for NMUs. Consequently, there would only be a <i>minor magnitude</i> adverse impact on NMU amenity as a result of this change in traffic flows.</p> <p>Link 41 is subject to a 40mph speed limit, although vehicles are likely to be under this limit, given the link's proximity to the A4095 roundabout. For RC4A, the average vehicle/hour flow over 18 hours is 658, and the total number of HGVs over 18 hours is 242. Accordingly, the RC4A fear and intimidation Degree of Hazard score is 30 (10+0+20), which equates to a 'Moderate' level of fear and intimidation. For DS3A, the average vehicle/hour flow over 18 hours was 1002, and the total number of HGVs over 18 hours is 610. Accordingly, the DS3A fear and intimidation Degree of Hazard score is 30 (10+0+20), which also equates to a 'Moderate' level of fear and intimidation. Therefore, there is no step change between scenarios and hence the impact is of <i>negligible magnitude</i>. As traffic flows increase, this impact has been assessed as adverse.</p> <p>From the PIC assessment included in the TA, one collision over a five-year period, slight in nature, was recorded on this link. This was a rear end shut on the</p>
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		eastbound approach to the A4095 roundabout. In itself this is not an indication of an existing Road User and Pedestrian Safety Issue. Thus, there would be <i>negligible impact</i> in conditions as a result of the proposals. As traffic flows increase, this impact has been assessed as adverse.
	<b>Embedded Mitigation</b>	None
	<b>Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: Slight permanent adverse (<b>Not significant</b>)</li> <li>• Driver Delay: Moderate permanent adverse (<b>Significant</b>)</li> <li>• NMU Delay: Slight permanent adverse (<b>Not significant</b>)</li> <li>• NMU Amenity: Slight permanent adverse (<b>Not significant</b>)</li> <li>• Fear and Intimidation: Neutral (<b>No effect</b>)</li> <li>• Road User and Pedestrian Safety: Neutral (<b>No effect</b>)</li> </ul>
	<b>Additional Mitigation</b>	<p>The TA identifies that the A4095/B4030 roundabout would be the subject of additional mitigation to increase capacity and provide signal-controlled Toucan crossings on all arms of the junction. The Toucan crossing and capacity increases would reduce moderate magnitude impact on severance and driver delay to negligible magnitude. Hence, with the additional mitigation in place, there would be the following magnitude impacts:</p> <ul style="list-style-type: none"> <li>• Severance: minor magnitude (beneficial)</li> <li>• Driver Delay: minor magnitude (beneficial)</li> <li>• NMU Delay: minor magnitude (adverse)</li> <li>• NMU Amenity: minor magnitude (adverse)</li> <li>• Fear and Intimidation: negligible magnitude (adverse)</li> <li>• Road User and Pedestrian Safety: negligible magnitude (adverse)</li> </ul>
	<b>Effect of Travel Plan</b>	Not applied
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Slight permanent beneficial (Not significant)</b></li> <li>• Driver Delay: <b>Slight permanent beneficial (Not significant)</b></li> <li>• NMU Delay: <b>Slight permanent adverse (Not significant)</b></li> <li>• NMU Amenity: <b>Slight permanent adverse (Not significant)</b></li> <li>• Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
<p><b>Link 48</b></p> <p>B4030 Heyford Road (Middleton Stoney)</p> <p><b>Sensitivity:</b></p> <p>High</p>	<b>Potential Effects</b>	<ul style="list-style-type: none"> <li>• Severance: moderate magnitude (beneficial)</li> <li>• Driver Delay: major magnitude (beneficial)</li> <li>• NMU Delay: minor magnitude (beneficial)</li> <li>• NMU Amenity: moderate magnitude (beneficial)</li> <li>• Fear and Intimidation: negligible magnitude (beneficial)</li> <li>• Road User and Pedestrian Safety: no change</li> </ul> <p>Between the RC4A and DS4A scenarios, Link 48 would be subject to a 46% reduction in 24-hour total vehicle traffic, indicating a potential slight impact upon severance. Frequent crossings of Link 48 are expected,</p>

	<p>with a key desire line along the B430 crossing the link at its eastern extent, and several WCH receptors (private dwellings) adjacent to the link. Currently, and in the RC4A scenario, there is/would be an uncontrolled pedestrian crossing in this location. As part of OxSRFI, a signalised pedestrian crossing would provide an upgrade to this crossing in the DS4A scenario. Therefore, this reduction in traffic flows and new crossing provision would produce a <i>moderate magnitude</i> beneficial impact on severance.</p> <p>Similarly, the reduction in traffic flows indicates an impact on NMU delay. In actual terms, a 46% reduction in total vehicle traffic comprises a decrease of 4668 vehicles on Link 48 within a 24-hour period, or approximately three fewer vehicles per minute. Given the provision of a signalised pedestrian crossing in the DS4A scenario, and the reduction in traffic flows, would have a <i>minor magnitude</i> beneficial impact on NMU delay.</p> <p>HGV flows halve between the RC4A and DS4A scenarios, and therefore the changes in traffic flows are non-negligible in accordance with IEMA Guidelines. Furthermore, the provision of a signalised pedestrian crossing would have a beneficial impact on NMU amenity. It is considered that the signalised pedestrian crossing, and the reduction in HGV flows, would have a <i>moderate magnitude</i> of impact on NMU amenity.</p> <p>Link 48 would be governed by a 20mph speed limit in the RC4A, and this would remain unchanged in the DS4A scenario. Thus, average vehicle speeds are likely to be under 20mph in both scenarios as vehicles approach/leave the B4030/B430 signalised junction. In terms of traffic flows, in RC4A, the average vehicle/hour flow over 18 hours is 527 and the total number of HGVs over 18 hours is 218. Accordingly, the RC4A fear and intimidation degree of hazard score is 0 (0+0+0), which equates to a 'Small' level of fear and intimidation. For DS4A, the average vehicle/hour flow over 18 hours is 282 and the total number of HGVs over 18 hours is 94. Accordingly, the DS4A fear and intimidation degree of hazard score is 0 (0+0+0), which equates to a 'Small' level of fear and intimidation. Therefore, there is no step change between scenarios and hence the impact is of <i>negligible magnitude</i>. As traffic flows decrease between the scenarios, this impact is deemed to be beneficial.</p> <p>The total vehicle flows would reduce on Link 48 in the DS4A scenario, thus reducing congestion and delay for users of the link. Indeed, the BTM modelling shows that the link would operate at a maximum of 115% of capacity in the RC4A scenario (south eastbound AM peak) decreasing to 68% of capacity in the DS4A scenario (south eastbound AM peak). This reduction in</p>
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		<p>congestion, constitutes a <i>major magnitude</i> beneficial impact on driver delay.</p> <p>As part of the collision records obtained for analysis within the TA, Link 48 was analysed for the 5-year period studied. No incidents were observed, and therefore there is no indication of an existing Road User and Pedestrian Safety Issue. Thus, there would be a <i>no change</i> of impact on conditions as a result of the proposals.</p>
	<b>Embedded Mitigation</b>	The B430/4030 Middleton Stoney crossroads (of which Link 38 comprises the western arm) are part of the embedded Highway Works associated with OxSRFI. As part of the works at the crossroads, a signalised pedestrian crossing would be provided across Link 48, serving the pedestrian desire line along the B430.
	<b>Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Moderate permanent beneficial (Potentially Significant)</b></li> <li>• Driver Delay: <b>Large permanent beneficial (Significant)</b></li> <li>• NMU Delay: <b>Slight permanent beneficial (Not significant)</b></li> <li>• NMU Amenity: <b>Moderate permanent beneficial (Potentially Significant)</b></li> <li>• Fear and Intimidation: <b>Slight permanent beneficial (Not significant)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
	<b>Additional Mitigation</b>	None
	<b>Effect of Travel Plan</b>	Not applied
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Moderate permanent beneficial (Significant)</b></li> <li>• Driver Delay: <b>Large permanent beneficial (Significant)</b></li> <li>• NMU Delay: <b>Slight permanent beneficial (Not significant)</b></li> <li>• NMU Amenity: <b>Moderate permanent beneficial (Significant)</b></li> <li>• Fear and Intimidation: <b>Slight permanent beneficial (Not significant)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
<p><b>Link 49</b></p> <p>Upper Heyford Road (between Chilgrove Drive and HPLR)</p> <p><b>Sensitivity:</b></p> <p>Low</p>	<b>Potential Effects</b>	<ul style="list-style-type: none"> <li>• Severance: moderate magnitude (adverse)</li> <li>• Driver Delay: minor magnitude (adverse)</li> <li>• NMU Delay: minor magnitude (adverse)</li> <li>• NMU Amenity: major magnitude (beneficial)</li> <li>• Fear and Intimidation: minor magnitude (beneficial)</li> <li>• Road User and Pedestrian Safety: no change</li> </ul> <p>Between the RC4A and DS4A scenarios, Link 49 would be subject to a 100% increase in 24-hour total vehicle traffic. Thus, the IEMA Guidelines suggest there would be a substantial change in severance. However, currently there are no notable WCH receptors to the south of the link and there is no regular need for NMUs to cross this link. Nevertheless, OxSRFI would generate</p>

	<p>WCH trips along this link in the DS4A scenario and constitutes a key WCH receptor. In the DS4A scenario a 5.2m segregated footway/cycleway would be provided alongside the link road, tying into 3<sup>rd</sup> party works. There would be limited need to cross to link in both scenarios, nevertheless this increase in flows suggests an <i>moderate magnitude</i> adverse impact on severance in the DS4A scenario.</p> <p>Similarly, the 100% increase in traffic flows indicates an impact on NMU delay. In actual terms, this equates to an increase in total vehicle traffic of 10108 vehicles on Link 49 within a 24-hour period, or approximately seven vehicles per minute, in each direction. NMU movements across the HPLR are facilitated: at the western extent, the link road would tie in with the signalised junction constructed as part of Heyford Park, where a crossing would be provided. Therefore, on Link 49, there would be a <i>minor magnitude</i> adverse impact on NMU delay only.</p> <p>No junctions are proposed on this link as part of the OxSRFI development, although at the western extent the link road would tie in with the signalised junction constructed as part of Heyford Park. The BTM modelling shows that the link would operate at a maximum of 39% of capacity in the RC4A scenario (westbound AM peak hour) increasing to 58% of capacity in the DS4A scenario (westbound AM peak hour). The link would operate with spare capacity in both scenarios, with a minimal increase between the RC4A and DS4A. Therefore, it is considered that there would be a <i>minor magnitude</i> adverse impact on driver delay on this link.</p> <p>Total traffic flows or HGV flows do not double between the RC4A and DS4A scenarios, and therefore the changes in traffic flows are negligible in accordance with IEMA Guidelines. However, a 5.2m segregated footway/cycleway would be provided on the northern side of the link. As there would be no provision in the RC4A, this would constitute a <i>major magnitude</i> beneficial impact in terms of NMU amenity.</p> <p>Link 49 would be governed by a 60mph speed limit in both scenarios and thus vehicles are likely to be travelling at over 40mph on average. For RC4A, the average vehicle/hour flow over 18 hours is 531 and the total number of HGVs over 18 hours is 528. Accordingly, the RC4A fear and intimidation degree of hazard score is 30 (0+0+30), which equates to a 'Moderate' level of fear and intimidation. For DS4A, the average vehicle/hour flow over 18 hours is 1054 and the total number of HGVs over 18 hours is 887. Accordingly, the DS4A fear and intimidation degree of hazard score is 40 (10+0+30), which equates to a 'Moderate' level of fear and intimidation. Therefore, there is no step change between scenarios and hence the impact is suggested</p>
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		<p>to be of <i>negligible magnitude</i>. However, the provision of a segregated footway/cycleway alongside the link would provide an enhanced experience for NMUs, reducing the fear and intimidation experienced on the link. Thus, there would be a <i>minor magnitude</i> beneficial impact on NMU Amenity in the DS4A scenario.</p> <p>As part of the collision records obtained for analysis within the TA, Link 49 was analysed for the 5-year period studied. No incidents were observed, and therefore there is no indication of an existing Road User and Pedestrian Safety Issue. Thus, there would be a <i>no change</i> of impact on conditions as a result of the proposals.</p>
	<b>Embedded Mitigation</b>	The original link would be replaced with the HPLR. At its eastern extent, the link road would tie in with the signalised junction constructed as part of Heyford Park. On the northern side of the carriageway a 5.2m segregated footway/cycleway would be provided alongside the link road. This will aid WCH traversing the route, where previously there was no provision.
	<b>Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Slight permanent adverse (Not significant)</b></li> <li>• Driver Delay: <b>Slight permanent adverse (Not significant)</b></li> <li>• NMU Delay: <b>Slight permanent adverse (Not significant)</b></li> <li>• NMU Amenity: <b>Slight permanent beneficial (Not significant)</b></li> <li>• Fear and Intimidation: <b>Slight permanent beneficial (Not significant)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
	<b>Additional Mitigation</b>	None
	<b>Effect of Travel Plan</b>	Not applied
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Slight permanent adverse (Not significant)</b></li> <li>• Driver Delay: <b>Slight permanent adverse (Not significant)</b></li> <li>• NMU Delay: <b>Slight permanent adverse (Not significant)</b></li> <li>• NMU Amenity: <b>Slight permanent beneficial (Not significant)</b></li> <li>• Fear and Intimidation: <b>Slight permanent beneficial (Not significant)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
<b>Link 50</b>  New Link - HPLR between B430 and Secondary Access (as compared to	<b>Potential Effects</b>	<ul style="list-style-type: none"> <li>• Severance: moderate magnitude (adverse)</li> <li>• Driver Delay: minor magnitude (adverse)</li> <li>• NMU Delay: minor magnitude (adverse)</li> <li>• NMU Amenity: minor magnitude (beneficial)</li> <li>• Fear and Intimidation: minor magnitude (beneficial)</li> <li>• Road User and Pedestrian Safety: no change</li> </ul> <p>Although Link 50 is a new link, it effectively replaces Camp Road. Therefore, to aid a discussion on</p>

<p>Upper Heyford Rd)</p> <p><b>Sensitivity:</b></p> <p>Low</p>		<p>severance, RC4A flows on Link 49 can be used for comparison. In the DS4A scenario, the flows on Links 49 and 50 are the same. Between the RC4A and DS4A scenarios, Link 50 would be subject to a 100% increase in 24-hour total vehicle traffic. Thus, the IEMA Guidelines suggest there would be a substantial change in severance. There would be limited need to cross to link in both scenarios and so the impact would not be felt by a significant number of pedestrians. Nevertheless, the change in traffic flows suggests an <i>moderate</i> adverse impact on severance in the DS4A scenario.</p> <p>Similarly, the 100% increase in traffic flows indicates an impact on NMU delay. In actual terms, this equates to an increase in total vehicle traffic of 10108 vehicles on Link 50 within a 24-hour period, or approximately seven vehicles per minute, in each direction. NMU movements across the HPLR are facilitated: at the western extent, the link road would tie in with the signalised junction constructed as part of Heyford Park, where a crossing would be provided. Therefore, on Link 50, there would be a <i>minor magnitude</i> adverse impact on NMU delay only.</p> <p>At the western extent, the link road would meet the OxSRFI secondary access. Other than at this junction, there are no points on the link where vehicles can make turning movements. BTM modelling shows the link would operate at a maximum of 53% of capacity in the DS4A scenario (south eastbound AM peak hour). Traffic flows would increase on the link; but the link would operate with spare capacity in both scenarios, and it is considered that there would be a <i>minor magnitude</i> adverse impact on driver delay on this link.</p> <p>Total traffic flows or HGV flows do not double between the RC4A and DS4A scenarios, and therefore the changes in traffic flows are negligible in accordance with IEMA Guidelines. However, a 5.2m segregated footway/cycleway would be provided on the northern side of the link. As there would be no provision in the RC4A, there would be a <i>major magnitude</i> beneficial impact on NMU amenity.</p> <p>Link 50 would be governed by a 60mph speed limit in both scenarios and thus vehicles are likely to be travelling at over 40mph on average. For RC4A, the average vehicle/hour flow over 18 hours is 531 and the total number of HGVs over 18 hours is 528. Accordingly, the RC4A fear and intimidation degree of hazard score is 30 (0+0+30), which equates to a 'Moderate' level of fear and intimidation. For DS4A, the average vehicle/hour flow over 18 hours is 1054 and the total number of HGVs over 18 hours is 887. Accordingly, the DS4A fear and intimidation degree of hazard score is 40 (10+0+30), which equates to a 'Moderate' level of fear and intimidation. Therefore, there is no step change</p>
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		<p>between scenarios and hence the impact is suggested to be of <i>negligible magnitude</i>. However, the provision of a segregated footway/cycleway alongside the link would provide an enhanced experience for NMUs, reducing the fear and intimidation experienced on the link. Thus, there would be a <i>minor magnitude</i> beneficial impact on NMU Amenity in the DS4A scenario.</p> <p>As part of the collision records obtained for analysis within the TA, Link 50 was analysed for the 5-year period studied. No incidents were observed, and therefore there is no indication of an existing Road User and Pedestrian Safety Issue. Thus, there would be a <i>no change</i> of impact on conditions as a result of the proposals.</p>
	<b>Embedded Mitigation</b>	Link 50 is a new link, effectively replacing the Camp Road. At its western extent, the link would meet the Secondary Site Access, providing access to the OxSRFI development for cars only. In terms of NMU provision, on the northern side of the carriageway a 5.2m segregated footway/cycleway would be provided alongside the link road. This will aid WCH traversing the route, where previously there was no provision.
	<b>Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Slight permanent adverse (Not significant)</b></li> <li>• Driver Delay: <b>Slight permanent adverse (Not significant)</b></li> <li>• NMU Delay: <b>Slight permanent adverse (Not significant)</b></li> <li>• NMU Amenity: <b>Slight permanent beneficial (Not significant)</b></li> <li>• Fear and Intimidation: <b>Slight permanent beneficial (Not significant)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
	<b>Additional Mitigation</b>	None
	<b>Effects of Travel Plan</b>	Not applied
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Slight permanent adverse (Not significant)</b></li> <li>• Driver Delay: <b>Slight permanent adverse (Not significant)</b></li> <li>• NMU Delay: <b>Slight permanent adverse (Not significant)</b></li> <li>• NMU Amenity: <b>Slight permanent beneficial (Not significant)</b></li> <li>• Fear and Intimidation: <b>Slight permanent beneficial (Not significant)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
<b>Link 51</b>  New Link - HPLR between B430 and Secondary	<b>Potential Effects</b>	<ul style="list-style-type: none"> <li>• Severance: minor magnitude (adverse)</li> <li>• Driver Delay: negligible magnitude (adverse)</li> <li>• NMU Delay: minor magnitude (adverse)</li> <li>• NMU Amenity: moderate magnitude (beneficial)</li> <li>• Fear and Intimidation: minor magnitude (beneficial)</li> <li>• Road User and Pedestrian Safety: no change</li> </ul>

<p>Access (as compared to Upper Heyford Rd)</p> <p><b>Sensitivity:</b></p> <p>Low</p>	<p>Although Link 51 is a new link, it effectively replaces Camp Road between the Secondary Site Access and the B430. Therefore, to aid a discussion on severance, RC4A flows on Link 49 can be used for comparison. In the DS4A scenario, the flows on Links 49 and 51 are the same. Between the RC4A and DS4A scenarios, Link 51 would be subject to a 100% increase in 24-hour total vehicle traffic. Thus, the IEMA Guidelines suggest there would be a moderate change in severance. However, there are limited WCH receptors adjacent the link there would be limited need to cross to link for NMUs in both scenarios. Therefore, this increase in traffic flows suggests an <i>minor magnitude</i> adverse impact on severance in the DS4A scenario.</p> <p>Similarly, the 100% increase in traffic flows indicates an impact on NMU delay. In actual terms, this equates to an increase in total vehicle traffic of 10108 vehicles on the link within a 24-hour period, or approximately one additional vehicle every 9 seconds, in either direction. Consequently, there would be a <i>minor magnitude</i> adverse impact on NMU delay, considering the limited WCH trips expected.</p> <p>Other than this junctions at the link's furthest extent, there are no points on the link where vehicles can make turning movements. The BTM modelling shows that the link would operate at a maximum of 53% of capacity in the DS4A scenario (southeast bound AM peak hour). Traffic flows would increase on the link; but the link would operate with spare capacity in both scenarios, and therefore it is considered that there would be a <i>negligible magnitude</i> impact in terms of driver delay on this link. As traffic flows increase, this impact has been assessed as adverse.</p> <p>Total traffic flows or HGV flows do not double between the RC4A and DS4A scenarios, and therefore the changes in traffic flows are potentially negligible in accordance with IEMA Guidelines. However, a 3m shared footway/cycleway would be provided on the northern side of the link. As there would be no provision in the RC4A, this is considered to comprise a <i>moderate magnitude</i> beneficial impact in terms of NMU amenity.</p> <p>Link 51 would be governed by a 60mph speed limit in both scenarios and thus vehicles are likely to be travelling at over 40mph on average. For RC4A, the average vehicle/hour flow over 18 hours is 531 and the total number of HGVs over 18 hours is 528. Accordingly, the RC4A fear and intimidation degree of hazard score is 30 (0+0+30), which equates to a 'Moderate' level of fear and intimidation. For DS4A, the average vehicle/hour flow over 18 hours is 1054 and the total number of HGVs over 18 hours is 887. Accordingly, the DS4A fear and intimidation degree of hazard score is 40 (10+0+30), which equates to a 'Moderate' level of fear</p>
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		<p>and intimidation. Therefore, there is no step change between scenarios and hence the impact is suggested to be of <i>negligible magnitude</i>. However, the provision of a segregated footway/cycleway alongside the link would provide an enhanced experience for NMUs, reducing the fear and intimidation experienced on the link. Thus, there would be a <i>minor magnitude</i> beneficial impact on NMU Amenity in the DS4A scenario.</p> <p>As a new link, no history of collisions is available for interrogation. Thus, there would be a <i>no change</i> of impact on conditions as a result of the proposals.</p>
	<b>Embedded Mitigation</b>	Link 51 is a new link, effectively replacing the Camp Road between the Secondary Site Access and the B430. In terms of NMU provision, on the northern side of the carriageway a 3m shared footway/cycleway would be provided alongside the link road.
	<b>Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Slight permanent adverse (Not significant)</b></li> <li>• Driver Delay: <b>Neutral (No effect)</b></li> <li>• NMU Delay: <b>Slight permanent adverse (Not significant)</b></li> <li>• NMU Amenity: <b>Slight permanent beneficial (Not significant)</b></li> <li>• Fear and Intimidation: <b>Slight permanent beneficial (Not significant)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
	<b>Additional Mitigation</b>	None
	<b>Effect of Travel Plan</b>	Not applied
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Slight permanent adverse (Not significant)</b></li> <li>• Driver Delay: <b>Neutral (No effect)</b></li> <li>• NMU Delay: <b>Slight permanent adverse (Not significant)</b></li> <li>• NMU Amenity: <b>Slight permanent beneficial (Not significant)</b></li> <li>• Fear and Intimidation: <b>Slight permanent beneficial (Not significant)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
<p><b>Link 52</b></p> <p>NW Bicester access road</p> <p><b>Sensitivity:</b></p> <p>Medium</p>	<b>Potential Effects</b>	<ul style="list-style-type: none"> <li>• Severance: minor magnitude (adverse)</li> <li>• Driver Delay: negligible magnitude (adverse)</li> <li>• NMU Delay: minor magnitude (adverse)</li> <li>• NMU Amenity: negligible magnitude (adverse)</li> <li>• Fear and Intimidation: negligible magnitude (adverse)</li> <li>• Road User and Pedestrian Safety: no change</li> </ul> <p>Link 52 forms a site access into the Himley Village residential development. This development is currently being constructed and is expected to be in place in the RC4A and DS4A scenarios. In terms of traffic flows, between the two scenarios, there would be a 45% increase in 24-hour total vehicle traffic. Thus, the IEMA Guidelines suggest there would be a minor change in severance. Private dwellings part of the Himley Village</p>

	<p>development comprise WCH receptors adjacent the link, although it is expected suitable crossing points would be provided. Nevertheless, this increase would comprise a <i>minor magnitude</i> adverse impact on severance in the DS4A scenario.</p> <p>Similarly, the 45% increase in traffic flows indicates an impact on NMU delay. In the DS4A scenario, there would be 1520 vehicles on the link within a 24-hour period, or approximately one vehicles per minute, in either direction. Thus, there would still be gaps in the traffic for pedestrians to cross the link. Therefore, this increase in traffic flows would have a <i>minor magnitude</i> adverse impact on NMU delay only.</p> <p>The only junction on this link is the access road's junction with the B4030, and the traffic flows on the link are low in both scenarios. The link would operate with minimal congestion and delay. Indeed, the BTM modelling shows Link 52 would operate at a maximum of 8% of capacity in the RC4A scenario, compared to at a maximum of 25% of capacity in the DS4A scenario. In the worst performing scenario (DS4A SB AM peak) there would be 88 vehicles on the link within the peak hour, 15 of which would be OxSRFI development traffic: a minimal amount. Therefore, there would be an adverse, but <i>negligible magnitude</i> impact on driver delay on this link.</p> <p>Total traffic flows do not double between the RC4A and DS4A scenarios, and therefore the changes in traffic flows are negligible in accordance with IEMA Guidelines. Thus, there would be <i>negligible magnitude</i> impact on NMU amenity. As traffic flows increase between scenarios, this impact has been assessed as adverse.</p> <p>Link 52 would be governed by a 30mph speed limit in both scenarios and thus vehicles are likely to be travelling between 20mph and 30mph on average. In terms of traffic flows, in the RC4A scenario, the average vehicle/hour flow over 18 hours is 80 and the total number of HGVs over 18 hours is 0. Accordingly, the RC4A fear and intimidation degree of hazard score is 10 (0+0+10), which equates to a 'Small' level of fear and intimidation. For DS4A, the average vehicle/hour flow over 18 hours is 114 and the total number of HGVs over 18 hours is 0. Accordingly, the DS4A fear and intimidation degree of hazard score is 10 (0+0+10), which equates to a 'Small' level of fear and intimidation. Therefore, there is no step change between scenarios and hence the impact is suggested to be of <i>negligible magnitude</i>. Traffic flows increase and thus this is deemed to be an adverse impact.</p> <p>The link was constructed in 2025 and thus currently has limited traffic flows, and no history of collisions is available for interrogation. There is a limited increase in</p>
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		traffic flows between the scenario, and thus it is considered there would be a <i>no change</i> of impact on conditions as a result of the proposals.
	<b>Embedded Mitigation Effects (Significance)</b>	<p>None</p> <ul style="list-style-type: none"> <li>Severance: <b>Slight permanent adverse (Not significant)</b></li> <li>Driver Delay: <b>Slight permanent adverse (Not significant)</b></li> <li>NMU Delay: <b>Slight permanent adverse (Not significant)</b></li> <li>NMU Amenity: <b>Neutral (No effect)</b></li> <li>Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
	<b>Additional Mitigation</b>	None
	<b>Effect of Travel Plan</b>	Not applied
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>Severance: <b>Slight permanent adverse (Not significant)</b></li> <li>Driver Delay: <b>Slight permanent adverse (Not significant)</b></li> <li>NMU Delay: <b>Slight permanent adverse (Not significant)</b></li> <li>NMU Amenity: <b>Neutral (No effect)</b></li> <li>Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
<p><b>Link 53</b></p> <p>Bainton Road</p> <p><b>Sensitivity:</b></p> <p>Very High</p>	<b>Potential Effects</b>	<ul style="list-style-type: none"> <li>Severance: negligible magnitude (adverse)</li> <li>Driver Delay: negligible magnitude (adverse)</li> <li>NMU Delay: negligible magnitude (adverse)</li> <li>NMU Amenity: negligible magnitude (adverse)</li> <li>Fear and Intimidation: negligible magnitude (adverse)</li> <li>Road User and Pedestrian Safety: no change</li> </ul> <p>Between the RC4A and DS4A scenarios, Link 53 would be subject to a 78% increase in 24-hour total vehicle traffic. In accordance with IEMA Guidelines, there may be a moderate change in severance. Bainton Road serves several dwellings either side, is narrow and has no pedestrian or cycling infrastructure. In the RC4A scenario, the daily traffic flow is 2365 vehicles, or approximately two vehicles a minute. In the DS4A scenario, there would be 4206 vehicles (of which 392 are forecast to be OxSRFI trips compared to 394 in the DS3A scenario), or approximately three vehicles a minute. Therefore, whilst there is moderate change in severance based on the percentage change in traffic flow, the traffic flows remain low in absolute terms and hence the impact on severance would be adverse, but of <i>negligible magnitude</i>.</p> <p>In terms of NMU delay, the WCH receptors adjacent the link would generate fairly regular trips along and across the link. There are no formal crossing points provided on the link, although vehicle speeds are restricted to 20mph within the village, and NMUs would have to wait for gaps in the traffic. In RC4A, a vehicle would pass a point on</p>

		<p>the link every 37 seconds. In DS4A, this would increase to every 21 seconds and hence traffic flows remain low in absolute terms. Thus, there would still be able opportunities to cross the link and the impact on NMU delay would <i>negligible magnitude</i>. Nevertheless, the opportunities to cross the link in the DS4A scenario decrease and thus this impact has been assessed as adverse.</p> <p>HGV flows halve between the RC4A and DS4A scenarios, and therefore the changes in traffic flows are non-negligible in accordance with IEMA Guidelines. However, this decrease is from 18 HGVs in the RC4A to 0 in the DS4A. Consequently, - as RC4A HGV flows are trivial - there would be a <i>negligible magnitude</i> impact on NMU amenity. Although HGV flows decrease, total traffic flows increase this impact has been assessed as adverse.</p> <p>BTM modelling shows Link 53 would operate at a maximum of 21% of capacity (PM peak) in the RC4A scenario, compared to at a maximum of 31% of capacity (PM peak) in the DS4A scenario. This increase in operating capacity is minimal and therefore it is considered that there would be an adverse, but <i>negligible magnitude</i> impact on driver delay in the DS4A scenario.</p> <p>Within Bucknall, the link would be governed by a 20mph speed limit in both scenarios. Elsewhere, the is governed by the national 60mph speed limit. Therefore, it is considered that vehicles would be averaging between 30mph and 40mph in both scenarios. In terms of traffic flows, in the RC4A, the average vehicle/hour flow over 18 hours is 124 and the total number of HGVs over 18 hours is 17. Accordingly, the RC4A fear and intimidation degree of hazard score is 20 (0+0+20), which equates to a 'Small' level of fear and intimidation. For DS4A, the average vehicle/hour flow over 18 hours is 219 and the total number of HGVs over 18 hours is 0. Accordingly, the DS4A fear and intimidation degree of hazard score is 20 (0+0+20), which equates to a 'Small' level of fear and intimidation. Therefore, there is no step change between scenarios and hence the impact is of <i>negligible magnitude</i>. As traffic flows increase this impact has been assessed as adverse.</p> <p>In terms of road user safety, the PIC analysis undertaken as part of the TA did not include Link 53. Instead, a review of publicly available data (via crashmap.com) for the latest 5 years of available data (2020-2024), found no collisions on the link. Therefore, there is nothing indicative of an underlying highway safety issue that could be worsened by the changes in traffic flows and thus in the DS4A scenario, there is deemed to be a <i>no change</i> in Road User and Pedestrian Safety on Link 53.</p>
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	<b>Embedded Mitigation</b>	None
	<b>Effects (Significance)</b>	<ul style="list-style-type: none"> <li>Severance: <b>Slight permanent adverse (Not Significant)</b></li> <li>Driver Delay: <b>Slight permanent adverse (Not Significant)</b></li> <li>NMU Delay: <b>Slight permanent adverse (Not Significant)</b></li> <li>NMU Amenity: <b>Slight permanent adverse (Not Significant)</b></li> <li>Fear and Intimidation: <b>Slight permanent adverse (Not Significant)</b></li> <li>Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
	<b>Additional Mitigation</b>	None
	<b>Effects of Travel Plan</b>	Not applied
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>Severance: <b>Slight permanent adverse (Not Significant)</b></li> <li>Driver Delay: <b>Slight permanent adverse (Not Significant)</b></li> <li>NMU Delay: <b>Slight permanent adverse (Not Significant)</b></li> <li>NMU Amenity: <b>Slight permanent adverse (Not Significant)</b></li> <li>Fear and Intimidation: <b>Slight permanent adverse (Not Significant)</b></li> <li>Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
<b>Link 54</b>  Ardley Road  <b>Sensitivity:</b>  Low/Medium	<b>Potential Effects</b>	<ul style="list-style-type: none"> <li>Severance: negligible magnitude (beneficial)</li> <li>Driver Delay moderate magnitude (beneficial)</li> <li>NMU Delay: minor magnitude (beneficial)</li> <li>NMU Amenity: negligible magnitude (beneficial)</li> <li>Fear and Intimidation: minor magnitude (beneficial)</li> <li>Road User and Pedestrian Safety: no change</li> </ul> <p>Ardley Road stretches from Ardley to Bucknall and is approximately 2.75km in length. There are limited WCH receptors adjacent the link, other than within Ardley and Bucknall themselves where several private dwellings front the link. Between the RC4A and DS4A scenarios, Link 54 would be subject to a 24% reduction in 24-hour total vehicle traffic flows (equating to 1785 vehicles). Thus, in accordance with IEMA Guidelines, there may be a negligible change in severance. No NMU crossing facilities are provided on Link 54, meaning WCHs would have to wait for gaps in the traffic to cross the link. A 1785 reduction in daily flows equates to approximately one fewer vehicle each minute. Therefore, in accordance with IEMA Guidelines, there would be a <i>negligible magnitude</i> beneficial impact on severance.</p> <p>Similarly, in terms of NMU delay, the private dwellings within Ardley and Bucknall would generate fairly regular trips along and across the link, particularly at times of peak traffic. As discussed, there are no formal crossing points provided on the link and NMUs would have to wait for gaps in the traffic to cross. In RC4A, a there would be</p>

		<p>7473 vehicles on the link in a 24-hour period. This equates to a vehicle passing a point on the link circa every 12 seconds. In DS4A, this time would increase to circa 15 seconds. Thus, there would more opportunities to cross the link in the DS4A scenario, reducing NMU delay, although this benefit would largely be felt in Ardley and Bucknall only. Nevertheless, the impact upon NMU delay is deemed to be beneficial and of <i>minor magnitude</i>.</p> <p>Total traffic flows do not halve between the RC4A and DS4A scenarios, and therefore the changes in traffic flows are negligible in accordance with IEMA Guidelines. HGV flows decrease by 100%, although this reduction only comprises 75 HGVs, or less than one a hour: a trivial amount. Consequently, this suggests a beneficial, but <i>negligible magnitude</i> impact on NMU amenity.</p> <p>Although there are no points on Link 54 where vehicles can make turning movements; there would be a reduction in traffic flows on Link 54 between the two scenarios, indicating a reduction in congestion and delay on the link. The benefits of this reduction in flows would be realised at the speed control feature in Bucknall where Ardley Road is reduced to a single lane, and at private accesses where vehicles would turn onto the link. Indeed, the BTM modelling shows Link 54 would operate at a maximum of 111% of capacity (north westbound AM peak) in the RC4A scenario, and at a maximum of 67% of capacity (north westbound AM peak) in the DS4A scenario, suggesting a decrease in driver delay at the T-Junction in Ardley, of which Link 54 forms the minor arm. The decrease increase in operating capacity is large and therefore it is considered that there would be a <i>moderate magnitude</i> beneficial impact in terms of driver delay in the DS4A scenario.</p> <p>In the RC4A scenario, the link would be governed by a 30mph limit in Ardley, a 20mph limit in Bucknall, and the national (60mph) limit between the villages. In the DS4A scenario, the speed limit in Ardley would be reduced to 20mph, the 20mph limit in Bucknall would remain, and the speed limit where 60mph, would be reduced to 40mph. Therefore, it is considered that within the RC4A scenario, vehicles on the link would average over 40mph, and in the DS4A they would average between 30mph and 40mph. In terms of traffic flows, in the RC4A scenario, the average vehicle/hour flow over 18 hours is 390 and the total number of HGVs over 18 hours is 72. Accordingly, the RC4A fear and intimidation degree of hazard score is 30 (0+0+30), which equates to a 'Moderate' level of fear and intimidation. For DS4A, the average vehicle/hour flow over 18 hours is 293 and the total number of HGVs over 18 hours is 0. Accordingly, the DS4A fear and intimidation degree of hazard score is 20 (0+0+20), which equates to a 'Small' level of fear and intimidation. Therefore, there is one step change in level.</p>
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		<p>In terms of traffic flows there is less than a 400 vehicle change in average 18-hour vehicle flow (97 vehicles), and less than a 500 HGV change in total 18-hour HGV flow (75 HGVs). Therefore, in accordance with IEMA guidelines, the magnitude of impact can be considered low, and thus there would be a <i>minor magnitude</i> beneficial impact between the two scenarios.</p> <p>In terms of road user safety, the PIC analysis undertaken as part of the TA did not include Link 54. Instead, a review of publicly available data (via crashmap.com) for the latest 5 years of available data (2020-2024), found no collisions on the link. Therefore, there is nothing indicative of an underlying highway safety issue that would be affected by the changes in traffic flows and thus in the DS4A scenario, there is deemed to be <i>no change</i> in Road User and Pedestrian Safety on Link 54.</p>
	<b>Embedded Mitigation</b>	A road bridge over B430 Ardley Bypass (Bridge 16) would be constructed on the link. The speed limit in Ardley (30mph) would be reduced to 20mph, and the speed limit where 60mph, would be reduced to 40mph.
	<b>Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• Driver Delay: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• NMU Delay: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• NMU Amenity: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• Fear and Intimidation: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
	<b>Additional Mitigation</b>	None
	<b>Effects of Travel Plan</b>	Not applied
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• Driver Delay: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• NMU Delay: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• NMU Amenity: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• Fear and Intimidation: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
<p><b>Link 55</b></p> <p>Unnamed Road between B4030 and Camp Road</p> <p><b>Sensitivity:</b></p>	<b>Potential Effects</b>	<ul style="list-style-type: none"> <li>• Severance: moderate magnitude (beneficial)</li> <li>• Driver Delay: minor magnitude (beneficial)</li> <li>• NMU Delay: minor magnitude (beneficial)</li> <li>• NMU Amenity: minor magnitude (beneficial)</li> <li>• Fear and Intimidation: negligible magnitude (beneficial)</li> <li>• Road User and Pedestrian Safety: no change</li> </ul>

<p>Low</p>	<p>Link 55 runs north to south from Camp Road to the B4030 (Lower Heyford Road) and is approximately 1.3km in length. There are no WCH receptors adjacent the link and few NMU trips along and across the link are expected in the RC4A scenario. In the DS4A scenario, a new publicly designated bridleway would intersect the link close to Camp Road. In terms of traffic flows, between the RC4A and DS4A scenarios, Link 55 would be subject to a 76% reduction in 24-hour total vehicle traffic flows (equating to 8177 vehicles). Thus, in accordance with IEMA Guidelines, there may be a moderate change in severance. In the RC4A, no NMU crossing facilities are provided on Link 55, meaning WCHs would have to wait for gaps in the traffic to cross the link. In the DS4A, an equestrian crossing would be provided for NMUs at the proposed Bridleway, the only location regular NMU crossings of the link are expected. Considering the reduction in traffic flows, and the Bridleway and associated crossing provided, there would be a <i>moderate magnitude</i> beneficial impact on severance between the scenarios.</p> <p>In terms of NMU delay, there would be limited NMU trips along and across the link in the RC4A scenario, although the provision of a Bridleway across the link in the DS4A scenario would increase the frequency of NMU movements. Along the rest of the link no formal crossing points are proposed; and so NMUs would have to wait for gaps in the traffic to cross. In the RC4A scenario, there would be 10813 vehicles on the link in a 24-hour period. The equates to a vehicle passing a point on the link every 8 seconds. In DS4A, this time would increase to 33 seconds. Thus, there would more opportunities to cross the link in the DS4A scenario, thereby reducing NMU delay; although there would be limited benefit, as few trips across the link are expected. Where regular NMU trips are expected (along the proposed Bridleway) an equestrian crossing would be provided. The impact upon NMU delay is deemed to be beneficial and of <i>minor magnitude</i>.</p> <p>Total traffic flows and HGV flows halve between the RC4A and DS4A scenarios, and therefore, in terms of NMU amenity, the changes in traffic flows are non-negligible in accordance with IEMA Guidelines. There would be a reduction of 8177 vehicles in 24 hours, or the equivalent of 4-5 fewer vehicles per minute on the link. However, no NMU infrastructure for NMUs is provided along the link, and the speed limit would remain high (60mph). Thus, overall, it is considered that impact on NMU amenity would be beneficial, but of <i>minor magnitude</i>.</p> <p>Although there are no points on Link 55 where vehicles can make turning movements; there would be a reduction in traffic flows on Link 55 between the two scenarios, indicating a reduction in congestion and delay</p>
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		<p>on the link. The benefits of this reduction in flows would be realised at the southern extent of the link where, in both scenarios, the link forms the minor arm of a T-junction with the B4030. In the north, the link would form the minor arm of a signalised T-junction with Camp Road, where the priority of the existing junction would be changed. These works would either be completed in the RC4A scenario as part of the Heyford Park highway works, or in the DS4A scenario as part of the OxSRFI highway works. It is considered that this alteration of the priority of the Camp Road would increase delay for northbound vehicles on Link 55, but this delay would be outweighed by benefits elsewhere on the highway network. The BTM modelling shows that the link would operate at a maximum of 66% (southbound AM) in the RC4A scenario, and at a maximum of 25% (northbound AM) in the DS4A scenario. Overall, the BTM modelling shows the reduction in traffic flows would cause a reduction in driver delay on the link in both directions, and this benefit is considered to be of a <i>minor magnitude</i>.</p> <p>In both scenarios, the link would be governed by the national (60mph) limit, and it is considered that vehicles on the link would average over 40mph. In terms of traffic flows, in the RC4A scenario, the average vehicle/hour flow over 18 hours is 567 and the total number of HGVs over 18 hours is 299. Accordingly, the RC4A fear and intimidation degree of hazard score is 30 (0+0+30), which equates to a 'Moderate' level of fear and intimidation. For DS4A, the average vehicle/hour flow over 18 hours is 138 and the total number of HGVs over 18 hours is 54. Accordingly, the DS4A fear and intimidation degree of hazard score is 30 (0+0+30), which equates to a 'Moderate' level of fear and intimidation. Therefore, there is no step change between scenarios and hence the impact is of <i>negligible magnitude</i>. As traffic flows decrease this impact is deemed to be beneficial.</p> <p>In terms of road user safety, the PIC analysis undertaken as part of the TA identified four incidents on the link (three slight and one serious), but concluded that there was no evidence of any underlying highway safety issue that would be affected by the changes in traffic flows and thus in the DS4A scenario, there is deemed to be <i>no change</i> in Road User and Pedestrian Safety on Link 55.</p>
	<p><b>Embedded Mitigation</b></p>	<p>The link remains largely unchanged between the RC4A and DS4A scenarios, apart from at its northern extent, where the link would form the minor arm of a signalised T-junction with Camp Road, where the priority of the existing junction would be changed. These works would either be completed in the RC4A scenario as part of the Heyford Park highway works, or in the DS4A scenario as part of the OxSRFI highway works. In terms of NMU provision; a new publicly designated bridleway would</p>

		intersect the link close to Camp Road, where an equestrian crossing would be provided across the link.
	<b>Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• Driver Delay: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• NMU Delay: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• NMU Amenity: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
	<b>Additional Mitigation</b>	<ul style="list-style-type: none"> <li>• None</li> </ul>
	<b>Effect of Travel Plan</b>	<ul style="list-style-type: none"> <li>• Not applied</li> </ul>
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• Driver Delay: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• NMU Delay: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• NMU Amenity: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
<p><b>Link 57</b></p> <p>B4100 between Hillside and East Street</p> <p><b>Sensitivity:</b></p> <p>Low</p>	<b>Potential Effects</b>	<ul style="list-style-type: none"> <li>• Severance: negligible magnitude (adverse)</li> <li>• Driver Delay: negligible magnitude (adverse)</li> <li>• NMU Delay: minor magnitude (adverse)</li> <li>• NMU Amenity: negligible magnitude (adverse)</li> <li>• Fear and Intimidation: negligible magnitude (adverse)</li> <li>• Road User and Pedestrian Safety: no change</li> </ul> <p>Link 57 comprises the B4100 between Hillside and East Street; a stretch that is approximately 1.4km in length. There are limited WCH receptors adjacent the link, other than a few private dwellings just south of Souldern and a small industrial site. Very few NMU trips are expected across the majority of the link in either scenario. In terms of traffic flows, between the RC4A and DS4A scenarios, Link 57 would be subject to a 27% increase in 24-hour total vehicle traffic flows (equating to 1632 vehicles). Thus, in accordance with IEMA Guidelines, there may be a negligible change in severance. In both scenarios, no NMU crossing facilities would be provided on Link 57, meaning WCHs would have to wait for gaps in the traffic to cross the link. Overall, balancing the increase in traffic flow and the lack of formal NMU crossing points provided, with the lack of expected NMU trips; it is concluded that there would be an adverse impact upon severance of <i>negligible magnitude</i> in the DS4A scenario.</p> <p>In terms of NMU delay, in both scenarios, there would be limited NMU trips along and across the link, but no formal crossing points are proposed and so NMUs would</p>

	<p>have to wait for gaps in the traffic to cross. In the RC4A scenario, there would be 6128 vehicles on the link in a 24-hour period. This equates to a vehicle passing a point on the link every 14 seconds. In DS4A, this time would decrease to 11 seconds. Thus, there would be fewer opportunities to cross the link in the DS4A scenario, thereby increasing NMU delay; although there would be limited harm, as few trips across the link are expected. Thus, the impact upon NMU delay is deemed to be adverse and of <i>minor magnitude</i>.</p> <p>Total traffic flows and HGV flows do not double and therefore, in terms of NMU amenity, the changes in traffic flows are negligible in accordance with IEMA Guidelines. While no infrastructure for NMUs is provided along the link, very few NMU trips are expected also. Thus, the conclusion of a <i>negligible magnitude</i> of impact on NMU Amenity in the DS4A is suitable. As traffic flows increase this impact has been assessed as adverse.</p> <p>Although there are no points on Link 57 where vehicles can make turning movements; there would be an increase in traffic flows on Link 57 between the two scenarios, indicating a potential increase in congestion and delay on the link. The BTM modelling shows that the link would operate at a maximum of 30% (south eastbound AM) in the RC4A scenario, and at a maximum of 43% (south eastbound AM) in the DS4A scenario. This increase in traffic flows would be translated to driver delay at points where other roads or private accesses meet the link, as vehicles would be joining a road with more traffic and thus fewer gaps in which to join. Overall, such points are limited, and the increase in maximum operating capacity between the scenarios is not large. Furthermore, the link operates with spare capacity in both scenarios. Therefore, it is considered that impact on driver delay would be adverse and of <i>negligible magnitude</i>, in the DS4A scenario.</p> <p>In both scenarios, the link would be governed by the national (60mph) speed limit, and it is considered that vehicles on the link would average over 40mph. In terms of traffic flows, in the RC4A scenario, the average vehicle/hour flow over 18 hours is 321 and the total number of HGVs over 18 hours is 120. Accordingly, the RC4A fear and intimidation degree of hazard score is 30 (0+0+30), which equates to a 'Moderate' level of fear and intimidation. For DS4A, the average vehicle/hour flow over 18 hours is 405 and the total number of HGVs over 18 hours is 146. Accordingly, the DS4A fear and intimidation degree of hazard score is 30 (0+0+30), which equates to a 'Moderate' level of fear and intimidation. Therefore, there is no step change between scenarios and hence the impact is of <i>negligible magnitude</i>. As traffic flows increase, this impact has been assessed as adverse.</p>
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		In terms of road user safety, the PIC analysis undertaken as part of the TA did not include Link 57. Instead, a review of publicly available data (via crashmap.com) for the latest 5 years of available data (2020-2024), found no collisions on the link. Therefore, there is nothing indicative of an underlying highway safety issue that would be affected by the changes in traffic flows and thus in the DS4A scenario, there is deemed to be <i>no change</i> in Road User and Pedestrian Safety on Link 57.
	<b>Embedded Mitigation Effects (Significance)</b>	None <ul style="list-style-type: none"> <li>• Severance: <b>Neutral (No effect)</b></li> <li>• Driver Delay: <b>Neutral (No effect)</b></li> <li>• NMU Delay: <b>Neutral (No effect)</b></li> <li>• NMU Amenity: <b>Neutral (No effect)</b></li> <li>• Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
	<b>Additional Mitigation Effect of Travel Plan</b>	None Not applied
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Neutral (No effect)</b></li> <li>• Driver Delay: <b>Neutral (No effect)</b></li> <li>• NMU Delay: <b>Neutral (No effect)</b></li> <li>• NMU Amenity: <b>Neutral (No effect)</b></li> <li>• Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
<b>Link 59</b>  B4100 Aynho Road between A4260 and Mill Lane  <b>Sensitivity:</b>  Low/Medium	<b>Potential Effects</b>	<ul style="list-style-type: none"> <li>• Severance: negligible magnitude (adverse)</li> <li>• Driver Delay: minor magnitude (adverse)</li> <li>• NMU Delay: negligible magnitude (adverse)</li> <li>• NMU Amenity: negligible magnitude (adverse)</li> <li>• Fear and Intimidation: negligible magnitude (adverse)</li> <li>• Road User and Pedestrian Safety: no change</li> </ul> <p>Link 59 comprises the B4100 Aynho Road between Adderbury and Mill Lane. This section of the B4100 is approximately 3km in length. There are limited WCH receptors adjacent the link, other than within Adderbury where several accesses to residential developments meet the link, as well as a public house and A primary school. In Adderbury, a two-stage signalised crossing is provided across the link as part of the A4260 junction at the link's western extent (adjacent to the school), and an uncontrolled pedestrian crossing point is provided adjacent to the public house at the edge of Adderbury. In terms of traffic flows, between the RC4A and DS4A scenarios, Link 59 would be subject to a 12% increase in 24-hour total vehicle traffic flows (equating to 210 vehicles). No HGVs would be on the link in either scenario. Thus, in accordance with IEMA Guidelines, there may be a negligible change in severance. Outside of Adderbury this increase in traffic flows would have limited effect, due to the lack of WCH receptors. Overall, the balancing the increase in traffic flow on the link as a whole, with the provision of suitable NMU crossing</p>

	<p>points in Adderbury at key locations, it is concluded that there would be an adverse impact upon severance of <i>negligible magnitude</i> in the DS4A scenario.</p> <p>The increase of 210 vehicles in a 24-hour period equates to one additional vehicle every seven minutes. This is not a substantial increase in trips and would not significantly impact NMUs waiting for gaps in traffic to cross the link. Therefore, considering the provision of crossings in Adderbury where the majority of WCH trips across the link are expected in both scenarios, and the limited increase in vehicles, the impact upon NMU delay is deemed to be adverse, but of <i>negligible magnitude</i>.</p> <p>Total traffic flows do not double between the RC4A and DS4A scenarios, and therefore the changes in traffic flows are negligible in accordance with IEMA Guidelines. There would be no HGVs on the link in either scenario. This increase of 210 vehicles equates to one additional vehicle every three/four minutes, which is not a substantial change. Therefore, the adverse impact upon NMU amenity is limited to <i>negligible magnitude</i>.</p> <p>Although there are no points on Link 59 where vehicles can make turning movements; there would be an increase in traffic flows on Link 59 between the two scenarios, indicating a potential increase in congestion and delay on the link. This potential increase in driver delay would be most felt at the link's western extent at the A4260 junction, and at the residential accesses within Adderbury where vehicles would have to wait to turn on to the link. The link is within the buffer zone of the BTM modelling and so Volume/Capacity ratios are not provided, but a 24-hour total vehicle flow of 1957 vehicles (DS4A) suggests the link is lightly trafficked and would not suffer from any issues involving congestion or delay. The expected impact in Adderbury is small, and while adverse, it is deemed to be of <i>minor magnitude</i>.</p> <p>In both scenarios, the link would be governed by a 20mph limit within Adderbury adjacent to the primary school, a 30mph limit within the rest of Adderbury, and the national (60mph) limit elsewhere on the link. It is expected that vehicles on the link would therefore average over 40mph. In terms of traffic flows, in the RC4A scenario, the average vehicle/hour flow over 18 hours is 92 and the total number of HGVs over 18 hours is 0. Accordingly, the RC4A fear and intimidation degree of hazard score is 30 (0+0+30), which equates to a 'Moderate' level of fear and intimidation. For DS4A, the average vehicle/hour flow over 18 hours is 103 and the total number of HGVs over 18 hours is 0. Accordingly, the DS4A fear and intimidation degree of hazard score is 30 (0+0+30), which equates to a 'Moderate' level of fear and intimidation. Therefore, there is no step change between scenarios and hence the impact is of <i>negligible</i></p>
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		<p><i>magnitude</i>. As traffic flows increase, this impact has been assessed as adverse.</p> <p>In terms of road user safety, the PIC analysis undertaken as part of the TA did not include Link 59. Instead, a review of publicly available data (via crashmap.com) for the latest 5 years of available data (2020-2024), found nine collisions on the link (seven slight and two serious). No two collisions occurred in the same location, other than a one slight and one serious at the A4100 junction. Nine incidents in a five-year period does not constitute a collision problem, when considering the length of the link (3km). Overall, there are no trends in collision location that indicate an underlying highway safety issue on this link that would be affected by the changes in traffic flows and thus in the DS4A scenario, there is deemed to be <i>no change</i> in Road User and Pedestrian Safety on Link 59.</p>
	<b>Embedded Mitigation</b>	None
	<b>Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Slight permanent adverse (Not Significant)</b></li> <li>• Driver Delay: <b>Slight permanent adverse (Not Significant)</b></li> <li>• NMU Delay: <b>Neutral (No effect)</b></li> <li>• NMU Amenity: <b>Slight permanent adverse (Not Significant)</b></li> <li>• Fear and Intimidation: <b>Slight permanent adverse (Not Significant)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
	<b>Additional Mitigation</b>	None
	<b>Effect of Travel Plan</b>	Not applied
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Slight permanent adverse (Not Significant)</b></li> <li>• Driver Delay: <b>Slight permanent adverse (Not Significant)</b></li> <li>• NMU Delay: <b>Neutral (No effect)</b></li> <li>• NMU Amenity: <b>Slight permanent adverse (Not Significant)</b></li> <li>• Fear and Intimidation: <b>Slight permanent adverse (Not Significant)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
<p><b>Link 60</b></p> <p>A4095/B430 internal junction link</p> <p><b>Sensitivity:</b></p> <p>Low</p>	<b>Potential Effects</b>	<ul style="list-style-type: none"> <li>• Severance: negligible magnitude (adverse)</li> <li>• Driver Delay: negligible magnitude (adverse)</li> <li>• NMU Delay: negligible magnitude (adverse)</li> <li>• NMU Amenity: negligible magnitude (adverse)</li> <li>• Fear and Intimidation: negligible magnitude (adverse)</li> <li>• Road User and Pedestrian Safety: no change</li> </ul> <p>Link 60 is a short link comprising of an internal link of the junction between the B430 and the A4095. The link facilitates movements from the eastbound A4095 on to the northbound B430, as well as the opposing</p>

	<p>movement. There are no WCH receptors adjacent the link and no NMU trips are expected along and across the link in the RC4A or DS4A scenarios. In terms of traffic flows, between the RC4A and DS4A scenarios, Link 60 would be subject to a 94% increase in 24-hour total vehicle traffic flows (equating to 1283 vehicles). Thus, based on IEMA Guidelines; there may be a substantial change in terms of severance between scenarios. However, this change in terms of specific vehicle numbers is low (under one additional vehicle a minute), and no NMU trips are expected across the link. Therefore, it is considered that there would be an adverse, but <i>negligible magnitude</i> impact on severance on Link 60.</p> <p>In terms of NMU delay, there would be no NMU trips along and across the link in either scenarios. Again, the decrease in traffic flows in terms of vehicles is low, and thus it is considered that there would also be a adverse, but <i>negligible magnitude</i> impact in terms of NMU delay on the link.</p> <p>Total traffic flows do not double between the RC4A and DS4A scenarios, and therefore, in terms of NMU amenity, the changes in traffic flows are negligible in accordance with IEMA Guidelines. The number of HGVs on Link 60 in a 24-hour period increases by 10% in the DS4A (equating to 6 HGVs), and thus also considered to have a minimal effect. Overall, it is considered that there would be an adverse, but <i>negligible magnitude</i> of impact in terms of NMU Amenity on the link.</p> <p>There are no points on Link 60 where vehicles can make turning movements and so the only point where a change in driver delay can be realised is as at each end of the link where vehicles join the B430 or the A4095. The BTM modelling shows the south westbound link operating at 15% of capacity in the RC4A scenario, increasing to 27% of capacity in the DS4A scenario. Thus, the link would comfortably operate with spare capacity in both scenarios. This change would result in a adverse <i>negligible magnitude</i> upon driver delay between the two scenarios.</p> <p>In both scenarios, the link would be governed by the national (60mph) speed limit, although it is thought that vehicles would be travelling much slower, averaging under 20mph.</p> <p>In terms of traffic flows, in the RC4A scenario, the average vehicle/hour flow over 18 hours is 72 and the total number of HGVs over 18 hours is 58. Accordingly, the RC4A fear and intimidation degree of hazard score is 0 (0+0+0), which equates to a 'Small' level of fear and intimidation. For DS4A, the average vehicle/hour flow over 18 hours is 134 and the total number of HGVs over 18 hours is 63. Accordingly, the RC4A fear and intimidation degree of hazard score is 0 (0+0+0), which</p>
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		<p>equates to a 'Small' level of fear and intimidation. Therefore, there is no step change between scenarios and hence the impact is of <i>negligible magnitude</i>. As traffic flows increase, this impact has been assessed as adverse.</p> <p>In terms of road user safety, the PIC analysis undertaken as part of the TA identified four slight incidents at the junction between the B430 and A4095, although did not specify where the collisions occurred. Of the four collisions, one was a loss of control on approach to the junction, one was a motorbike losing control, and two were failures to give way. A further review of publicly available data (via crashmap.com) for the latest 5 years of available data (2020-2024), found one slight incident on the link. Therefore, as was the case in the TA, it can be concluded that there is no evidence of any underlying highway safety issue on the link that would be affected by the changes in traffic flows and thus in the DS4A scenario, there is deemed to be <i>no change</i> in Road User and Pedestrian Safety on Link 60.</p>
	<b>Embedded Mitigation</b>	None
	<b>Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Slight permanent adverse (Not Significant)</b></li> <li>• Driver Delay: <b>Slight permanent adverse (Not Significant)</b></li> <li>• NMU Delay: <b>Slight permanent adverse (Not Significant)</b></li> <li>• NMU Amenity: <b>Slight permanent adverse (Not Significant)</b></li> <li>• Fear and Intimidation: <b>Slight permanent adverse (Not Significant)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
	<b>Additional Mitigation</b>	None
	<b>Effect of Travel Plan</b>	Not applied
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Slight permanent adverse (Not Significant)</b></li> <li>• Driver Delay: <b>Slight permanent adverse (Not Significant)</b></li> <li>• NMU Delay: <b>Slight permanent adverse (Not Significant)</b></li> <li>• NMU Amenity: <b>Slight permanent adverse (Not Significant)</b></li> <li>• Fear and Intimidation: <b>Slight permanent adverse (Not Significant)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
<b>Link 61</b>  Port Way/Kirlington Road  <b>Sensitivity:</b>	<b>Potential Effects</b>	<ul style="list-style-type: none"> <li>• Severance: minor magnitude (adverse)</li> <li>• Driver Delay: negligible magnitude (adverse)</li> <li>• NMU Delay: negligible magnitude (adverse)</li> <li>• NMU Amenity: negligible magnitude (adverse)</li> <li>• Fear and Intimidation: negligible magnitude (adverse)</li> <li>• Road User and Pedestrian Safety: no change</li> </ul>

<p>Low</p>	<p>Link 61 runs north to south from Camp Road to the B4030 (Lower Heyford Road) and is approximately 1.4km in length. There are no WCH receptors adjacent the link, other than one private dwelling, and few NMU trips along and across the link are expected in the RC4A or DS4A scenarios. In terms of traffic flows, between the RC3A and DS3A scenarios, Link 61 would be subject to a 36% reduction in 24-hour total vehicle traffic flows (equating to 792 vehicles). Thus, in accordance with IEMA Guidelines, there may be a slight change in severance. In both scenarios, the only NMU crossing facilities on Link 61 would be found at the link's northern most extent where an uncontrolled pedestrian crossing facilitates the desire line along Camp Road. There is no provision for WCH elsewhere on the link. Therefore, considering the reduction in traffic flows, and the lack of NMU infrastructure, the conclusion that there would be a <i>minor magnitude</i> beneficial impact on severance between the scenarios is suitable.</p> <p>In terms of NMU delay, there would be limited NMU trips along and across the link in the RC4A scenario, other than at Camp Road where an uncontrolled crossing is provided. Along the rest of the link, and at Camp Road, no signalised crossing points are proposed; and so NMUs would have to wait for gaps in the traffic to cross. In the RC4A scenario, there would be 2217 vehicles on the link in a 24-hour period. The equates to a vehicle passing a point on the link every 39 seconds. In DS4A, this time would increase to 61 seconds. Thus, there would more opportunities to cross the link in the DS4A scenario, thereby reducing NMU delay; although there would be limited benefit, as few trips across the link are expected. Where regular NMU trips are expected (along Camp Road) a crossing would be provided in both scenarios. The impact upon NMU delay is therefore deemed to be beneficial and of <i>minor magnitude</i>.</p> <p>HGV flows halve between the RC4A and DS4A scenarios (56% reduction), and therefore, in terms of NMU amenity, the changes in traffic flows are negligible in accordance with IEMA Guidelines. There would be a reduction of 49 HGVs in 24 hours, or the equivalent of circa two fewer vehicles every hour minutes on the link. This is not deemed to be a substantial change and thus, it is considered that impact on NMU amenity would be beneficial, but of <i>negligible magnitude</i>.</p> <p>Although there are no points on Link 61 where vehicles can make turning movements; there would be a reduction in traffic flows on Link 61 between the two scenarios, indicating a reduction in congestion and delay on the link. The benefits of this reduction in flows would be realised at the extents of the link where, in both scenarios, the link forms priority-controlled T-junctions with Camp Road (north) and the B4030 (south). The BTM modelling shows that the link would operate at a</p>
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		<p>maximum of 11% (southbound AM) in the RC4A scenario, and at a maximum of 6% (southbound AM and northbound PM) in the DS4A scenario. Overall, the BTM modelling shows the substantial reduction in traffic flows would cause a reduction in driver delay on the link in both directions, but this is limited, and the link operates with plenty of spare capacity in both scenarios. Thus, the impact is considered to be beneficial but of <i>negligible magnitude</i>.</p> <p>In both scenarios, the link would be governed by the national (60mph) speed limit, and it is considered that vehicles on the link would average over 40mph. In terms of traffic flows, in the RC4A scenario, the average vehicle/hour flow over 18 hours is 116 and the total number of HGVs over 18 hours is 83. Accordingly, the RC4A fear and intimidation degree of hazard score is 30 (0+0+30), which equates to a 'Moderate' level of fear and intimidation. For DS4A, the average vehicle/hour flow over 18 hours is 75 and the total number of HGVs over 18 hours is 36. Accordingly, the DS4A fear and intimidation degree of hazard score is 30 (0+0+30), which equates to a 'Moderate' level of fear and intimidation. Therefore, there is no step change between scenarios and hence the impact is of <i>negligible magnitude</i>. As traffic flows decrease, this impact has been assessed as beneficial.</p> <p>In terms of road user safety, the PIC analysis undertaken as part of the TA identified two slight incidents at the link's southern junction with the B4030, and no incidents elsewhere on the link. The analysis found no evidence of any underlying highway safety issue that would be affected by the changes in traffic flows; and thus, in the DS3A scenario, there is deemed to be <i>no change</i> in Road User and Pedestrian Safety on Link 61.</p>
	<b>Embedded Mitigation</b>	None
	<b>Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: Slight permanent beneficial (<b>Not Significant</b>)</li> <li>• Driver Delay: Neutral (<b>No effect</b>)</li> <li>• NMU Delay: Neutral (<b>No effect</b>)</li> <li>• NMU Amenity: Neutral (<b>No effect</b>)</li> <li>• Fear and Intimidation: Neutral (<b>No effect</b>)</li> <li>• Road User and Pedestrian Safety: Neutral (<b>No effect</b>)</li> </ul>
	<b>Additional Mitigation</b>	None
	<b>Effect of Travel Plan</b>	Not applied
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: Slight permanent beneficial (<b>Not Significant</b>)</li> <li>• Driver Delay: Neutral (<b>No effect</b>)</li> <li>• NMU Delay: Neutral (<b>No effect</b>)</li> <li>• NMU Amenity: Neutral (<b>No effect</b>)</li> <li>• Fear and Intimidation: Neutral (<b>No effect</b>)</li> </ul>

		<ul style="list-style-type: none"> <li>• Road User and Pedestrian Safety: Neutral (<b>No effect</b>)</li> </ul>
<p><b>Link 64</b></p> <p>Mill Road south of Barton Hartshorn junction</p> <p><b>Sensitivity:</b></p> <p>Low</p>	<p><b>Potential Effects</b></p>	<ul style="list-style-type: none"> <li>• Severance: negligible magnitude (beneficial)</li> <li>• Driver Delay: negligible magnitude (beneficial)</li> <li>• NMU Delay: negligible magnitude (beneficial)</li> <li>• NMU Amenity: negligible magnitude (beneficial)</li> <li>• Fear and Intimidation: negligible magnitude (beneficial)</li> <li>• Road User and Pedestrian Safety: no change</li> </ul> <p>Between the RC4A and DS4A scenarios, the modelling shows Mill Road south of Barton Hartshorn junction would be subject to 30% reduction in 24-hour total vehicle traffic. In actual terms, two-way 24-hour traffic flows would reduce from 1035 vehicles to 725 vehicles. In both scenarios there would be less than a vehicle a minute on Link 64: not enough to cause severance. Therefore, there would be many opportunities provided between vehicles for NMUs to cross the link in both scenarios, and it is considered that this reduction in traffic flows would comprises a <i>negligible magnitude</i> but beneficial impact on severance in the DS4A scenario.</p> <p>Similarly, the lack of WCH receptors adjacent the link and the limited number of vehicles that are predicted to use the link in both scenarios indicates that there would be a beneficial, but <i>negligible magnitude</i> of impact on NMU delay and NMU amenity between the scenarios.</p> <p>In terms of driver delay, the BTM modelling shows that the link would operate at a maximum of 14% of capacity in the RC4A, reducing to a maximum of 9% of capacity in the DS4A. Consequently, drivers would experience minimal delay and queuing in both scenarios, and thus there would be beneficial but <i>negligible magnitude</i> of impact on driver delay between the two scenarios.</p> <p>In terms of fear and intimidation, the link is governed by the national speed limit, and vehicle speeds are likely to exceed 40mph. For RC4A, the average vehicle/hour flow over 18 hours is 54 vehicles, and the total number of HGVs over 18 hours is 0. Accordingly, the DS4A fear and intimidation degree of hazard score is 30 (0+0+30), which equates to a 'Moderate' level of fear and intimidation. For DS4A, the average vehicle/hour flow over 18 hours is 38, and the total number of HGVs over 18 hours is 0. Accordingly, the DS4A fear and intimidation degree of hazard score is 30 (0+0+30), which equates to a 'Moderate' level of fear and intimidation. Therefore, there is no step change between scenarios and hence the impact is of <i>negligible magnitude</i>. This impact has been assessed as beneficial due to the decrease in traffic flows between the scenarios.</p> <p>Link 64 was not included in the study area of the collision analysis undertaken as part of the TA.</p>

		Nevertheless, a review of the crashmap.com database found no collisions were recorded on the link during the latest 5-year period (2020-2024). Given the reduction in traffic flows, and that there is no indication of a collision problem on the link, there would be <i>no change</i> in Road User and Pedestrian Safety on this link.
	<b>Embedded Mitigation Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• None</li> <li>• Severance: <b>Neutral (No effect)</b></li> <li>• Driver Delay: <b>Neutral (No effect)</b></li> <li>• NMU Delay: <b>Neutral (No effect)</b></li> <li>• NMU Amenity: <b>Neutral (No effect)</b></li> <li>• Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
	<b>Additional Mitigation</b>	None
	<b>Effect of Travel Plan</b>	Not applied
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Neutral (No effect)</b></li> <li>• Driver Delay: <b>Neutral (No effect)</b></li> <li>• NMU Delay: <b>Neutral (No effect)</b></li> <li>• NMU Amenity: <b>Neutral (No effect)</b></li> <li>• Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
<p><b>Link 65</b></p> <p>Mill Road between A421 and Barton Hartshorn junction</p> <p><b>Sensitivity:</b></p> <p>Low</p>	<b>Potential Effects</b>	<ul style="list-style-type: none"> <li>• Severance: negligible magnitude (beneficial)</li> <li>• Driver Delay: negligible magnitude (beneficial)</li> <li>• NMU Delay: negligible magnitude (beneficial)</li> <li>• NMU Amenity: minor magnitude (beneficial)</li> <li>• Fear and Intimidation: negligible magnitude (beneficial)</li> <li>• Road User and Pedestrian Safety: no change</li> </ul> <p>Between the RC4A and DS4A scenarios, the modelling shows Mill Road between the A421 and Barton Hartshorn junction, would be subject to 28% reduction in 24-hour total vehicle traffic. In actual terms, two-way 24-hour traffic flows would reduce from 1097 vehicles to 791 vehicles. In both scenarios there would be less than one vehicle a minute on Link 65. Therefore, there would be many opportunities provided between vehicles for NMUs to cross the link in both scenarios, and it is considered that this reduction in traffic flows would comprise a <i>negligible magnitude</i> beneficial impact on severance in the DS4A scenario.</p> <p>Similarly, the lack of WCH receptors adjacent the link and the limited number of vehicles that are predicted to use the link in both scenarios indicates that there would be a beneficial, but <i>negligible magnitude</i> of impact on NMU delay, and NMU amenity.</p> <p>In terms of driver delay, the BTM modelling shows that the link would operate at a maximum of 19% of capacity in the RCSA, reducing to a maximum of 13% of capacity in the DS4A. Consequently, drivers would experience minimal delay and queuing in both scenarios, and thus</p>

		<p>there would be a beneficial, but <i>negligible magnitude</i> of impact on driver delay between the two scenarios.</p> <p>In terms of fear and intimidation, the link is governed by the national speed limit, and vehicle speeds are likely to exceed 40mph. For RC4A, the average vehicle/hour flow over 18 hours is 58 vehicles, and the total number of HGVs over 18 hours is 0. Accordingly, the DS4A fear and intimidation degree of hazard score is 30 (0+0+30), which equates to a 'Moderate' level of fear and intimidation. For DS4A, the average vehicle/hour flow over 18 hours is 41, and the total number of HGVs over 18 hours is 0. Accordingly, the DS4A fear and intimidation degree of hazard score is 30 (0+0+30), which equates to a 'Moderate' level of fear and intimidation. Therefore, there is no step change between scenarios and hence the impact is beneficial, but of <i>negligible magnitude</i>.</p> <p>Link 65 was not included in the study area of the collision analysis undertaken as part of the TA. Nevertheless, a review of the crashmap.com database found no collisions were recorded on the link during the latest 5-year period (2020-2024). Given the reduction in traffic flows, and that there is no indication of an collision problem on the link, there would be <i>no change</i> in Road User and Pedestrian Safety on this link.</p>
	<b>Embedded Mitigation Effects (Significance)</b>	<p>None</p> <ul style="list-style-type: none"> <li>• Severance: <b>Neutral (No effect)</b></li> <li>• Driver Delay: <b>Neutral (No effect)</b></li> <li>• NMU Delay: <b>Neutral (No effect)</b></li> <li>• NMU Amenity: <b>Neutral (No effect)</b></li> <li>• Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
	<b>Additional Mitigation Effect of Travel Plan</b>	<p>None</p> <p>Not applied</p>
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Neutral (No effect)</b></li> <li>• Driver Delay: <b>Neutral (No effect)</b></li> <li>• NMU Delay: <b>Neutral (No effect)</b></li> <li>• NMU Amenity: <b>Neutral (No effect)</b></li> <li>• Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
<p><b>Link 67</b></p> <p>Unnamed Road to Bainton</p> <p><b>Sensitivity:</b></p> <p>Low</p>	<b>Potential Effects</b>	<ul style="list-style-type: none"> <li>• Severance: negligible magnitude (adverse)</li> <li>• Driver Delay: negligible magnitude (beneficial)</li> <li>• NMU Delay: negligible magnitude (adverse)</li> <li>• NMU Amenity: negligible magnitude (adverse)</li> <li>• Fear and Intimidation: negligible magnitude (adverse)</li> <li>• Road User and Pedestrian Safety: no change</li> </ul> <p>Link 67 comprises an unnamed road that runs between the B4100 Banbury Road and Bainton. There are no WCH receptors adjacent the link, other than a few private dwellings and the road is narrow, and some sections can only accommodate one vehicle passing in</p>

	<p>each direction at once. No NMU infrastructure is provided on the link, although limited WCH trips are expected along and across the link. In terms of traffic flows, between the RC4A and DS4A scenarios, Link 67 would be subject to an 18% increase in 24-hour total vehicle traffic, equating to 162 vehicles. Thus, in accordance with IEMA Guidelines, there may be a negligible change in severance. However, an increase of 162 vehicles equates to an average of just over one additional vehicle every nine minutes, and overall flows would remain low in the DS4A scenario (1072 vehicles, or 45 an hour). No HGVs would be on the link in either scenario. Thus, it is deemed that the impact upon severance on Link 67 is adverse, but only of <i>negligible magnitude</i>.</p> <p>In terms of NMU delay, there would be limited NMU trips along and across the link in the RC4A scenario, other than where the few private dwellings may generate WCH trips. No crossing points are proposed anywhere on the link and so NMUs would have to wait for gaps in the traffic to cross. In the RC4A scenario, there would be 910 vehicles on the link in a 24-hour period. This equates to a vehicle passing a point on the link with a frequency 1-2 minutes. In DS4A, this time would decrease to approximately 1 minute 20 seconds. Thus, in the DS4A there would still be opportunities for NMUs to cross the link and minimal delay for NMUs. Therefore, the impact upon NMU delay is deemed to be adverse, but of <i>negligible magnitude</i>.</p> <p>Total traffic flows and HGV flows do not double between the RC4A and DS4A scenarios, and therefore, in terms of NMU amenity, the changes in traffic flows are negligible in accordance with IEMA Guidelines. As discussed above, overall traffic numbers are low in both scenarios and therefore it is deemed there would be a <i>negligible magnitude</i> of impact on NMU Amenity in the DS4A scenario. As traffic numbers increase, this impact has been deemed adverse.</p> <p>Traffic flows would remain low in absolute terms and the outputs from the BTM modelling show the link operating at a maximum of 10% of capacity in the DC3A scenario, up from 9% in the RC4A scenario. The link would therefore continue to operate well within capacity and there would be <i>negligible magnitude</i> of impact on in driver delay. This impact is assessed as beneficial.</p> <p>In both scenarios, the link would be governed by the national (60mph) speed limit, although given the narrow and rural nature of the link it is considered that vehicles on the link would average between 30mph and 40mph. In terms of traffic flows, in the RC4A scenario, the average vehicle/hour flow over 18 hours is 48 and the total number of HGVs over 18 hours is 0. Accordingly, the RC4A fear and intimidation degree of hazard score</p>
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		<p>is 20 (0+0+20), which equates to a 'Small' level of fear and intimidation. For DS4A, the average vehicle/hour flow over 18 hours is 56 and the total number of HGVs over 18 hours is 0. Accordingly, the DS4A fear and intimidation degree of hazard score is 20 (0+0+20), which equates to a 'Small' level of fear and intimidation. Therefore, there is no step change between scenarios and hence the impact is of <i>negligible magnitude</i>. As traffic flows decrease, this impact is assessed as adverse.</p> <p>In terms of road user safety, the PIC analysis undertaken as part of the TA did not include Link 67. Instead, a review of publicly available data (via crashmap.com) for the latest 5 years of available data (2020-2024), found no collisions on the link. Therefore, there is nothing indicative of an underlying highway safety issue that could be worsened by the changes in traffic flows and thus in the DS4A scenario, there is deemed to be <i>no change</i> in Road User and Pedestrian Safety on Link 67.</p>
	<b>Embedded Mitigation</b>	None
	<b>Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Neutral (No effect)</b></li> <li>• Driver Delay: <b>Neutral (No effect)</b></li> <li>• NMU Delay: <b>Neutral (No effect)</b></li> <li>• NMU Amenity: <b>Neutral (No effect)</b></li> <li>• Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
	<b>Additional Mitigation</b>	None
	<b>Effect of Travel Plan</b>	Not applied
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Neutral (No effect)</b></li> <li>• Driver Delay: <b>Neutral (No effect)</b></li> <li>• NMU Delay: <b>Neutral (No effect)</b></li> <li>• NMU Amenity: <b>Neutral (No effect)</b></li> <li>• Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
<p><b>Link 71</b></p> <p>Station Road between Main Street and Millfield Avenue</p> <p><b>Sensitivity:</b></p> <p>Low/Medium</p>	<b>Potential Effects</b>	<ul style="list-style-type: none"> <li>• Severance: negligible magnitude (beneficial)</li> <li>• Driver Delay: negligible magnitude (beneficial)</li> <li>• NMU Delay: negligible magnitude (beneficial)</li> <li>• NMU Amenity: negligible magnitude (beneficial)</li> <li>• Fear and Intimidation: negligible magnitude (beneficial)</li> <li>• Road User and Pedestrian Safety: no change</li> </ul> <p>Link 71 runs north from Marsh Gibbon to Main Street near Poundon in the north. The link measures approximately 2250m and has limited WCH receptors adjacent to it, other than in Marsh Gibbon where several dwellings front the link to the east. A narrow footway (c. 1m) running along the east edge of the link serves these dwellings. For the rest of length of the link, there is no NMU infrastructure meaning NMUs would have to wait for gaps in the traffic to cross. In terms of traffic flows,</p>

		<p>between the RC4A and DS4A scenarios, the modelling shows Link 71 would be subject to 9% reduction in 24-hour total vehicle traffic. In actual terms, two-way 24-hour traffic flows would reduce by 181 vehicles, or on average, one every 3mins. Thus, there would be a beneficial impact on severance, it is deemed that the impact is limited to a <i>negligible magnitude</i>.</p> <p>Similarly, the lack of WCH receptors adjacent the link and the limited number of vehicles that are predicted to use the link in both scenarios indicates that there would be a <i>negligible magnitude</i> beneficial impact on NMU delay and NMU amenity.</p> <p>In terms of driver delay, the BTM modelling shows that the link would operate at a maximum of 13% of capacity in the RCSA, reducing to a maximum of 11% of capacity in the DS4A. Consequently, drivers would experience minimal delay and queuing in both scenarios, and thus there would be a <i>negligible magnitude</i> beneficial impact on driver delay between the two scenarios.</p> <p>In terms of fear and intimidation, the link is governed by the national speed limit, and vehicle speeds are likely to exceed 40mph. For RC4A, the average vehicle/hour flow over 18 hours is 101 vehicles, and the total number of HGVs over 18 hours is 13. Accordingly, the RC4A fear and intimidation degree of hazard score is 30 (0+0+30), which equates to a 'Moderate' level of fear and intimidation. For DS4A, the average vehicle/hour flow over 18 hours is 92, and the total number of HGVs over 18 hours is 14. Accordingly, the DS4A fear and intimidation degree of hazard score is 30 (0+0+30), which equates to a 'Moderate' level of fear and intimidation. Therefore, there is no step change between scenarios and hence the impact is of <i>negligible magnitude</i>. As traffic flows decrease, this impact is deemed beneficial.</p> <p>Link 71 was not included in the study area of the collision analysis undertaken as part of the TA. Nevertheless, a review of the crashmap.com database found no collisions were recorded on the link during the latest 5-year period (2020-2024). Given the reduction in traffic flows, and that there is no indication of a collision problem on the link, there would be <i>no change</i> in Road User and Pedestrian Safety on this link.</p>
	<b>Embedded Mitigation</b>	None
	<b>Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Neutral (No effect)</b></li> <li>• Driver Delay: <b>Neutral (No effect)</b></li> <li>• NMU Delay: <b>Neutral (No effect)</b></li> <li>• NMU Amenity: <b>Neutral (No effect)</b></li> <li>• Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
	<b>Additional Mitigation</b>	None
	<b>Effect of Travel Plan</b>	<ul style="list-style-type: none"> <li>• Not applied</li> </ul>

	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Neutral (No effect)</b></li> <li>• Driver Delay: <b>Neutral (No effect)</b></li> <li>• NMU Delay: <b>Neutral (No effect)</b></li> <li>• NMU Amenity: <b>Neutral (No effect)</b></li> <li>• Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
<p><b>Link 73</b></p> <p>B430 thorough Weston-on-the-Green (north of loading point)</p> <p><b>Sensitivity:</b></p> <p>Medium</p>	<p><b>Potential Effects</b></p>	<ul style="list-style-type: none"> <li>• Severance: negligible magnitude (beneficial)</li> <li>• Driver Delay: negligible magnitude (beneficial)</li> <li>• NMU Delay: negligible magnitude (beneficial)</li> <li>• NMU Amenity: negligible magnitude (beneficial)</li> <li>• Fear and Intimidation: negligible magnitude (beneficial)</li> <li>• Road User and Pedestrian Safety: no change</li> </ul> <p>Link 73 runs north from the village of Weston-on-the-Green for approximately 1500m. Within Weston-on-the-Green are WCH receptors adjacent the link to the west, comprising private dwellings, although there are few WCH receptors to the east indicating a possible limited impact upon severance. A 2m footway is provided on the western side of the B430 serving the aforementioned residential development. Elsewhere on the link, few WCH receptors are to be found and there would be limited NMU trips across or along the link in both scenarios. No controlled crossing facilities are provided, meaning NMUs would have to wait for gaps in the traffic to cross the link. In terms of traffic flows, between the RC4A and DS4A scenarios, Link 73 would be subject to a 9% reduction in 24-hour total vehicle traffic flows. Thus, in accordance with IEMA Guidelines, there would be a beneficial but <i>negligible magnitude</i> in severance as a result in the reduction in traffic flows between the scenarios.</p> <p>In terms of NMU delay, there would be limited NMU trips across the link in the RC4A scenario, although as no signalised crossing is present NMUs would have to wait for gaps in the traffic to cross. In the RC4A scenario, there would be 8625 vehicles on the link in a 24-hour period. The equates to a vehicle passing a point on the link every 10 seconds. In DS4A, this time would increase to 11 seconds. Thus, there would be a slight increase in the opportunities to cross the link in the DS4A scenario. Therefore, there would be <i>negligible magnitude</i> in terms of NMU delay in the DS4A scenario. As traffic flows decrease, this impact is assessed as beneficial.</p> <p>Total vehicle and HGVs flows do not double or halve between the RC4A and DS4A scenarios, and therefore, in terms of NMU amenity, the changes in traffic flows are negligible in accordance with IEMA Guidelines. There would be a change of 779 vehicle between the scenarios: not a significant amount. A footway is provided on the link's western edge, facilitating pedestrian movements along the link and would offer</p>

		<p>some protection. Overall, it is considered that slight decrease in flows corresponds to a <i>negligible magnitude</i> beneficial impact in terms of NMU amenity.</p> <p>Although there are no points on Link 73 where vehicles can make turning movements; there would be a change in traffic flows on Link 73 between the two scenarios, indicating a change in congestion and delay on the link; realised at roads that meet the link by vehicles waiting to join the B430. The BTM modelling shows that the link would operate at a maximum of 56% (southbound AM) in the RC4A scenario, and at a maximum of 43% (southbound AM) in the DS4A scenario. In both scenarios, the BTM modelling shows the link working within capacity, and the reduction between the maximum operating capacities is not a substantial reduction. This is consistent with the small reduction in traffic flows, which would cause slight change for vehicles waiting to join the link also. Therefore, overall, it is considered that there would be a beneficial <i>negligible magnitude</i> impact on driver delay between the scenarios.</p> <p>In the RC4A scenario, the link would be governed by the national (60mph) speed limit, and this would remain unchanged in the DS4A scenario. It is considered that vehicle would therefore be travelling over 40mph on average, in both scenarios. In terms of flows, in the RC4A scenario, the average vehicle/hour flow over 18 hours is 444 and the total number of HGVs over 18 hours is 315. Accordingly, the RC4A fear and intimidation degree of hazard score is 30 (0+0+30), which equates to a 'Moderate' level of fear and intimidation. For DS4A, the average vehicle/hour flow over 18 hours is 401 and the total number of HGVs over 18 hours is 369. Accordingly, the RC4A fear and intimidation degree of hazard score is 30 (0+0+30), which equates to a 'Moderate' level of fear and intimidation. Therefore, there is no step change between scenarios and hence the impact is of <i>negligible magnitude</i>. As there is a reduction in traffic flows between the scenarios, this has been assessed as a beneficial impact.</p> <p>In terms of road user safety, the PIC analysis undertaken as part of the TA identified two slight incidents on the link but concluded that there was no evidence of any underlying highway safety issue that would be affected by the changes in traffic flows and thus in the DS4A scenario, there is deemed to be <i>no change</i> in Road User and Pedestrian Safety on Link 73.</p>
	<p><b>Embedded Mitigation Effects (Significance)</b></p>	<p>None</p> <ul style="list-style-type: none"> <li>• Severance: <b>Neutral (No effect)</b></li> <li>• Driver Delay: <b>Neutral (No effect)</b></li> <li>• NMU Delay: <b>Neutral (No effect)</b></li> <li>• NMU Amenity: <b>Neutral (No effect)</b></li> <li>• Fear and Intimidation: <b>Neutral (No effect)</b></li> </ul>

		<ul style="list-style-type: none"> <li>Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
	<b>Additional Mitigation</b>	None
	<b>Effect of Travel Plan</b>	Not applied
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>Severance: <b>Neutral (No effect)</b></li> <li>Driver Delay: <b>Neutral (No effect)</b></li> <li>NMU Delay: <b>Neutral (No effect)</b></li> <li>NMU Amenity: <b>Neutral (No effect)</b></li> <li>Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
<p><b>Link 79</b></p> <p>A43 SB within Cherwell Roundabout</p> <p><b>Sensitivity:</b></p> <p>Low</p>	<b>Potential Effects</b>	<ul style="list-style-type: none"> <li>Severance: minor magnitude (adverse)</li> <li>Driver Delay: moderate magnitude (beneficial)</li> <li>NMU Delay: negligible magnitude (adverse)</li> <li>NMU Amenity: negligible magnitude (adverse)</li> <li>Fear and Intimidation: negligible magnitude (adverse)</li> <li>Road User and Pedestrian Safety: negligible magnitude (adverse)</li> </ul> <p>Between the RC4A and DS4A scenarios, Link 79 would be subject to a 31% increase in 24-hour total vehicle traffic. This suggests that there may be a slight impact upon severance and NMU Delay. NMUs are unlikely to cross Link 79 in both scenarios. Therefore, a <i>minor magnitude</i> of impact on these criteria in DS4A on Link 79 is a suitable assessment. As traffic flows increase, these impacts have been assessed as adverse.</p> <p>Total vehicle traffic flows and HGV flows are not expected to double, and therefore the impact of the changes traffic flows are negligible when considering NMU amenity. Further, when considering the lack of NMU trips expected on or across the link, it is deemed that the impact would be of <i>negligible magnitude</i> in terms of NMU amenity. Traffic flows increase between scenarios and thus this impact is deemed adverse.</p> <p>In terms of driver delay, the BTM modelling shows that the link would operate at a maximum of 105% of capacity in the RC4A scenario. In the DS4A scenario, the link would operate at 83% of capacity. Thus, the link would operate at capacity in the RC4A scenario, and with spare capacity in the DS4A scenario. The redesign of this link is part of the embedded highway works at J10, which lead to an overall improvement of capacity at the Cherwell Roundabout, reducing journey times for vehicles passing through the junction. This benefit is considered to comprise a <i>moderate magnitude</i> of impact.</p> <p>Link 79 would be subject to a 50mph speed limit in the RC4A. This would be lowered to 40mph in the DS4A scenario. In terms of traffic flows, in RC4A, the average vehicle/hour flow over 18 hours is 1367 vehicles, and the total number of HGVs over 18 hours is 2951. Accordingly, the RC4A fear and intimidation degree of</p>

		<p>hazard score is 70 (20+20+30), which equates to a 'Great' level of fear and intimidation. For DS4A, the average vehicle/hour flow over 18 hours is 1754, and the total number of HGVs over 18 hours is 4955. Accordingly, the DS4A fear and intimidation degree of hazard score is 70 (20+30+20), which equates to a 'Great' level of fear and intimidation. Therefore, there is no step change between scenarios and hence the impact is of <i>negligible magnitude</i>. As traffic flows increase between scenarios, this impact has been assessed as adverse.</p> <p>From the PIC assessment included in the TA, no collisions were recorded within the five-year study period on Link 79. It was concluded that there is not an existing highway safety issue at the Cherwell Roundabout. Nevertheless, as part of the embedded highway works associated with OxSRFI, Link 14 and the Cherwell Roundabout are subject to layout changes and thus it is considered that there may be <i>negligible magnitude</i> of impact in conditions as a result of the proposals. As traffic flows increase between scenarios, this impact has been assessed as adverse.</p>
	<b>Embedded Mitigation</b>	Link 79 is part of the embedded highway works at the M40 J10, which address the existing congestion at the junction thereby providing capacity at the Cherwell Roundabout to accommodate the OxSRFI development traffic.
	<b>Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Neutral (No effect)</b></li> <li>• Driver Delay: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• NMU Delay: <b>Neutral (No effect)</b></li> <li>• NMU Amenity: <b>Neutral (No effect)</b></li> <li>• Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
	<b>Additional Mitigation</b>	None
	<b>Effect of Travel Plan</b>	Not applied
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Neutral (No effect)</b></li> <li>• Driver Delay: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• NMU Delay: <b>Neutral (No effect)</b></li> <li>• NMU Amenity: <b>Neutral (No effect)</b></li> <li>• Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
<b>Link 80</b>  A41 Vendee Drive roundabout circulatory exit to Vendee Drive	<b>Potential Effects</b>	<ul style="list-style-type: none"> <li>• Severance: negligible magnitude (beneficial)</li> <li>• Driver Delay: no change</li> <li>• NMU Delay: negligible magnitude (beneficial)</li> <li>• NMU Amenity: negligible magnitude (beneficial)</li> <li>• Fear and Intimidation: negligible magnitude (beneficial)</li> <li>• Road User and Pedestrian Safety: negligible magnitude</li> </ul>

<p><b>Sensitivity:</b></p> <p>Low</p>	<p>Between the RC4A and DS4A scenarios there would be a 7% reduction in total vehicles on Link 80. This indicates (in accordance with IEMA Guidelines) a negligible magnitude of impact upon severance. In terms on NMU demand, there are limited WCH receptors adjacent the link and, being a roundabout circulatory the link would have no WCH crossings. Therefore, it is considered that there would be a <i>negligible magnitude</i> impact upon severance and NMU delay in the DS4A scenario. As traffic flows reduce, this impact is assessed as beneficial.</p> <p>Total vehicle traffic flows and HGV flows are not expected to double or halve, and therefore the impact of the changes traffic flows are negligible when considering NMU amenity. In terms of provision for NMUs, a 2m footway is provided on the outside of the roundabout, setback from the carriageway by a verge. Therefore, it is considered that there would be a <i>negligible magnitude</i> impact on NMU amenity. As total traffic flows reduce, this has been assessed as beneficial.</p> <p>Link 80, in both scenarios is governed by a 40mph speed limit, however as a roundabout circulatory it is considered that on average vehicles would be travelling in between 20mph and 30mph in both scenarios. In RC4A the average vehicle/hour over 18 hours is 1435 vehicles and the 18-hour HGVs is 1354 vehicles. Accordingly, the RC4A fear and intimidation degree of hazard score is 40 (20+10+10), which equates to a 'Moderate' level of fear and intimidation. In the DS4A scenario the average vehicle/hour over 18 hours is 1330 vehicles and the 18-hour HGVs is 1484 vehicles. Accordingly, the DS4A fear and intimidation degree of hazard score is 40 (20+10+10), which equates to a 'Moderate' level of fear and intimidation. Therefore, there is no step change in level and thus the impact is of <i>negligible magnitude</i>. As traffic flows decrease, this impact has been assessed as beneficial.</p> <p>The BTM modelling shows Link 80 would operate at a maximum of 66% of capacity in both scenarios. Thus, it is considered that there would be a <i>no change</i> in terms of driver delay in the DS4A scenario.</p> <p>In terms of road user safety, the PIC analysis undertaken as part of the TA showed several collisions on Link 80. In the five-year period studied, nine incidents were reported, including two fatal collisions. Few appear to involve HGVs. The analysis concluded that there is an collision problem on in this location, identifying the high speed A41 NB approach and geometric form of the junction as contributing factors. Nevertheless, the reduction in total traffic flows would not worsen these issues. Indeed, the increase in HGV traffic on the link may slow approach speeds on the A41. Overall, there is</p>
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		thought to be a <i>negligible magnitude</i> of impact on road user safety.
	<b>Embedded Mitigation Effects (Significance)</b>	None
	<b>Additional Mitigation Effect of Travel Plan</b>	None
	<b>Residual Effects (Significance)</b>	Not applied
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>Severance: <b>No effect (Neutral)</b></li> <li>Driver Delay: <b>No effect (Neutral)</b></li> <li>NMU Delay: <b>No effect (Neutral)</b></li> <li>NMU Amenity: <b>No effect (Neutral)</b></li> <li>Fear and Intimidation: <b>No effect (Neutral)</b></li> <li>Road User and Pedestrian Safety: <b>No effect (Neutral)</b></li> </ul>
<p><b>Link 84</b></p> <p>A41 (east of Tesco Roundabout)</p> <p><b>Sensitivity:</b></p> <p>Low</p>	<b>Potential Effects</b>	<ul style="list-style-type: none"> <li>Severance: negligible magnitude (adverse)</li> <li>Driver Delay: minor magnitude (adverse)</li> <li>NMU Delay: negligible magnitude (adverse)</li> <li>NMU Amenity: negligible magnitude (adverse)</li> <li>Fear and Intimidation: negligible magnitude (adverse)</li> <li>Road User and Pedestrian Safety: negligible magnitude (adverse)</li> </ul> <p>Between the RC4A and DS4A scenarios there would be 1% increase in total vehicles on Link 84. This indicates (in accordance with IEMA Guidelines) a negligible magnitude of impact upon severance. In actuality, this increase in the proportion of HGVs comprises 2029 HGVs, or the equivalent of one every one to two minutes. There are no WCH receptors adjacent the link, and no NMUs would be expected along or across the link. Therefore, there would be an adverse <i>negligible magnitude</i> impact upon severance and NMU delay in the DS4A scenario.</p> <p>Total vehicle traffic or HGV flows are not expected to double or halve, and therefore the impact of the changes traffic flows are negligible when considering NMU amenity. Furthermore, no NMUs are expected on the link and thus there would be a <i>negligible magnitude</i> of impact on NMU Amenity between the scenarios. As traffic flows increase, this impact has been assessed as adverse.</p> <p>Link 84, in both scenarios is governed by the national speed limit and it is expected that vehicles would exceed 40mph. In RC4A the average vehicle/hour over 18 hours is 1982 vehicles and the 18-hour HGVs is 1464 vehicles. Accordingly, the RC4A fear and intimidation degree of hazard score is 70 (30+10+30), which equates to a 'Great' level of fear and intimidation. In the DS4A scenario the average vehicle/hour over 18 hours is 1999</p>

		<p>vehicles and the 18-hour HGVs is 1760 vehicles. Accordingly, the DS4A fear and intimidation degree of hazard score is 70 (30+10+30), which equates to a 'Great' level of fear and intimidation. Therefore, there is no step change in level. Therefore, there would be a <i>negligible magnitude</i> adverse impact on fear and intimidation as a result of the change in traffic flows.</p> <p>The BTM modelling shows Link 84 would operate at a maximum of 99% of capacity in the RC4A scenario, compared to at a maximum of 102% of capacity (NWB AM peak) in the DS4A scenario. This increase in operating capacity is minimal and therefore it is considered that there would be an adverse <i>minor magnitude</i> impact on driver delay in the DS4A scenario, as the link reaches capacity in the DS4A scenario.</p> <p>In terms of road user safety, the PIC analysis undertaken as part of the TA several incidents on the link, although concluded that the collisions did not display a locational or causal trend, and that there was no trend in location or type that indicated any underlying Road Safety Issue. In the DS4A scenario, the minimal increase in traffic flows would have a <i>negligible magnitude</i> of impact on Road User and Pedestrian Safety on Link 84. As traffic flows increase, this impact has been assessed as adverse.</p>
	<b>Embedded Mitigation Effects (Significance)</b>	<p>None</p> <ul style="list-style-type: none"> <li>• Severance: <b>No effect (Neutral)</b></li> <li>• Driver Delay: <b>Slight permanent adverse (Not Significant)</b></li> <li>• NMU Delay: <b>No effect (Neutral)</b></li> <li>• NMU Amenity: <b>No effect (Neutral)</b></li> <li>• Fear and Intimidation: <b>No effect (Neutral)</b></li> <li>• Road User and Pedestrian Safety: <b>No effect (Neutral)</b></li> </ul>
	<b>Additional Mitigation Effect of Travel Plan</b>	<p>None</p> <p>Not applied</p>
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>No effect (Neutral)</b></li> <li>• Driver Delay: <b>Slight permanent adverse (Not Significant)</b></li> <li>• NMU Delay: <b>No effect (Neutral)</b></li> <li>• NMU Amenity: <b>No effect (Neutral)</b></li> <li>• Fear and Intimidation: <b>No effect (Neutral)</b></li> <li>• Road User and Pedestrian Safety: <b>No effect (Neutral)</b></li> </ul>
<p><b>Link 89</b></p> <p>A41 between London Road roundabout and Pioneer Road Roundabout</p> <p><b>Sensitivity:</b></p>	<b>Potential Effects</b>	<ul style="list-style-type: none"> <li>• Severance: negligible magnitude (adverse)</li> <li>• Driver Delay: negligible magnitude (adverse)</li> <li>• NMU Delay: negligible magnitude (adverse)</li> <li>• NMU Amenity: minor magnitude (adverse)</li> <li>• Fear and Intimidation: negligible magnitude (adverse)</li> <li>• Road User and Pedestrian Safety: negligible magnitude (adverse)</li> </ul> <p>Between the RC4A and DS4A scenarios there would be a 3% increase in the total vehicles on Link 89. This</p>

<p>Low</p>	<p>indicates (in accordance with IEMA Guidelines) a negligible magnitude of impact upon severance. There are limited WCH receptors adjacent the link, and no NMUs would be expected to cross the link, other than at the eastern most point (at Pioneer Roundabout) where suitable signalised crossings are provided across the link. For pedestrians travelling along the link, a narrow footway is provided on the northern edge of the carriageway (c. 1.5m in width). Therefore, there would be a <i>negligible magnitude</i> adverse impact upon severance and NMU delay in the DS4A scenario.</p> <p>Total vehicle traffic or HGV flows are not expected to double or halve, and therefore the impact of the changes traffic flows could be negligible when considering NMU amenity. However, pedestrians would be walking on a sub-standard footway where, they would be in close proximity to HGVs. The link is long, and so, although the increase in flows only equates to one HGV every three minutes, a pedestrian walking the length of the link would experience several additional HGVs in the DS4A scenario. Thus, it is considered there would be a <i>minor magnitude</i> adverse impact on NMU Amenity between the scenarios.</p> <p>Link 89, in both scenarios is governed by the national speed limit and it is expected that vehicles would exceed 40mph. In RC4A the average vehicle/hour over 18 hours is 1184 vehicles and the 18-hour HGVs is 1158 vehicles. Accordingly, the RC4A fear and intimidation degree of hazard score is 50 (10+10+30), which equates to a 'Great' level of fear and intimidation. In the DS4A scenario the average vehicle/hour over 18 hours is 1214 vehicles and the 18-hour HGVs is 1616 vehicles. Accordingly, the DS4A fear and intimidation degree of hazard score is 60 (20+10+30), which equates to a 'Great' level of fear and intimidation. Therefore, there is no step change in level. Therefore, there would be a <i>negligible magnitude</i> adverse impact on fear and intimidation as a result of the change in traffic flows.</p> <p>BTM modelling shows Link 89 would operate at a maximum of 72% of capacity in the RC4A scenario, compared to a maximum of 76% of capacity in the DS4A scenario. This increase in operating capacity is minimal and therefore it is considered that there would be a <i>negligible magnitude</i> impact on driver delay in the DS4A scenario. As the operating capacity increases, this impact has been assessed as adverse.</p> <p>In terms of road user safety, the PIC analysis undertaken as part of the TA did not include Link 89. Instead, a review of publicly available data (via crashmap.com for the latest 5 years of available data (2020-2024), found that no collisions had been recorded on the link. Therefore, there is no indication of any underlying safety issue on this link that could be</p>
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		exacerbated by the change in traffic flows. Therefore, in the DS4A scenario, the impact is deemed to be of <i>negligible magnitude</i> adverse impact on Road User and Pedestrian Safety on Link 89.
	<b>Embedded Mitigation</b>	None
	<b>Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>No effect (Neutral)</b></li> <li>• Driver Delay: <b>No effect (Neutral)</b></li> <li>• NMU Delay: <b>No effect (Neutral)</b></li> <li>• NMU Amenity: <b>Slight permanent adverse (Not Significant)</b></li> <li>• Fear and Intimidation: <b>No effect (Neutral)</b></li> <li>• Road User and Pedestrian Safety: <b>No effect (Neutral)</b></li> </ul>
	<b>Additional Mitigation</b>	None
	<b>Effect of Travel Plan</b>	Not applied
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>No effect (Neutral)</b></li> <li>• Driver Delay: <b>No effect (Neutral)</b></li> <li>• NMU Delay: <b>No effect (Neutral)</b></li> <li>• NMU Amenity: <b>Slight permanent adverse (Not Significant)</b></li> <li>• Fear and Intimidation: <b>No effect (Neutral)</b></li> <li>• Road User and Pedestrian Safety: <b>No effect (Neutral)</b></li> </ul>
<p><b>Link 90</b></p> <p>A41 between Pioneer Roundabout and Ploughley Road</p> <p><b>Sensitivity:</b></p> <p>Low</p>	<b>Potential Effects</b>	<ul style="list-style-type: none"> <li>• Severance: negligible magnitude (adverse)</li> <li>• Driver Delay: negligible magnitude (adverse)</li> <li>• NMU Delay: negligible magnitude (adverse)</li> <li>• NMU Amenity: negligible magnitude (adverse)</li> <li>• Fear and Intimidation: negligible magnitude (adverse)</li> <li>• Road User and Pedestrian Safety: negligible magnitude (adverse)</li> </ul> <p>Between the RC4A and DS4A scenarios there would be a 2% increase in the total vehicles on Link 90. This indicates (in accordance with IEMA Guidelines) a negligible magnitude of impact upon severance. There are limited WCH receptors adjacent the link, and no NMUs would be expected to cross the link, although a signalised crossing is provided across the western extent of the link, within the vicinity of the Pioneer Roundabout. For pedestrians travelling along the link, a footway is provided on both sides of the carriageway, Therefore, given the infrastructure provided, and the minimal changes in traffic flows, it is considered that there would be a <i>negligible magnitude</i> impact upon severance and NMU delay in the DS4A scenario. As traffic flows increase, this impact has been assessed as adverse.</p> <p>Total vehicle traffic or HGV flows are not expected to double or halve, and therefore the impact of the changes traffic flows could be negligible when considering NMU amenity. Footways are provided along the link on both sides, as is a signalised crossing. The increase in traffic flows is minimal, and therefore there would be a <i>negligible magnitude</i> of impact on NMU Amenity</p>

		<p>between the scenarios. As traffic flows increase this impact has been assessed as adverse.</p> <p>Link 90, in both scenarios is governed by a 40mph speed limit and it is expected that vehicles would average between 30mph and 40mph. In RC4A the average vehicle/hour over 18 hours is 1622 vehicles and the 18-hour HGVs is 1145 vehicles. Accordingly, the RC4A fear and intimidation degree of hazard score is 50 (20+10+20), which equates to a 'Great' level of fear and intimidation. In the DS4A scenario the average vehicle/hour over 18 hours is 1651 vehicles and the 18-hour HGVs is 1608 vehicles. Accordingly, the DS4A fear and intimidation degree of hazard score is 50 (20+10+20), which equates to a 'Great' level of fear and intimidation. Therefore, there is no step change in level. Therefore, there would be a <i>negligible magnitude</i> adverse impact on fear and intimidation as a result of the change in traffic flows.</p> <p>BTM modelling shows Link 90 would operate at a maximum of 67% of capacity in the RC4A scenario, compared to a maximum of 68% of capacity in the DS4A scenario. This increase in operating capacity is minimal and therefore it is considered that there would be a <i>negligible magnitude</i> impact on driver delay in the DS4A scenario. As traffic flows increase this impact has been assessed as adverse.</p> <p>In terms of road user safety, the PIC analysis undertaken as part of the TA did not include Link 90. Instead, a review of publicly available data (via crashmap.com for the latest 5 years of available data (2020-2024), found that no collisions had been recorded on the link, other than a slight collision at the A41 junction with Ploughley Road. Therefore, there is no indication of any underlying safety issue on this link that could be exacerbated by the change in traffic flows. Therefore, in the DS4A scenario, the impact is deemed to be of <i>negligible magnitude</i> of impact on Road User and Pedestrian Safety on Link 90.</p>
	<b>Embedded Mitigation</b>	None
	<b>Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>No effect (Neutral)</b></li> <li>• Driver Delay: <b>No effect (Neutral)</b></li> <li>• NMU Delay: <b>No effect (Neutral)</b></li> <li>• NMU Amenity: <b>No effect (Neutral)</b></li> <li>• Fear and Intimidation: <b>No effect (Neutral)</b></li> <li>• Road User and Pedestrian Safety: <b>No effect (Neutral)</b></li> </ul>
	<b>Additional Mitigation</b>	None
	<b>Effect of Travel Plan</b>	Not applied
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>No effect (Neutral)</b></li> <li>• Driver Delay: <b>No effect (Neutral)</b></li> <li>• NMU Delay: <b>No effect (Neutral)</b></li> <li>• NMU Amenity: <b>No effect (Neutral)</b></li> <li>• Fear and Intimidation: <b>No effect (Neutral)</b></li> </ul>

		<ul style="list-style-type: none"> <li>• Road User and Pedestrian Safety: <b>No effect (Neutral)</b></li> </ul>
<p><b>Link 93</b></p> <p>A41 between B4011 and Blackthorn Road</p> <p><b>Sensitivity:</b></p> <p>Low</p>	<p><b>Potential Effects</b></p>	<ul style="list-style-type: none"> <li>• Severance: negligible magnitude (adverse)</li> <li>• Driver Delay: negligible magnitude (adverse)</li> <li>• NMU Delay: negligible magnitude (adverse)</li> <li>• NMU Amenity: negligible magnitude (adverse)</li> <li>• Fear and Intimidation: minor magnitude (adverse)</li> <li>• Road User and Pedestrian Safety: negligible magnitude (adverse)</li> </ul> <p>Between the RC4A and DS4A scenarios there would be a 2% increase in the total vehicles on Link 93. This indicates (in accordance with IEMA Guidelines) a negligible magnitude of impact upon severance. There are some WCH receptors adjacent the link, comprising of a few private dwellings although none are situated to the south of the link, and so no NMUs are expected to have a need to cross the link. Therefore, given the NMU crossings expected, and the minimal change in total traffic flows, there would be a <i>negligible magnitude</i> of impact upon severance and NMU delay in the DS4A scenario. As traffic flows increase, this impact has been assessed as adverse.</p> <p>Total vehicle traffic flows and HGV flows do not double between the two scenarios, and thus the impact on NMU Amenity should be considered negligible. Although very few NMU trips along the link are expected, for pedestrians and cyclists travelling along the link, no infrastructure is provided. The link is over 1km in length, and so, although the increase in flows only equates to one HGV every two minutes, a pedestrian walking the length of the link would experience several additional HGVs passing them within the DS4A scenario. Nevertheless, the total number vehicles would remain similar to in the RC4A scenario. Therefore, it is considered there would be a <i>negligible magnitude</i> adverse impact on NMU amenity.</p> <p>Link 93, in both scenarios, is governed by a 50mph speed limit and therefore it is expected that average vehicle speeds are likely to exceed 40mph. In RC4A the average vehicle/hour over 18 hours is 784 vehicles and the 18-hour HGVs is 694 vehicles. Accordingly, the RC4A fear and intimidation degree of hazard score is 40 (10+0+30), which equates to a 'Moderate' level of fear and intimidation. In the DS4A scenario the average vehicle/hour over 18 hours is 793 vehicles and the 18-hour HGVs is 1144 vehicles. Accordingly, the DS4A fear and intimidation degree of hazard score is 50 (10+10+30), which equates to a 'Great' level of fear and intimidation.</p> <p>Therefore, there is one step change in level. In terms of traffic flows there is less than a 400 vehicle change in average 18-hour vehicle flow (9 vehicles), and less than a 500 HGV change in total 18-hour HGV flow (450</p>

		<p>HGVs). Therefore, in accordance with IEMA guidelines, the magnitude of impact can be considered low. Therefore, there would be a <i>minor magnitude</i> adverse impact on fear and intimidation as a result of the change in traffic flows. As the traffic flows increase, this impact has been assessed as adverse.</p> <p>BTM modelling shows Link 93 would operate at a maximum of 71% of capacity in the RC4A scenario, compared to a maximum of 72% of capacity in the DS4A scenario. This increase in operating capacity is minimal and therefore it is considered that there would be a <i>negligible magnitude</i> of impact on driver delay in the DS4A scenario. As traffic flows increase, this impact is assessed as adverse.</p> <p>In terms of road user safety, the PIC analysis undertaken as part of the TA did not include Link 93. Instead, a review of publicly available data (via crashmap.com) for the latest 5 years of available data (2020-2024), found that one collision had been recorded on the link, which was fatal. The collision involved a solitary vehicle and one casualty. One incident in a five-year period is not indicative of an underlying highway safety issue, which could be worsened by the changes in traffic flows. Therefore, in the DS4A scenario, the impact is deemed to be of <i>negligible magnitude</i> of impact on Road User and Pedestrian Safety on Link 93.</p>
	<b>Embedded Mitigation</b>	<ul style="list-style-type: none"> <li>• None</li> </ul>
	<b>Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>No effect (Neutral)</b></li> <li>• Driver Delay: <b>No effect (Neutral)</b></li> <li>• NMU Delay: <b>No effect (Neutral)</b></li> <li>• NMU Amenity: <b>No effect (Neutral)</b></li> <li>• Fear and Intimidation: <b>Slight permanent adverse (Not Significant)</b></li> <li>• Road User and Pedestrian Safety: <b>No effect (Neutral)</b></li> </ul>
	<b>Additional Mitigation</b>	None
	<b>Effect of Travel Plan</b>	Not applied
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>No effect (Neutral)</b></li> <li>• Driver Delay: <b>No effect (Neutral)</b></li> <li>• NMU Delay: <b>No effect (Neutral)</b></li> <li>• NMU Amenity: <b>No effect (Neutral)</b></li> <li>• Fear and Intimidation: <b>Slight permanent adverse (Not Significant)</b></li> <li>• Road User and Pedestrian Safety: <b>No effect (Neutral)</b></li> </ul>
<p><b>Link 94</b></p> <p>A41 between Blackthorn Road and Station Road</p> <p><b>Sensitivity:</b></p>	<b>Potential Effects</b>	<ul style="list-style-type: none"> <li>• Severance: negligible magnitude (adverse)</li> <li>• Driver Delay: negligible magnitude (beneficial)</li> <li>• NMU Delay: negligible magnitude (adverse)</li> <li>• NMU Amenity: negligible magnitude (adverse)</li> <li>• Fear and Intimidation: minor magnitude (adverse)</li> <li>• Road User and Pedestrian Safety: negligible magnitude (adverse)</li> </ul>

<p>Low</p>	<p>Between the RC4A and DS4A scenarios there would be a 1% increase in the total vehicles on Link 94. There are no WCH receptors adjacent the link, no NMUs are expected to have a need to cross the link. Therefore, there would be a <i>negligible magnitude</i> of impact upon severance and NMU delay in the DS4A scenario. As traffic flows increase, this impact has been assessed as adverse.</p> <p>Total vehicle traffic flows and HGV flows do not double between the two scenarios. Although NMUs would be in close proximity to more fast-moving HGVs, the total number vehicles would remain similar to in the RC4A scenario. Therefore, it is considered there would be a <i>negligible magnitude</i> adverse impact on NMU amenity.</p> <p>Link 94, in both scenarios, is governed by a 50mph speed limit and therefore it is expected that average vehicle speeds are likely to exceed 40mph. In RC4A the average vehicle/hour over 18 hours is 878 vehicles and the 18-hour HGVs is 694 vehicles. Accordingly, the RC4A fear and intimidation degree of hazard score is 40 (10+0+30), which equates to a 'Moderate' level of fear and intimidation. In the DS4A scenario the average vehicle/hour over 18 hours is 881 vehicles and the 18-hour HGVs is 1144 vehicles. Accordingly, the DS4A fear and intimidation degree of hazard score is 50 (10+10+30), which equates to a 'Great' level of fear and intimidation.</p> <p>Therefore, there is one step change in level. In terms of traffic flows there is less than a 400 vehicle change in average 18-hour vehicle flow (6 vehicles), and less than a 500 HGV change in total 18-hour HGV flow (450 HGVs). Therefore, in accordance with IEMA guidelines, the magnitude of impact can be considered low. As there is no NMU infrastructure provision on the link, it is considered that overall, there would be a <i>minor magnitude</i> adverse impact on fear and intimidation as a result of the change in traffic flows.</p> <p>The BTM modelling shows Link 94 would operate at a maximum of 81% of capacity in the RC4A scenario, compared to a maximum of 78% of capacity in the DS4A scenario. Therefore, there is a small decrease in operating capacity and therefore it is considered that there would be a <i>negligible magnitude</i> beneficial impact on driver delay in the DS4A scenario.</p> <p>In terms of road user safety, the PIC analysis undertaken as part of the TA did not include Link 93. Instead, a review of publicly available data (via crashmap.com) for the latest 5 years of available data (2020-2024), found that three collisions had been recorded on the link, one of which was serious, and the other two slight. Two collisions, one serious and one slight, occurred at the Station Road junction. Two</p>
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		incidents in a singular location during a five-year period is not indicative of an underlying highway safety issue, which could be worsened by the changes in traffic flows. Therefore, in the DS4A scenario, the impact is deemed to be of <i>negligible magnitude</i> of impact on Road User and Pedestrian Safety on Link 94.
	<b>Embedded Mitigation Effects (Significance)</b>	None
	<b>Additional Mitigation Effect of Travel Plan</b>	None
	<b>Residual Effects (Significance)</b>	Not applied
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>No effect (Neutral)</b></li> <li>• Driver Delay: <b>No effect (Neutral)</b></li> <li>• NMU Delay: <b>No effect (Neutral)</b></li> <li>• NMU Amenity: <b>No effect (Neutral)</b></li> <li>• Fear and Intimidation: <b>Slight permanent adverse (Not Significant)</b></li> <li>• Road User and Pedestrian Safety: <b>No effect (Neutral)</b></li> </ul>
<p><b>Link 95</b></p> <p>A41 between Station Road and Townsend</p> <p><b>Sensitivity:</b></p> <p>Low</p>	<b>Potential Effects</b>	<ul style="list-style-type: none"> <li>• Severance: negligible magnitude (adverse)</li> <li>• Driver Delay: negligible magnitude (beneficial)</li> <li>• NMU Delay: negligible magnitude (adverse)</li> <li>• NMU Amenity: negligible magnitude (adverse)</li> <li>• Fear and Intimidation: minor magnitude (adverse)</li> <li>• Road User and Pedestrian Safety: negligible magnitude (adverse)</li> </ul> <p>Between the RC4A and DS4A scenarios there would be a 1% increase in the total vehicles on Link 95. This indicates (in accordance with IEMA Guidelines) a negligible magnitude of impact upon severance. There are no WCH receptors adjacent the link, no NMUs are expected to have a need to cross the link. Therefore, there would be a <i>negligible magnitude</i> of impact upon severance and NMU delay in the DS4A scenario. As traffic flows increase, this impact has been assessed as adverse.</p> <p>Total vehicle traffic flows and HGV flows do not double between the two scenarios. Very few NMU trips along the link are expected and although no specific pedestrian/cycle infrastructure is provided, it is considered there would be a <i>negligible magnitude</i> but adverse impact on NMU amenity.</p> <p>Link 95, in both scenarios, is governed by a 50mph speed limit and therefore it is expected that average vehicle speeds are likely to exceed 40mph. In RC4A the average vehicle/hour over 18 hours is 1184 vehicles and the 18-hour HGVs is 699 vehicles. Accordingly, the</p>

		<p>RC4A fear and intimidation degree of hazard score is 40 (10+0+30), which equates to a 'Moderate' level of fear and intimidation. In the DS4A scenario the average vehicle/hour over 18 hours is 1190 vehicles and the 18-hour HGVs is 1153 vehicles. Accordingly, the DS4A fear and intimidation degree of hazard score is 50 (10+10+30), which equates to a 'Great' level of fear and intimidation.</p> <p>Therefore, there is one step change in level. In terms of traffic flows there is less than a 400 vehicle change in average 18-hour vehicle flow (6 vehicles), and less than a 500 HGV change in total 18-hour HGV flow (454 HGVs). Therefore, in accordance with IEMA guidelines, the magnitude of impact can be considered low. Therefore, as there is no NMU infrastructure provision on the link, and speeds are expected to significantly exceed 40mph, it is considered that overall, there would be a <i>minor magnitude</i> adverse impact on fear and intimidation as a result of the change in traffic flows.</p> <p>The BTM modelling shows Link 95 would operate at a maximum of 105% of capacity in the RC4A scenario, and 103% in the DS4A scenario. This change is minimal and thus, it is considered that there would be a <i>negligible magnitude</i> beneficial impact on driver delay.</p> <p>In terms of road user safety, the PIC analysis undertaken as part of the TA did not include Link 95. Instead, a review of publicly available data (via crashmap.com) for the latest 5 years of available data (2020-2024), found that two collisions were recorded at both the junction between the A41 and Station Road, and the A41 and Townsend. In both locations, one collision was serious and one slight. Two incidents in a singular location during a five-year period is not indicative of an underlying highway safety issue, which could be worsened by the changes in traffic flows. Therefore, in the DS4A scenario, the impact is deemed to be of <i>negligible magnitude</i> of impact on Road User and Pedestrian Safety on Link 95.</p>
	<b>Embedded Mitigation</b>	None
	<b>Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>No effect (Neutral)</b></li> <li>• Driver Delay: <b>No effect (Neutral)</b></li> <li>• NMU Delay: <b>No effect (Neutral)</b></li> <li>• NMU Amenity: <b>No effect (Neutral)</b></li> <li>• Fear and Intimidation: <b>Slight permanent adverse (Not Significant)</b></li> <li>• Road User and Pedestrian Safety: <b>No effect (Neutral)</b></li> </ul>
	<b>Additional Mitigation</b>	None
	<b>Effect of Travel Plan</b>	Not applied
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>No effect (Neutral)</b></li> <li>• Driver Delay: <b>No effect (Neutral)</b></li> <li>• NMU Delay: <b>No effect (Neutral)</b></li> <li>• NMU Amenity: <b>No effect (Neutral)</b></li> </ul>

		<ul style="list-style-type: none"> <li>• Fear and Intimidation: <b>Slight permanent adverse (Not Significant)</b></li> <li>• Road User and Pedestrian Safety: <b>No effect (Neutral)</b></li> </ul>
<p><b>Link 96</b></p> <p>A41 between Townsend and Bicester Road</p> <p><b>Sensitivity:</b></p> <p>Low</p>	<p><b>Potential Effects</b></p>	<ul style="list-style-type: none"> <li>• Severance: negligible magnitude (adverse)</li> <li>• Driver Delay: negligible magnitude (adverse)</li> <li>• NMU Delay: negligible magnitude (adverse)</li> <li>• NMU Amenity: minor magnitude (adverse)</li> <li>• Fear and Intimidation: minor magnitude (adverse)</li> <li>• Road User and Pedestrian Safety: negligible magnitude (adverse)</li> </ul> <p>Between the RC4A and DS4A scenarios there would be a 3% increase in the total vehicles on Link 96. This indicates (in accordance with IEMA Guidelines) a negligible magnitude of impact upon severance. There are some WCH receptors adjacent the link, comprising of a few private dwellings although none are situated to the north of the link, and so no NMUs are expected to have a need to cross the link. Two rural roads also meet the link, which connect to Marsh Gibbon to the north, and Piddington to the south, although they are expected to carry minimal traffic of all modes. Therefore, given the lack of NMU crossings expected, and the minimal change in total traffic flows, there would be a <i>negligible magnitude</i> of impact upon severance and NMU delay in the DS4A scenario. As traffic flows increase, this impact has been assessed as adverse.</p> <p>Total vehicle traffic flows and HGV flows do not double between the two scenarios. Very few NMU trips along the link are expected and although no specific pedestrian/cycle infrastructure is provided, the link is over 2.8km in length, and so a pedestrian walking the length of the link would experience several additional HGVs passing them. Therefore, it is considered there would be a <i>minor magnitude</i> adverse impact on NMU amenity.</p> <p>Link 96, in both scenarios, is partly governed by a 50mph speed limit, and partly governed by the national speed limit (60mph), and therefore it is expected that average vehicle speeds are highly likely to exceed 40mph. In RC4A the average vehicle/hour over 18 hours is 930 vehicles and the 18-hour HGVs is 568 vehicles. Accordingly, the RC4A fear and intimidation degree of hazard score is 40 (10+0+30), which equates to a 'Moderate' level of fear and intimidation. In the DS4A scenario the average vehicle/hour over 18 hours is 951 vehicles and the 18-hour HGVs is 1017 vehicles. Accordingly, the DS4A fear and intimidation degree of hazard score is 50 (10+10+30), which equates to a 'Moderate' level of fear and intimidation.</p> <p>Therefore, there is one step change in level. In terms of traffic flows there is less than a 400 vehicle change in average 18-hour vehicle flow (21 vehicles), and less</p>

		<p>than a 500 HGV change in total 18-hour HGV flow (449 HGVs). Therefore, in accordance with IEMA guidelines, the magnitude of impact can be considered low. Therefore, there would be a <i>minor magnitude</i> adverse impact on fear and intimidation as a result of the change in traffic flows.</p> <p>The BTM modelling shows Link 96 would operate at a maximum of 79% of capacity in the RC4A scenario, compared to a maximum of 81% of capacity in the DS4A scenario. This increase in operating capacity is minimal and therefore it is considered that there would be an adverse but <i>negligible magnitude</i> of impact on driver delay in the DS4A scenario.</p> <p>In terms of road user safety, the PIC analysis undertaken as part of the TA did not include Link 93. Instead, a review of publicly available data (via crashmap.com) for the latest 5 years of available data (2020-2024), found that three collisions had occurred on the link, two of which were serious, and one slight. Three collisions in a five-year period, especially when considering the length of the link, is not indicative of an underlying highway safety issue that could be worsened by the changes in traffic flows. Therefore, in the DS4A scenario, the impact is deemed to be of <i>negligible magnitude</i> of impact on Road User and Pedestrian Safety on Link 96.</p>
	<b>Embedded Mitigation</b>	None
	<b>Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>No effect (Neutral)</b></li> <li>• Driver Delay: <b>No effect (Neutral)</b></li> <li>• NMU Delay: <b>No effect (Neutral)</b></li> <li>• NMU Amenity: <b>Slight permanent adverse (Not Significant)</b></li> <li>• Fear and Intimidation: <b>Slight permanent adverse (Not Significant)</b></li> <li>• Road User and Pedestrian Safety: <b>No effect (Neutral)</b></li> </ul>
	<b>Additional Mitigation</b>	None
	<b>Effect of Travel Plan</b>	Not applied
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>No effect (Neutral)</b></li> <li>• Driver Delay: <b>No effect (Neutral)</b></li> <li>• NMU Delay: <b>No effect (Neutral)</b></li> <li>• NMU Amenity: <b>Slight permanent adverse (Not Significant)</b></li> <li>• Fear and Intimidation: <b>Slight permanent adverse (Not Significant)</b></li> <li>• Road User and Pedestrian Safety: <b>No effect (Neutral)</b></li> </ul>
<p><b>Link 97</b></p> <p>A41 between Bicester Road and Kingswood Lane</p>	<b>Potential Effects</b>	<ul style="list-style-type: none"> <li>• Severance: negligible magnitude (adverse)</li> <li>• Driver Delay: negligible magnitude (adverse)</li> <li>• NMU Delay: negligible magnitude (adverse)</li> <li>• NMU Amenity: minor magnitude (adverse)</li> <li>• Fear and Intimidation: minor magnitude (adverse)</li> <li>• Road User and Pedestrian Safety: negligible magnitude (adverse)</li> </ul>

<p><b>Sensitivity:</b></p> <p>Low</p>	<p>Between the RC4A and DS4A scenarios there would be a 3% increase in the total vehicles on Link 97. There are some WCH receptors adjacent the link, particularly at either end, comprising of a few private dwellings, although NMUs would have limited need to cross the link. Therefore, given the minimal change in total traffic flows, there would be a <i>negligible magnitude</i> of impact upon severance and NMU delay in the DS4A scenario. As traffic flows increase, this impact has been assessed as adverse.</p> <p>Total vehicle traffic and HGV flows do not double between the two scenarios thus the impact on NMU Amenity should be considered negligible. Where pedestrian trips are most likely (at the link's eastern extent) a footway is provided on the northern edge of the link, serving the existing dwellings. Few NMU trips along the link are expected and although no specific cycle infrastructure is provided, the link is approximately 4km in length, and so, although the increase in flows only equates to one HGV every two minutes and a cyclists traveling the length of the link could experience several additional HGVs passing them within the DS4A scenario. Therefore, it is considered there would be a <i>minor magnitude</i> adverse impact on NMU amenity.</p> <p>Link 97, in both scenarios, is partly governed by a 50mph speed limit, and partly governed by the national speed limit (60mph), and therefore it is expected that average vehicle speeds are highly likely to exceed 40mph. In RC4A the average vehicle/hour over 18 hours is 884 vehicles and the 18-hour HGVs is 568 vehicles. Accordingly, the RC4A fear and intimidation degree of hazard score is 40 (10+0+30), which equates to a 'Moderate' level of fear and intimidation. In the DS4A scenario the average vehicle/hour over 18 hours is 905 vehicles and the 18-hour HGVs is 1017 vehicles. Accordingly, the DS4A fear and intimidation degree of hazard score is 50 (10+10+30), which equates to a 'Moderate' level of fear and intimidation.</p> <p>Therefore, there is one step change in level. In terms of traffic flows there is less than a 400 vehicle change in average 18-hour vehicle flow (21 vehicles), and less than a 500 HGV change in total 18-hour HGV flow (449 HGVs). Therefore, in accordance with IEMA guidelines, the magnitude of impact can be considered low. Therefore, there would be a <i>minor magnitude</i> adverse impact on fear and intimidation as a result of the change in traffic flows.</p> <p>The BTM modelling shows Link 97 would operate at a maximum of 85% of capacity in the RC4A scenario, compared to a maximum of 86% of capacity in the DS4A scenario. This increase in operating capacity is minimal and therefore it is considered that there would be a</p>
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		<p><i>negligible magnitude</i> adverse impact on driver delay in the DS4A scenario.</p> <p>In terms of road user safety, the PIC analysis undertaken as part of the TA did not include Link 93. Instead, a review of publicly available data (via crashmap.com) for the latest 5 years of available data (2020-2024), found that four collisions had occurred on the link, one of which was fatal, and the other three slight. Four collisions in a five-year period, especially when considering the length of the link, is not indicative of an underlying highway safety issue that could be worsened by the changes in traffic flows. Therefore, in the DS4A scenario, the impact is deemed to be of <i>negligible magnitude</i> of impact on Road User and Pedestrian Safety on Link 97. As traffic flows increase, this impact has been assessed as adverse.</p>
	<b>Embedded Mitigation</b>	None
	<b>Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Slight permanent adverse (Not Significant)</b></li> <li>• Driver Delay: <b>No effect (Neutral)</b></li> <li>• NMU Delay: <b>No effect (Neutral)</b></li> <li>• NMU Amenity: <b>Slight permanent adverse (Not Significant)</b></li> <li>• Fear and Intimidation: <b>Slight permanent adverse (Not Significant)</b></li> <li>• Road User and Pedestrian Safety: <b>No effect (Neutral)</b></li> </ul>
	<b>Additional Mitigation</b>	None
	<b>Effect of Travel Plan</b>	Not applied
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Slight permanent adverse (Not Significant)</b></li> <li>• Driver Delay: <b>No effect (Neutral)</b></li> <li>• NMU Delay: <b>No effect (Neutral)</b></li> <li>• NMU Amenity: <b>Slight permanent adverse (Not Significant)</b></li> <li>• Fear and Intimidation: <b>Slight permanent adverse (Not Significant)</b></li> <li>• Road User and Pedestrian Safety: <b>No effect (Neutral)</b></li> </ul>
<p><b>Link 98</b></p> <p>A41 between Kingswood Lane and Creighton Road Roundabout</p> <p><b>Sensitivity:</b></p> <p>Low</p>	<b>Potential Effects</b>	<ul style="list-style-type: none"> <li>• Severance: negligible magnitude (adverse)</li> <li>• Driver Delay: negligible magnitude (adverse)</li> <li>• NMU Delay: negligible magnitude (adverse)</li> <li>• NMU Amenity: negligible magnitude (adverse)</li> <li>• Fear and Intimidation: minor magnitude (adverse)</li> <li>• Road User and Pedestrian Safety: negligible magnitude (adverse)</li> </ul> <p>Between the RC4A and DS4A scenarios there would be a 2% increase in the total vehicles on Link 98. There are some WCH receptors adjacent the link, comprising of a few private dwellings, a car showroom, and a public house. It is unlikely that NMUs would need to cross the link to access these amenities. However, there is a set of bus stops adjacent to some of the dwellings, which would require NMUs to cross the link to access.</p>

		<p>Nevertheless, the increase in traffic flows is minimal and therefore there would be a <i>negligible magnitude</i> adverse impact upon severance and NMU delay in the DS4A scenario.</p> <p>Total vehicle traffic and HGV flows do not double between the two scenarios thus the impact on NMU Amenity should be considered negligible. Although very few NMU trips along the link are expected, for pedestrians and cyclists travelling along the link, no infrastructure is provided. NMUs may traverse the link to access the Public House, dwellings, or bus stops. Nevertheless, the increase in traffic flows is minimal and thus there would be a <i>negligible magnitude</i> adverse impact in terms on NMU amenity.</p> <p>Link 98, in both scenarios, is governed by the national speed limit (60mph), and therefore it is expected that average vehicle speeds are highly likely to exceed 40mph. In RC4A the average vehicle/hour over 18 hours is 1035 vehicles and the 18-hour HGVs is 590 vehicles. Accordingly, the RC4A fear and intimidation degree of hazard score is 40 (10+0+30), which equates to a 'Moderate' level of fear and intimidation. In the DS4A scenario the average vehicle/hour over 18 hours is 1049 vehicles and the 18-hour HGVs is 1040 vehicles. Accordingly, the DS4A fear and intimidation degree of hazard score is 50 (10 +10+30), which equates to a 'Great' level of fear and intimidation.</p> <p>Therefore, there is one step change in level. In terms of traffic flows there is less than a 400 vehicle change in average 18-hour vehicle flow (14 vehicles), and less than a 500 HGV change in total 18-hour HGV flow (450 HGVs). Therefore, in accordance with IEMA guidelines, the magnitude of impact can be considered low. Therefore, as there is no NMU infrastructure provision on the link, and speeds are expected to significantly exceed 40mph, it is considered that overall, there would be a <i>minor magnitude</i> adverse impact on fear and intimidation as a result of the change in traffic flows.</p> <p>The BTM modelling shows Link 98 would operate at a maximum of 84% of capacity in the RC4A scenario, compared to a maximum of 86% of capacity in the DS4A scenario. This increase in operating capacity is minimal and therefore it is considered that there would be a <i>negligible magnitude</i> adverse impact on driver delay in the DS4A scenario.</p> <p>In terms of road user safety, the PIC analysis undertaken as part of the TA did not include Link 98. Instead, a review of publicly available data (via crashmap.com) for the latest 5 years of available data (2020-2024), found that six collisions had occurred on the link, one of which was fatal, two of which were serious, and one which was slight. The collisions were</p>
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		all in distinct positions, and six collisions in a five-year period, especially when considering the length of the link, is not indicative of an underlying highway safety issue that could be worsened by the changes in traffic flows. Therefore, in the DS4A scenario, the impact is deemed to be of <i>negligible magnitude</i> of impact on Road User and Pedestrian Safety on Link 98. As traffic flows increase, this impact is assessed as adverse.
	<b>Embedded Mitigation</b>	None
	<b>Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Slight permanent adverse (Not Significant)</b></li> <li>• Driver Delay: <b>No effect (Neutral)</b></li> <li>• NMU Delay: <b>No effect (Neutral)</b></li> <li>• NMU Amenity: <b>No effect (Neutral)</b></li> <li>• Fear and Intimidation: <b>Slight permanent adverse (Not Significant)</b></li> <li>• Road User and Pedestrian Safety: <b>No effect (Neutral)</b></li> </ul>
	<b>Additional Mitigation</b>	None
	<b>Effect of Travel Plan</b>	Not applied
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Slight permanent adverse (Not Significant)</b></li> <li>• Driver Delay: <b>No effect (Neutral)</b></li> <li>• NMU Delay: <b>No effect (Neutral)</b></li> <li>• NMU Amenity: <b>No effect (Neutral)</b></li> <li>• Fear and Intimidation: <b>Slight permanent adverse (Not Significant)</b></li> <li>• Road User and Pedestrian Safety: <b>No effect (Neutral)</b></li> </ul>
<p><b>Link 99</b></p> <p>A41 between Creighton Road Roundabout and Blackgrove Road roundabout</p> <p><b>Sensitivity:</b></p> <p>Medium</p>	<b>Potential Effects</b>	<ul style="list-style-type: none"> <li>• Severance: negligible magnitude (adverse)</li> <li>• Driver Delay: negligible magnitude (adverse)</li> <li>• NMU Delay: negligible magnitude (adverse)</li> <li>• NMU Amenity: minor magnitude (adverse)</li> <li>• Fear and Intimidation: minor magnitude (adverse)</li> <li>• Road User and Pedestrian Safety: negligible magnitude (adverse)</li> </ul> <p>Between the RC4A and DS4A scenarios there would be a 2% increase in the total vehicles on Link 99. This indicates (in accordance with IEMA Guidelines) a negligible magnitude of impact upon severance. There are several WCH receptors adjacent the link, primarily within the village of Waddesdon. However, within this village several formal crossing points are provided, including a Pelican Crossing and several uncontrolled two-stage pedestrian crossings. Therefore, although there are several receptors, suitable crossing points are provided and thus there would be a <i>negligible magnitude</i> adverse impact upon severance and NMU delay in the DS4A scenario.</p> <p>Total vehicle traffic and HGV flows do not double between the two scenarios thus the impact on NMU Amenity should be considered negligible. Outside of Waddesdon, very few NMU trips along the link are expected, and outside the village no NMU infrastructure</p>

		<p>is provided. Within Waddesdon, NMUs may traverse the link to access a number of amenities, although appropriate facilities are provided, including footways and suitable crossing points. Therefore, as the total number vehicles would remain similar to in the RC4A scenario it is considered there would be a <i>negligible magnitude</i> adverse impact on NMU amenity.</p> <p>Link 99, in both scenarios, is governed by the national speed limit (60mph) outside of Waddesdon, and by a 30mph limit within the village. It is expected that average vehicle speeds are to exceed 40mph, in both scenarios. In RC4A the average vehicle/hour over 18 hours is 868 vehicles and the 18-hour HGVs is 636 vehicles. Accordingly, the RC4A fear and intimidation degree of hazard score is 40 (10+0+30), which equates to a 'Moderate' level of fear and intimidation. In the DS4A scenario the average vehicle/hour over 18 hours is 879 vehicles and the 18-hour HGVs is 1063 vehicles. Accordingly, the DS4A fear and intimidation degree of hazard score is 50 (10 +10+30), which equates to a 'Great' level of fear and intimidation.</p> <p>Therefore, there is one step change in level. In terms of traffic flows there is less than a 400 vehicle change in average 18-hour vehicle flow (11 vehicles), and less than a 500 HGV change in total 18-hour HGV flow (427 HGVs). Therefore, in accordance with IEMA guidelines, the magnitude of impact can be considered low. Further, as the majority of NMU trips would be made within Waddesdon, where sufficient NMU infrastructure is provided, it is considered that there would be a <i>minor magnitude</i> adverse impact on fear and intimidation.</p> <p>Link 99 is within the buffer area of the BTM modelling referenced within this report. This means BTM modelling does not provide peak hour operating capacities for analysis. Nevertheless, there would be a 3% increase in traffic flows between the RC4A and DS4A scenario, and thus it is considered that there would be an adverse, but <i>negligible magnitude</i> of impact on driver delay in the DS4A scenario.</p> <p>In terms of road user safety, the PIC analysis undertaken as part of the TA did not include Link 99. Instead, a review of publicly available data (via crashmap.com) for the latest 5 years of available data (2020-2024), found several collisions on the link, (12 slight and 2 serious). There were no trends in location and considering the length of the link (5.6km), this number of collisions is not indicative of an underlying highway safety issue that could be worsened by the changes in traffic flows. Therefore, in the DS4A scenario, the impact is deemed to be of <i>negligible magnitude</i> of impact on Road User and Pedestrian Safety on Link 99.</p>
	<b>Embedded Mitigation</b>	None

	<b>Effects (Significance)</b>	<ul style="list-style-type: none"> <li>Severance: <b>Slight permanent adverse (Not Significant)</b></li> <li>Driver Delay: <b>No effect (Neutral)</b></li> <li>NMU Delay: <b>No effect (Neutral)</b></li> <li>NMU Amenity: <b>Slight permanent adverse (Not Significant)</b></li> <li>Fear and Intimidation: <b>Slight permanent adverse (Not Significant)</b></li> <li>Road User and Pedestrian Safety: <b>No effect (Neutral)</b></li> </ul>
	<b>Additional Mitigation</b>	None
	<b>Effect of Travel Plan</b>	Not applied
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>Severance: <b>Slight permanent adverse (Not Significant)</b></li> <li>Driver Delay: <b>No effect (Neutral)</b></li> <li>NMU Delay: <b>No effect (Neutral)</b></li> <li>NMU Amenity: <b>Slight permanent adverse (Not Significant)</b></li> <li>Fear and Intimidation: <b>Slight permanent adverse (Not Significant)</b></li> <li>Road User and Pedestrian Safety: <b>No effect (Neutral)</b></li> </ul>
<b>Link 100</b>  A41 between Blackgrove Road roundabout and A4157  <b>Sensitivity:</b>  Medium	<b>Potential Effects</b>	<ul style="list-style-type: none"> <li>Severance: negligible magnitude</li> <li>Driver Delay: negligible magnitude</li> <li>NMU Delay: negligible magnitude</li> <li>NMU Amenity: minor magnitude (adverse)</li> <li>Fear and Intimidation: minor magnitude (adverse)</li> <li>Road User and Pedestrian Safety: negligible magnitude</li> </ul> <p>Between the RC4A and DS4A scenarios there would be a 2% increase in the total vehicles on Link 100. This indicates (in accordance with IEMA Guidelines) a negligible magnitude of impact upon severance. There are several WCH receptors adjacent the link, primarily within Aylesbury, although suitable infrastructure is provided here. Thus, there would be a <i>negligible magnitude</i> adverse impact upon severance and NMU delay in the DS4A scenario.</p> <p>Total vehicle traffic and HGV flows do not double between the two scenarios thus the impact on NMU Amenity should be considered negligible. Outside of Aylesbury, very few NMU trips along the link are expected, and no NMU infrastructure is provided. Within Aylesbury, NMUs may traverse the link to access a number of amenities and appropriate facilities are provided to enable NMUs to do this. It is considered that overall, there would be a <i>minor magnitude</i> adverse impact on fear and intimidation.</p> <p>Link 100, in both scenarios, is governed by a range of speed limits; 30mph and 40mph limits within Aylesbury, and the national limit (60mph) outside. Therefore, it is expected that on average vehicle speeds would be approximately 40mph, in both scenarios. In RC4A the</p>

		<p>average vehicle/hour over 18 hours is 764 vehicles and the 18-hour HGVs is 632 vehicles. Accordingly, the RC4A fear and intimidation degree of hazard score is 30 (10+0+20), which equates to a 'Moderate' level of fear and intimidation. In the DS4A scenario the average vehicle/hour over 18 hours is 775 vehicles and the 18-hour HGVs is 1059 vehicles. Accordingly, the DS4A fear and intimidation degree of hazard score is 30 (10+0+20), which equates to a 'Moderate' level of fear and intimidation. Therefore, there is no step change in level, and the impact can be considered to be of <i>negligible magnitude</i>. As traffic flows increase, this impact has been assessed as adverse.</p> <p>Link 100 is within the buffer area of the BTM modelling referenced within this report and thus peak hour operating capacities are not provided for analysis. Nevertheless, there would be an increase of 2% in total daily traffic flows which does not indicate a substantial change in congestion or delay on the link. Accordingly, there would be a <i>negligible magnitude</i> of impact on driver delay in the DS4A scenario on Link 100.</p> <p>In terms of road user safety, the PIC analysis undertaken as part of the TA did not include Link 100. Instead, a review of publicly available data (via crashmap.com) for the latest 5 years of available data (2020-2024), found several collisions on the link. However, there were no trends in location of these incidents, and considering the length of the link (7.2km), this number of collisions is not indicative of an underlying highway safety issue that could be worsened by the changes in traffic flows. Therefore, in the DS4A scenario, the impact is deemed to be of <i>negligible magnitude</i> of impact on Road User and Pedestrian Safety on Link 100.</p>
	<p><b>Embedded Mitigation Effects (Significance)</b></p>	<p>None</p> <ul style="list-style-type: none"> <li>• Severance: <b>No effect (Neutral)</b></li> <li>• Driver Delay: <b>No effect (Neutral)</b></li> <li>• NMU Delay: <b>No effect (Neutral)</b></li> <li>• NMU Amenity: <b>Slight permanent adverse (Not Significant)</b></li> <li>• Fear and Intimidation: <b>Slight permanent adverse (Not Significant)</b></li> <li>• Road User and Pedestrian Safety: <b>No effect (Neutral)</b></li> </ul>
	<p><b>Additional Mitigation</b></p>	<p>None</p>
	<p><b>Effect of Travel Plan</b></p>	<p>Not applied</p>
	<p><b>Residual Effects (Significance)</b></p>	<ul style="list-style-type: none"> <li>• Severance: <b>No effect (Neutral)</b></li> <li>• Driver Delay: <b>No effect (Neutral)</b></li> <li>• NMU Delay: <b>No effect (Neutral)</b></li> <li>• NMU Amenity: <b>Slight permanent adverse (Not Significant)</b></li> <li>• Fear and Intimidation: <b>Slight permanent adverse (Not Significant)</b></li> </ul>

		<ul style="list-style-type: none"> <li>• Road User and Pedestrian Safety: <b>No effect (Neutral)</b></li> </ul>
<p><b>Link 106</b></p> <p>B430 Ardley Road (north of Middleton Stoney)</p> <p><b>Sensitivity:</b></p> <p>High</p>	<p><b>Potential Effects</b></p>	<ul style="list-style-type: none"> <li>• Severance: moderate magnitude (beneficial)</li> <li>• Driver Delay: major magnitude (beneficial)</li> <li>• NMU Delay: moderate magnitude (beneficial)</li> <li>• NMU Amenity: minor magnitude (beneficial)</li> <li>• Fear and Intimidation: minor magnitude (beneficial)</li> <li>• Road User and Pedestrian Safety: minor magnitude (beneficial)</li> </ul> <p>Between the RC4A and DS4A scenarios there would be a 15% reduction in total vehicles on Link 106: indicating (in accordance with IEMA Guidelines) a negligible magnitude of impact upon severance. In terms of NMU demand, there are several WCH receptors adjacent to the link within Middleton Stoney including The Jersey Arms Hotel, a B&amp;B, several private dwellings, and designated public footpath no. 297/8. No formal crossing facilities are currently provided on the B430 within Middleton Stoney and would not be provided in the RC4A scenario. In the DS4A scenario, a zebra crossing would be provided over the link within Middleton Stoney, substantially reducing severance. Considering the reduction in traffic flows 1048 vehicles (approximately one every minute), as well as the provision of a zebra crossing, there would be a <i>moderate magnitude</i> beneficial impact on severance.</p> <p>In terms of NMU delay, in the RC4A scenario, no crossings are provided over the link, and pedestrians and cyclists would have to wait for gaps in the traffic to cross the B430. Crossings would be most common in Middleton Stoney, where several WCH receptors are found adjacent the link. Between the two scenarios, the 15% reduction in total traffic flows would equate to 1048 less vehicles in a 24-hour period, or approximately one a minute. Furthermore, the provision of a zebra crossing would greatly aid NMUs in crossing Link 106 in Middleton Stoney. These beneficial improvements are deemed to be of <i>moderate magnitude</i> in terms of NMU delay.</p> <p>In terms of NMU amenity, no footways are provided on Link 106, other than within Middleton Stoney. Total vehicle flows and HGV flows are not expected to halve or double and therefore the changes are negligible in accordance with IEMA Guidelines. However, the provision of a zebra crossing would improve NMU amenity, a benefit deemed to comprise a <i>minor magnitude</i>.</p> <p>For the majority of link 106, the link is currently governed by the national speed limit (60mph), although this drops to 30mph and then 20mph within Middleton Stoney. This is expected to remain the case in the RC4A scenario. In the DS4A scenario, the speed limit for the 60mph section of Ardley Road would be reduced to 40mph. In</p>

		<p>Middleton Stoney, the 30mph and 20mph limits would remain. Therefore, in the RC4A scenario, vehicle speeds are expected to exceed 40mph for the majority of the link. In the DS4A scenario, speeds would likely fall and would be between 30mph and 40mph. In terms of traffic flows, in the RC4A scenario the average vehicle/hour over 18 hours is 348 vehicles and the 18-hour HGVs is 1180 vehicles. Accordingly, the RC4A fear and intimidation degree of hazard score is 40 (0+10+30), which equates to a 'Moderate' level of fear and intimidation. In the DS4A scenario the average vehicle/hour over 18 hours is 286 vehicles and the 18-hour HGVs is 793 vehicles. Accordingly, the DS4A fear and intimidation degree of hazard score is 20 (0+0+20), which equates to a 'Small' level of fear and intimidation.</p> <p>Therefore, there is one step change in level. In terms of traffic flows there is less than a 400 vehicle decrease in average 18-hour vehicle flow (62 vehicles), and less than a 500 HGV decrease in total 18-hour HGV flow (387 HGVs). Therefore, in accordance with IEMA guidelines, the magnitude of impact can be considered low. Thus, there would be a <i>minor magnitude</i> beneficial impact on fear and intimidation.</p> <p>In the DS4A scenario, there would be a substantial reduction in HGV flows on this links due to the construction of the MSRR, re-routing traffic from the B430. The BTM modelling shows that in the RC4A AM peak the link would operate at capacity (132%). In the RC4A PM peak the link would operate at 87% of capacity. This reduction in congesting and traffic, particularly in the morning peak hour is assessed as a <i>moderate magnitude</i> beneficial impact.</p> <p>In terms of road user safety, the PIC analysis undertaken as part of the TA identified no collisions within the vicinity of Link 106. The analysis concluded that there is no underlying collision problem on the B430 in this location. Nevertheless, the reduction in traffic flows and provision of a zebra crossing would improve safety conditions for road users and pedestrians. This beneficial impact is deemed to be of <i>minor magnitude</i> of impact on road user safety.</p>
	<b>Embedded Mitigation</b>	<p>In the DS4A, the OxSRFI development would provide a zebra crossing over the link within Ardley. Furthermore, as part of the embedded highway works on this link, the where the link is governed by the national speed limit, this limit would be reduced to 40mph.</p>
	<b>Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Large permanent beneficial (Significant)</b></li> <li>• Driver Delay: <b>Large permanent beneficial (Significant)</b></li> <li>• NMU Delay: <b>Large permanent beneficial (Significant)</b></li> <li>• NMU Amenity: <b>Slight permanent beneficial (Significant)</b></li> </ul>

		<ul style="list-style-type: none"> <li>• Fear and Intimidation: <b>Slight permanent beneficial (Significant)</b></li> <li>• Road User and Pedestrian Safety: <b>Slight permanent beneficial (Not Significant)</b></li> </ul>
	<b>Additional Mitigation</b>	None
	<b>Effect of Travel Plan</b>	Not applied
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Large permanent beneficial (Significant)</b></li> <li>• Driver Delay: <b>Large permanent beneficial (Significant)</b></li> <li>• NMU Delay: <b>Large permanent beneficial (Significant)</b></li> <li>• NMU Amenity: <b>Slight permanent beneficial (Significant)</b></li> <li>• Fear and Intimidation: <b>Moderate permanent beneficial (Significant)</b></li> <li>• Road User and Pedestrian Safety: <b>Slight permanent beneficial (Not Significant)</b></li> </ul>
<p><b>Link 107</b></p> <p>B430 thorough Weston-on-the-Green (north of Church Road)</p> <p><b>Sensitivity:</b></p> <p>Medium</p>	<b>Potential Effects</b>	<ul style="list-style-type: none"> <li>• Severance: negligible magnitude (beneficial)</li> <li>• Driver Delay: negligible magnitude (beneficial)</li> <li>• NMU Delay: negligible magnitude (beneficial)</li> <li>• NMU Amenity: negligible magnitude (beneficial)</li> <li>• Fear and Intimidation: negligible magnitude (beneficial)</li> <li>• Road User and Pedestrian Safety: no change</li> </ul> <p>Link 107 runs north from Church Road, through the village of Weston-on-the-Green for approximately 275m. There are WCH receptors adjacent the link to the west, including a Public House, bus stops, and private dwellings, although no receptors to the east – albeit a few private dwellings – indicating a possible limited impact upon severance. There is no NMU infrastructure on the western side of the B430, meaning NMUs would have to wait for gaps in the traffic to cross. In terms of traffic flows, between the RC4A and DS4A scenarios, Link 107 would be subject to a 14% reduction in 24-hour total vehicle traffic flows (equating to 1172 vehicles). Thus, in accordance with IEMA Guidelines there would be a <i>negligible magnitude</i> impact upon severance as a result in the reduction in traffic flows between the scenarios. As traffic flows decrease, this impact has been assessed as beneficial.</p> <p>In terms of NMU delay, there would be limited NMU trips across the link in the RC4A scenario, although there is no signalised crossing provided and so NMUs would have to wait for gaps in the traffic to cross. In the RC4A scenario, there would be 8596 vehicles on the link in a 24-hour period. The equates to a vehicle passing a point on the link every 10 seconds. In DS4A, this time would increase to 12 seconds. Thus, there would be a limited change in the frequency of opportunities to cross the link in the DS4A scenario, although there would be few NMUs wanting to cross in any case. Therefore, impact</p>

	<p>upon NMU delay is deemed to be beneficial, and of <i>negligible magnitude</i>.</p> <p>Total vehicle flows and HGV flows do not double or halve between the RC4A and DS4A scenarios, and therefore, in terms of NMU amenity, the changes in traffic flows are negligible in accordance with IEMA Guidelines. In terms of NMU infrastructure a footway is provided on the link's western edge, facilitating pedestrian movements along the link and would offer some protection. Overall, it is considered that reduction in flows corresponds to a <i>negligible magnitude</i> beneficial impact in terms of NMU amenity.</p> <p>Although there are no points on Link 107 where vehicles can make turning movements; there would be a reduction in traffic flows on Link 107 between the two scenarios, indicating a reduction in congestion and delay on the link. The benefits of this reduction in flows would be realised on roads that meet the link, by vehicles waiting to join the B430. The BTM modelling shows that the link would operate at a maximum of 47% in the RC4A scenario, and at a maximum of 35% in the DS4A scenario. In both scenarios, the BTM modelling shows the link working within capacity, and the reduction between the maximum operating capacities is not substantial reduction. This is consistent with the small reduction in traffic flows, which would cause slight change for vehicles waiting to join the link also. Therefore, overall, it is considered that there would be a beneficial <i>negligible magnitude</i> on driver delay between the scenarios.</p> <p>In the RC4A scenario, the link would be governed by a 30mph limit, and this would remain unchanged in the DS4A scenario. It is considered that vehicle would therefore be travelling on average between 20mph and 30mph, in both scenarios. In terms of flows, in the RC4A scenario, the average vehicle/hour flow over 18 hours is 442 and the total number of HGVs over 18 hours is 286. Accordingly, the RC4A fear and intimidation degree of hazard score is 10 (0+0+10), which equates to a 'Small' level of fear and intimidation. For DS4A, the average vehicle/hour flow over 18 hours is 379 and the total number of HGVs over 18 hours is 340. Accordingly, the RC4A fear and intimidation degree of hazard score is 10 (0+0+10), which equates to a 'Small' level of fear and intimidation. Therefore, there is no step change between scenarios and hence the impact is of <i>negligible magnitude</i>. As traffic flows decrease this impact is assessed as beneficial.</p> <p>In terms of road user safety, the PIC analysis undertaken as part of the TA identified one slight incident on the link but concluded that there was no evidence of any underlying highway safety issue that would be affected by the changes in traffic flows and</p>
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		thus in the DS4A scenario, there is deemed to be <i>no change</i> in Road User and Pedestrian Safety on Link 107.
	<b>Embedded Mitigation</b>	None
	<b>Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• Driver Delay: <b>Neutral (No effect)</b></li> <li>• NMU Delay: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• NMU Amenity: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• Fear and Intimidation: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
	<b>Additional Mitigation</b>	None
	<b>Effect of Travel Plan</b>	Not applied
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• Driver Delay: <b>Neutral (No effect)</b></li> <li>• NMU Delay: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• NMU Amenity: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• Fear and Intimidation: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
<p><b>Link 108</b></p> <p>B430 south of Akemen Street/Green Lane crossroads junction</p> <p><b>Sensitivity:</b></p> <p>Medium</p>	<b>Potential Effects</b>	<ul style="list-style-type: none"> <li>• Severance: negligible magnitude (beneficial)</li> <li>• Driver Delay: negligible magnitude (beneficial)</li> <li>• NMU Delay: negligible magnitude (beneficial)</li> <li>• NMU Amenity: negligible magnitude (beneficial)</li> <li>• Fear and Intimidation: negligible magnitude (beneficial)</li> <li>• Road User and Pedestrian Safety: negligible magnitude (beneficial)</li> </ul> <p>Link 108 runs along the B430, south from its crossroads with Akemen Street and Green Lane, for approximately 500m to Landscape Road. There are WCH receptors adjacent the link to the west, including several commercial land uses, but no receptors to the east, limiting the possible impact upon severance. For the length of the link, no NMU infrastructure is provided on either side of the B430, meaning NMUs would have to wait for gaps in the traffic to cross. In terms of traffic flows, between the RC4A and DS4A scenarios, Link 108 would be subject to a 4% reduction in 24-hour total vehicle traffic flows (equating to 438 vehicles) Thus, in accordance with IEMA Guidelines, and considered the lack of crossing provision, there could be a minor impact upon severance as a result in the reduction in HGV flows, however, it is considered that because the total vehicle flows increase by a little, there is a <i>negligible</i></p>

	<p><i>magnitude</i> beneficial impact upon severance between the scenarios.</p> <p>In terms of NMU delay, there would be limited NMU trips across the link in the RC4A scenario, although as no signalised crossing would be provided; NMUs would have to wait for gaps in the traffic to cross. In the RC4A scenario, there would be 10111 vehicles on the link in a 24-hour period. This equates to a vehicle passing a point on the link every 9 seconds. In DS4A, this time would remain at 9 seconds. Thus, there would be no change in the frequency of opportunities to cross the link in the DS4A scenario, although there would be few NMUs wanting to cross in any case. Therefore, impact upon NMU delay is deemed to be of <i>negligible magnitude</i>. As traffic flows decrease, the impact has been assessed as beneficial.</p> <p>Total vehicle flows and HGV flows do not double or halve between the RC4A and DS4A scenarios, and therefore, in terms of NMU amenity, the changes in traffic flows are negligible based on IEMA Guidelines. As traffic flows decrease, the impact is assessed as beneficial and of <i>negligible magnitude</i>.</p> <p>Although there are no points on Link 108 where vehicles can make turning movements; there would be a slight increase in traffic flows, and a reduction in HGV flows on Link 108 between the two scenarios, indicating a change in levels of congestion and delay on the link. The effects of this change in flows would be realised on roads that meet the link (Akeman Street and Green Lane), by vehicles waiting to join the B430. The BTM modelling shows that the link would operate at a maximum of 60% in the RC4A scenario, and at a maximum of 50% in the DS4A scenario. In both scenarios, the BTM modelling shows the link working within capacity, and the reduction between the maximum operating capacities is not substantial. This is consistent with the slight change in traffic flows, which would cause a limited change in wait time for vehicles waiting to join the link also. Therefore, overall, it is considered that there would be a <i>negligible magnitude</i> beneficial impact on driver delay between the scenarios.</p> <p>In the RC4A scenario, the link would be governed by a 40mph limit, and this would remain unchanged in the DS4A scenario. It is considered that vehicles would therefore be travelling on average between 30mph and 40mph, in both scenarios. In terms of flows, in the RC4A scenario, the average vehicle/hour flow over 18 hours is 520 and the total number of HGVs over 18 hours is 349. Accordingly, the RC4A fear and intimidation degree of hazard score is 20 (0+0+20), which equates to a 'Small' level of fear and intimidation. For DS4A, the average vehicle/hour flow over 18 hours is 495 and the total number of HGVs over 18 hours is 404. Accordingly, the</p>
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		<p>RC4A fear and intimidation degree of hazard score is 20 (0+0+20), which equates to a 'Small' level of fear and intimidation. Therefore, there is no step change between scenarios and hence the impact is beneficial and of <i>negligible magnitude</i>.</p> <p>In terms of road user safety, the PIC analysis undertaken identified an existing collision problem and so road user safety may be affected by the change in traffic flows on this link. In terms of traffic flows, there is a 4% reduction in flows. This is a limited change in flows and thus it is deemed there would be a <i>negligible magnitude</i> beneficial impact upon road user safety.</p>
	<b>Embedded Mitigation</b>	None
	<b>Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Neutral (No effect)</b></li> <li>• Driver Delay: <b>Neutral (No effect)</b></li> <li>• NMU Delay: <b>Neutral (No effect)</b></li> <li>• NMU Amenity: <b>Neutral (No effect)</b></li> <li>• Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
	<b>Additional Mitigation</b>	None
	<b>Effect of Travel Plan</b>	Not applied
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Neutral (No effect)</b></li> <li>• Driver Delay: <b>Neutral (No effect)</b></li> <li>• NMU Delay: <b>Neutral (No effect)</b></li> <li>• NMU Amenity: <b>Neutral (No effect)</b></li> <li>• Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
<p><b>Link 109</b></p> <p>B430 north of Akemen Street/Green Lane crossroads junction</p> <p><b>Sensitivity:</b></p> <p>Low</p>	<b>Potential Effects</b>	<ul style="list-style-type: none"> <li>• Severance: negligible magnitude (adverse)</li> <li>• Driver Delay: negligible magnitude (beneficial)</li> <li>• NMU Delay: negligible magnitude (adverse)</li> <li>• NMU Amenity: negligible magnitude (adverse)</li> <li>• Fear and Intimidation: negligible magnitude (adverse)</li> <li>• Road User and Pedestrian Safety: negligible magnitude (adverse)</li> </ul> <p>Link 109 runs along the B430, north from the crossroads with Akemen Street and Green Lane, for approximately 1.2km to the A4095. There are WCH receptors adjacent the link to the west, including several commercial land uses, but no receptors to the east, limiting the possible impact upon severance. For the length of the link, no NMU infrastructure is provided on either side of the B430, meaning NMUs would have to wait for gaps in the traffic to cross. In terms of traffic flows, between the RC4A and DS4A scenarios, Link 109 would be subject to a 5% increase in 24-hour total vehicle traffic flows (equating to 248 vehicles). Thus, in accordance with IEMA Guidelines, there would be an adverse and <i>negligible magnitude</i> impact upon severance between the scenarios.</p>

		<p>In terms of NMU delay, there would be limited NMU trips across the link in the RC4A scenario, although as no signalised crossing would be provided; NMUs would have to wait for gaps in the traffic to cross. In the RC4A scenario, there would be 5489 vehicles on the link in a 24-hour period. This equates to a vehicle passing a point on the link every 16 seconds. In DS4A, this time would reduce to 15 seconds. Thus, there would be a slight change in the frequency of opportunities to cross the link in the DS4A scenario, although there would be few NMUs wanting to cross in any case. Therefore, impact upon NMU delay is deemed to be of adverse and of <i>negligible magnitude</i>.</p> <p>Total vehicle flows and HGV flows do not double or halve between the RC4A and DS4A scenarios, and therefore, in terms of NMU amenity, the changes in traffic flows are negligible based on IEMA Guidelines. As traffic flows decrease, the impact is assessed as beneficial and of <i>negligible magnitude</i>.</p> <p>Although there are no points on Link 109 where vehicles can make turning movements; there would be a slight decrease in traffic flows between the two scenarios, indicating a change in levels of congestion and delay on the link. The effects of this change in flows would be realised on roads that meet the link; Akeman Street, Green Lane, and the A4095, by vehicles waiting to join the B430. The BTM modelling shows that the link would operate at a maximum of 27% (southbound AM) in the RC4A scenario, and at a maximum of 25% (southbound AM) in the DS4A scenario. In both scenarios, the BTM modelling shows the link working within capacity, and the reduction between the maximum operating capacities is not substantial. This is consistent with the slight change in traffic flows, which would cause a slight change in wait time for vehicles joining the link also. Therefore, overall, it is considered that there would be a beneficial but <i>negligible magnitude</i> on driver delay between the scenarios.</p> <p>In the RC4A scenario, the link would be governed by a 40mph limit, and this would remain unchanged in the DS4A scenario. It is considered that vehicles would therefore be travelling on average between 30mph and 40mph, in both scenarios. In terms of flows, in the RC4A scenario, the average vehicle/hour flow over 18 hours is 282 and the total number of HGVs over 18 hours is 270. Accordingly, the RC4A fear and intimidation degree of hazard score is 20 (0+0+20), which equates to a 'Small' level of fear and intimidation. For DS4A, the average vehicle/hour flow over 18 hours is 292 and the total number of HGVs over 18 hours is 351. Accordingly, the RC4A fear and intimidation degree of hazard score is 20 (0+0+20), which equates to a 'Small' level of fear and intimidation. Therefore, there is no step change between</p>
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		<p>scenarios and hence the impact is of <i>negligible magnitude</i> and adverse.</p> <p>In terms of road user safety, the PIC analysis undertaken identified an existing collision problem at the link's southern extent and so road user safety may be affected by the change in traffic flows on this link. In terms of traffic flows, there is a 2% decrease in flows (a limited change in flows) and thus it is deemed there would be a <i>negligible magnitude</i> impact upon road user safety. As traffic flows increase, this impact has been assessed as adverse.</p>
	<b>Embedded Mitigation</b>	None
	<b>Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Neutral (No effect)</b></li> <li>• Driver Delay: <b>Neutral (No effect)</b></li> <li>• NMU Delay: <b>Neutral (No effect)</b></li> <li>• NMU Amenity: <b>Neutral (No effect)</b></li> <li>• Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
	<b>Additional Mitigation</b>	None
	<b>Effect of Travel Plan</b>	Not applied
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Neutral (No effect)</b></li> <li>• Driver Delay: <b>Neutral (No effect)</b></li> <li>• NMU Delay: <b>Neutral (No effect)</b></li> <li>• NMU Amenity: <b>Neutral (No effect)</b></li> <li>• Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
<p><b>Link 110</b></p> <p>B430 within A4095 junction</p> <p><b>Sensitivity:</b></p> <p>Low</p>	<b>Potential Effects</b>	<ul style="list-style-type: none"> <li>• Severance: negligible magnitude (adverse)</li> <li>• Driver Delay: negligible magnitude (beneficial)</li> <li>• NMU Delay: negligible magnitude (adverse)</li> <li>• NMU Amenity: negligible magnitude (adverse)</li> <li>• Fear and Intimidation: negligible magnitude (adverse)</li> <li>• Road User and Pedestrian Safety: no change</li> </ul> <p>Link 110 is a short link comprising of the B430 mainline between the eastern entry and exits within the A4095 roundabout. There are no WCH receptors adjacent the link and no NMU trips are expected along and across the link in the RC4A or DS4A scenarios. In terms of traffic flows, between the RC4A and DS4A scenarios, Link 110 would be subject to a 4% increase in 24-hour total vehicle traffic flows (equating to 227 vehicles). Thus, based on IEMA Guidelines; there would be negligible change in terms of severance between scenarios. Further, the change in terms of specific vehicle numbers is low, and no NMU trips are expected across the link. Therefore, it is considered that there would be an adverse and <i>negligible magnitude</i> impact on severance on Link 110.</p> <p>In terms of NMU delay, there would be no NMU trips along and across the link in either scenarios. Again, the</p>

		<p>decrease in traffic flows in terms of vehicles is low, and thus it is considered that there would also be a <i>negligible magnitude</i> impact in terms of NMU delay on the link. As traffic flows increase, this impact has been assessed as adverse.</p> <p>Total traffic flows and HGV flows do not double or halve between the RC4A and DS4A scenarios, and therefore, in terms of NMU amenity, the changes in traffic flows are negligible in accordance with IEMA Guidelines. Overall, it is considered that there would be a <i>negligible magnitude</i> and adverse impact in terms of NMU Amenity on the link.</p> <p>There are no points on Link 110 where vehicles can make turning movements and so the only point where a change in driver delay can be realised is as at each end of the link where vehicles join the B430 or the A4095. The BTM modelling shows the southbound link operating at 38% of capacity in the RC4A scenario, decreasing to 34% of capacity in the DS4A scenario. Thus, link would comfortably operate with spare capacity in both scenarios. Although the link's operation would improve, the change is minimal and deemed to be of <i>negligible magnitude</i> impact upon driver delay between the two scenarios.</p> <p>In both scenarios, the link would be governed by the national (60mph) limit, and it is thought that vehicles would be travelling over 40mph. In terms of traffic flows, in the RC4A scenario, the average vehicle/hour flow over 18 hours is 270 and the total number of HGVs over 18 hours is 250. Accordingly, the RC4A fear and intimidation degree of hazard score is 30 (0+0+30), which equates to a 'Moderate' level of fear and intimidation. For DS4A, the average vehicle/hour flow over 18 hours is 278 and the total number of HGVs over 18 hours is 318. Accordingly, the RC4A fear and intimidation degree of hazard score is 30 (0+0+30), which equates to a 'Moderate' level of fear and intimidation. Therefore, there is no step change between scenarios and hence the impact is of <i>negligible magnitude</i>. As traffic flows increase, this impact is assessed as adverse.</p> <p>In terms of road user safety, the PIC analysis undertaken as part of the TA identified four slight incidents at the junction between the B430 and A4095, although did not specify where the collisions occurred. Of the four collisions, one was a loss of control on approach to the junction, one was a motorbike losing control, and two were failures to give way. A further review of publicly available data (via crashmap.com) for the latest 5 years of available data (2020-2024), found one slight incident on the link. Therefore, as was the case in the TA, it can be concluded that there is no evidence of any underlying highway safety issue on the</p>
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		link that would be affected by the changes in traffic flows and thus in the DS4A scenario, there is deemed to be <i>no change</i> in Road User and Pedestrian Safety on Link 110.
	<b>Embedded Mitigation</b>	None
	<b>Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Neutral (No effect)</b></li> <li>• Driver Delay: <b>Neutral (No effect)</b></li> <li>• NMU Delay: <b>Neutral (No effect)</b></li> <li>• NMU Amenity: <b>Neutral (No effect)</b></li> <li>• Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
	<b>Additional Mitigation</b>	None
	<b>Effect of Travel Plan</b>	Not applied
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Neutral (No effect)</b></li> <li>• Driver Delay: <b>Neutral (No effect)</b></li> <li>• NMU Delay: <b>Neutral (No effect)</b></li> <li>• NMU Amenity: <b>Neutral (No effect)</b></li> <li>• Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
<p><b>Link 111</b></p> <p>B430 within A4095 junction</p> <p><b>Sensitivity:</b></p> <p>Low</p>	<b>Potential Effects</b>	<ul style="list-style-type: none"> <li>• Severance: negligible magnitude (beneficial)</li> <li>• Driver Delay: no change</li> <li>• NMU Delay: negligible magnitude (beneficial)</li> <li>• NMU Amenity: negligible magnitude (beneficial)</li> <li>• Fear and Intimidation: negligible magnitude (beneficial)</li> <li>• Road User and Pedestrian Safety: no change</li> </ul> <p>Link 111 is a short link comprising of the B430 mainline between the western entry and exits with the A4095 junction. There are no WCH receptors adjacent the link and no NMU trips are expected along and across the link in the RC4A or DS4A scenarios. In terms of traffic flows, between the RC4A and DS4A scenarios, Link 111 would be subject to a 9% reduction in 24-hour total vehicle traffic flows (equating to 634 vehicles). Thus, based on IEMA Guidelines; there may be a negligible change in terms of severance between scenarios. Further, this change in terms of specific vehicle numbers relatively low (equating to one fewer per two minutes), and no NMU trips are expected across the link. Therefore, it is considered that there would be a <i>negligible magnitude</i> impact on severance on Link 111. As traffic flows reduce, this impact has been assessed as beneficial.</p> <p>In terms of NMU delay, there would be no NMU trips along and across the link in either scenarios. Again, the decrease in traffic flows in terms of vehicles is low, and thus it is considered that there would also be a <i>negligible magnitude</i> impact in terms of NMU delay on the link. As traffic flows reduce, this impact has been assessed as beneficial.</p>

		<p>Total traffic flows and HGV flows do not double or halve between the RC4A and DS4A scenarios, and therefore, in terms of NMU amenity, the changes in traffic flows are negligible in accordance with IEMA Guidelines. Overall, it is considered that there would be a <i>negligible magnitude</i> and beneficial impact in terms of NMU Amenity on the link.</p> <p>There are no points on Link 111 where vehicles can make turning movements and so the only point where a change in driver delay can be realised is as at each end of the link where vehicles join the B430 or the A4095. The BTM modelling shows the southbound link operating at 28% of capacity in both scenarios. Thus, link would comfortably operate with spare capacity in both scenarios and there is <i>no change</i> in driver delay between the two scenarios.</p> <p>In both scenarios, the link would be governed by the national (60mph) limit, and it is thought that vehicles would be travelling over 40mph. In terms of traffic flows, in the RC4A scenario, the average vehicle/hour flow over 18 hours is 361 and the total number of HGVs over 18 hours is 299. Accordingly, the RC4A fear and intimidation degree of hazard score is 30 (0+0+30), which equates to a 'Moderate' level of fear and intimidation. For DS4A, the average vehicle/hour flow over 18 hours is 326 and the total number of HGVs over 18 hours is 321. Accordingly, the RC4A fear and intimidation degree of hazard score is 30 (0+0+30), which equates to a 'Moderate' level of fear and intimidation. Therefore, there is no step change between scenarios and hence the impact is of <i>negligible magnitude</i>. As traffic flows reduce, this impact is assessed as beneficial.</p> <p>In terms of road user safety, the PIC analysis undertaken as part of the TA identified four slight incidents at the junction between the B430 and A4095, although did not specify where the collisions occurred. Of the four collisions, one was a loss of control on approach to the junction, one was a motorbike losing control, and two were failures to give way. A further review of publicly available data (via crashmap.com) for the latest 5 years of available data (2020-2024), found one slight incident on the link. Therefore, as was the case in the TA, it can be concluded that there is no evidence of any underlying highway safety issue on the link that would be affected by the changes in traffic flows and thus in the DS4A scenario, there is deemed to be <i>no change</i> in Road User and Pedestrian Safety on Link 111.</p>
	<b>Embedded Mitigation</b>	None
	<b>Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Neutral (No effect)</b></li> <li>• Driver Delay: <b>Neutral (No effect)</b></li> <li>• NMU Delay: <b>Neutral (No effect)</b></li> </ul>

		<ul style="list-style-type: none"> <li>NMU Amenity: <b>Neutral (No effect)</b></li> <li>Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
	<b>Additional Mitigation</b>	None
	<b>Effect of Travel Plan</b>	Not applied
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>Severance: <b>Neutral (No effect)</b></li> <li>Driver Delay: <b>Neutral (No effect)</b></li> <li>NMU Delay: <b>Neutral (No effect)</b></li> <li>NMU Amenity: <b>Neutral (No effect)</b></li> <li>Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
<p><b>Link 112</b></p> <p>B430 between A4095 junction and B4030</p> <p><b>Sensitivity:</b></p> <p>Low</p>	<b>Potential Effects</b>	<ul style="list-style-type: none"> <li>Severance: negligible magnitude (adverse)</li> <li>Driver Delay: negligible magnitude (adverse)</li> <li>NMU Delay: no change</li> <li>NMU Amenity: negligible magnitude (adverse)</li> <li>Fear and Intimidation: negligible magnitude (adverse)</li> <li>Road User and Pedestrian Safety: no change</li> </ul> <p>Link 112 runs along the B430, north from the A4095 for approximately 1.6km to Bicester Road within Middleton Stony. No WCH receptors are found adjacent the link, other than a few dwellings in Middleton Stony. No WCH infrastructure is provided on the link other than a pedestrian crossing at the signalised junction between the B430 and Bicester Road at the link's northern extent. For the majority of the length of the link, no NMU infrastructure is provided on either side of the B430, meaning NMUs would have to wait for gaps in the traffic to cross, although few WCH trips along and across the link are expected in either scenario. In terms of traffic flows, between the RC4A and DS4A scenarios, Link 112 would be subject to a 7% increase in 24-hour total vehicle traffic flows (equating to 617 vehicles). Thus, in accordance with IEMA Guidelines, and considering the lack of WCH receptors adjacent the link, there would be a <i>negligible magnitude</i> impact upon severance between the scenarios. As traffic flows increase, this impact has been assessed as adverse.</p> <p>In terms of NMU delay, there would be limited NMU trips across the link in the RC4A scenario, although as no signalised crossing would be provided along most of the link; NMUs would have to wait for gaps in the traffic to cross. In the RC4A scenario, there would be 8301 vehicles on the link in a 24-hour period. This equates to a vehicle passing a point on the link every 10 seconds. In DS4A, this time would remain at 10 seconds. Thus, there would be no discernible change in the frequency of opportunities to cross the link in the DS4A scenario, and there would be few NMUs wanting to cross in any case. Therefore, there is deemed to be <i>no change</i> in terms of NMU delay between the two scenarios.</p>

	<p>Total vehicle traffic flows and HGV flows do not double or halve between the RC4A and DS4A scenarios, and therefore, in terms of NMU amenity, the changes in traffic flows may be negligible in accordance with IEMA Guidelines. The increase in vehicles comprises 27 HGVs in 24 hours, or the equivalent of one HGV in an hour. This change flows is low and it is considered that there would be an adverse, but <i>negligible magnitude</i> in terms of NMU amenity.</p> <p>Although there are no points on Link 112 where vehicles can make turning movements; there would be a slight decrease in traffic flows between the two scenarios, indicating a change in levels of congestion and delay on the link. The effects of this change in flows would be realised on roads that meet the link; at the A4095 and at private accesses within Middleton Stoney, by vehicles waiting to join the B430. BTM modelling shows that the link would operate at a maximum of 36% in the RC4A scenario, and at a maximum of 38% in the DS4A scenario. In both scenarios, the BTM modelling shows the link working within capacity, and the reduction between the maximum operating capacities is not substantial. Overall, it is considered that there would be a <i>negligible magnitude</i> on driver delay between the scenarios. As traffic flows increase, this impact has been assessed as adverse.</p> <p>In the RC4A scenario, the link would be governed by the national (60mph) speed limit, and this would remain unchanged in the DS4A scenario. It is considered that vehicles would therefore be travelling on average over 40mph. In terms of flows, in the RC4A scenario, the average vehicle/hour flow over 18 hours is 427 and the total number of HGVs over 18 hours is 356. Accordingly, the RC4A fear and intimidation degree of hazard score is 30 (0+0+30), which equates to a 'Moderate' level of fear and intimidation. For DS4A, the average vehicle/hour flow over 18 hours is 452 and the total number of HGVs over 18 hours is 381. Accordingly, the RC4A fear and intimidation degree of hazard score is 30 (0+0+30), which equates to a 'Moderate' level of fear and intimidation. Therefore, there is no step change between scenarios and hence the impact is of <i>negligible magnitude</i>. As traffic flows increase, this impact has been assessed as adverse.</p> <p>In terms of road user safety, the PIC analysis undertaken as part of the TA identified four slight incidents at the junction between the B430 and A4095, at the link's southern extent, although did not specify where the collisions occurred. Of the four collisions, one was a loss of control on approach to the junction, one was a motorbike losing control, and two were failures to give way. A further review of publicly available data (via crashmap.com) for the latest 5 years of available data (2020-2024), found no incidents on the link, outside the</p>
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		A4095 junction. Therefore, as was the case in the TA, it can be concluded that there is no evidence of any underlying highway safety issue on the link that would be affected by the changes in traffic flows and thus in the DS4A scenario, there is deemed to be <i>no change</i> in Road User and Pedestrian Safety on Link 112.
	<b>Embedded Mitigation</b>	None
	<b>Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Neutral (No effect)</b></li> <li>• Driver Delay: <b>Neutral (No effect)</b></li> <li>• NMU Delay: <b>Neutral (No effect)</b></li> <li>• NMU Amenity: <b>Neutral (No effect)</b></li> <li>• Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
	<b>Additional Mitigation</b>	None
	<b>Effect of Travel Plan</b>	Not applied
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Neutral (No effect)</b></li> <li>• Driver Delay: <b>Neutral (No effect)</b></li> <li>• NMU Delay: <b>Neutral (No effect)</b></li> <li>• NMU Amenity: <b>Neutral (No effect)</b></li> <li>• Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
<p><b>Link 121</b></p> <p>A41/B4030 Vendee Drive roundabout circulatory</p> <p><b>Sensitivity:</b></p> <p>Low</p>	<b>Potential Effects</b>	<ul style="list-style-type: none"> <li>• Severance: negligible magnitude (adverse)</li> <li>• Driver Delay: negligible magnitude (adverse)</li> <li>• NMU Delay: negligible magnitude (adverse)</li> <li>• NMU Amenity: negligible magnitude (adverse)</li> <li>• Fear and Intimidation: negligible magnitude (adverse)</li> <li>• Road User and Pedestrian Safety: negligible magnitude (adverse)</li> </ul> <p>Between the RC4A and DS4A scenarios there would be a 13% increase in total vehicles on Link 121. This indicates (in accordance with IEMA Guidelines) a negligible magnitude of impact upon severance. In terms on NMU demand, there are limited WCH receptors adjacent the link and, being a roundabout circulatory, the link would have no WCH crossings. Therefore, it is considered that there would be an adverse, but <i>negligible magnitude</i> of impact in terms of severance and NMU delay in the DS4A scenario.</p> <p>Total vehicle traffic flows do not halve or double and therefore the impact of the changes traffic flows are negligible when considering NMU amenity. In terms of provision for NMUs, a footway is provided on the central island of the northern A41 arm. In accordance with IEMA Guidelines, it is considered that there would be an adverse, but <i>negligible magnitude</i> of impact on NMU amenity between the two scenarios.</p> <p>Link 121, in both scenarios is governed by a 40mph speed limit, however as a roundabout circulatory it is considered that on average vehicles would be travelling in between 20mph and 30mph in both scenarios. In RC4A the average vehicle/hour over 18 hours is 294</p>

		<p>vehicles and the 18-hour HGVs is 318 vehicles. Accordingly, the RC4A fear and intimidation degree of hazard score is 10 (0+0+10), which equates to a 'Small' level of fear and intimidation. In the DS4A scenario the average vehicle/hour over 18 hours is 332 vehicles and the 18-hour HGVs is 467 vehicles. Accordingly, the DS4A fear and intimidation degree of hazard score is 10 (0+0+10), which equates to a 'Small' level of fear and intimidation. Therefore, there is no step change in level, and it is considered that there would be a <i>negligible magnitude</i> adverse impact on fear and intimidation as a result of the change in traffic flows.</p> <p>The BTM modelling shows Link 121 would operate at a maximum of 15% of capacity in the RC4A scenario, compared to at a maximum of 18% of capacity in the DS4A scenario. This change is small and it is considered that there would be an adverse, but <i>negligible magnitude</i> impact in terms of driver delay in the DS4A scenario.</p> <p>In terms of road user safety, the PIC analysis undertaken as part of the TA concluded that there is an collision problem at this roundabout A41 NB approaches and geometric form of the junction as contributing factors. Nevertheless, there would be a slight reduction in total traffic flows on this link, and the development would not worsen these issues. Indeed, the increase in HGV traffic on the link may slow approach speeds on the A41. Overall, as traffic flows increase, there is thought to be an adverse, but <i>negligible magnitude</i> of impact on road user safety.</p>
	<b>Embedded Mitigation Effects (Significance)</b>	<p>None</p> <ul style="list-style-type: none"> <li>• Severance: <b>Neutral (No effect)</b></li> <li>• Driver Delay: <b>Neutral (No effect)</b></li> <li>• NMU Delay: <b>Neutral (No effect)</b></li> <li>• NMU Amenity: <b>Slight permanent adverse (Not Significant)</b></li> <li>• Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
	<b>Additional Mitigation Effect of Travel Plan</b>	<p>None</p> <p>Not applied</p>
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Neutral (No effect)</b></li> <li>• Driver Delay: <b>Neutral (No effect)</b></li> <li>• NMU Delay: <b>Neutral (No effect)</b></li> <li>• NMU Amenity: <b>Slight permanent adverse (Not Significant)</b></li> <li>• Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
<b>Link 122</b>  B4030 Vendee Drive eastbound	<b>Potential Effects</b>	<ul style="list-style-type: none"> <li>• Severance: negligible magnitude (adverse)</li> <li>• Driver Delay: negligible magnitude (adverse)</li> <li>• NMU Delay: negligible magnitude (adverse)</li> <li>• NMU Amenity: minor magnitude (adverse)</li> <li>• Fear and Intimidation: negligible magnitude (adverse)</li> </ul>

<p>approach to A41 roundabout</p> <p><b>Sensitivity:</b></p> <p>Low</p>	<ul style="list-style-type: none"> <li>• Road User and Pedestrian Safety: minor magnitude (adverse)</li> </ul> <p>In terms of infrastructure for pedestrians and cyclists; a shared 3m footway/cycleway is provided to the north of the Link 122. No crossing point is provided across the link with NMU crossings facilitated elsewhere on the B4030. Further, as an entry to the A41 roundabout NMU crossings would not be expected or encouraged across the link. In terms of traffic flows, between the RC4A and DS4A scenarios link 122 would be subject to an 28% increase in 24-hour total vehicle traffic, equating to 1771 vehicles (an average of one every 49 seconds). As a result of this change in traffic flows, and based on the IEMA Guidelines there could be a negligible magnitude of impact upon severance. Given the lack of NMU crossings expected across the link, the conclusion that there would be a <i>negligible magnitude</i> of impact in terms of severance is suitable. This impact has been assessed as adverse, due to the increase in traffic flows.</p> <p>Given the lack of NMU crossings expected across the link, and the negligible change in traffic flows, there would be a <i>negligible magnitude</i> of impact on NMU delay as a result of the change in traffic flows between the RC4A and DS4A scenarios. This impact has been assessed as adverse, due to the increase in traffic flows.</p> <p>Between the scenarios, total vehicle 24-hour traffic flows and HGV flows do not double. Although, there would be a 106% increase in HGV flows on the link (416 HGVs), this would equate to one additional HGV on the link every 49 seconds. Therefore, the changes in traffic flows are non-negligible in accordance with IEMA Guidelines when discussing NMU amenity. Infrastructure for pedestrians and cyclists is provided via shared 3m footway/cycleways on the northern edge of the link and there increase in HGV flows is not large. Thus, the change in flows is limited and in accordance with IEMA Guidelines, the impact on NMU amenity is deemed to be adverse, but of <i>minor magnitude</i>.</p> <p>The majority of link 122 would be subject to a 40mph speed limit in both scenarios. Vehicles would likely average between 30mph and 40mph in both scenarios, as they would slow when approaching the roundabout. For RC4A, the average vehicle/hour flow over 18 hours is 333 vehicles, and the total number of HGVs over 18 hours is 374. Accordingly, the RC4A fear and intimidation degree of hazard score is 20 (0+0+20), which equates to a 'Small' level of fear and intimidation. For DS4A, the average vehicle/hour flow over 18 hours is 426, and the total number of HGVs over 18 hours is 768. Accordingly, the DS4A fear and intimidation degree of hazard score is 20 (0+0+20), which equates to a 'Small' level of fear and intimidation. Therefore, there is no step change between scenarios and hence the</p>
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		<p>impact is of <i>negligible magnitude</i>. As traffic flows increase, this impact has been assessed as adverse.</p> <p>There would be a slight increase in traffic flows between the two scenarios, indicating a change in levels of congestion and delay on the link. The effects of this change in flows would be realised at the A41 roundabout. The BTM modelling shows that the link would operate at a maximum of 93% (AM peak hour) in the RC4A scenario, during which 472 vehicles would pass along the link. In the DS4A scenario the link would operate at 95% of capacity (AM peak hour), during which 654 vehicles would pass along the link. The link would operate within capacity in both scenarios and there is a minimal change between scenarios; thus, there would be limited change in queuing and delay in both scenarios. Therefore, it is considered that there would be an adverse, but <i>negligible magnitude</i> impact in terms of driver delay between the scenarios.</p> <p>In terms of road user safety, the PIC analysis undertaken as part of the TA concluded that there is a collision problem at this roundabout, identifying the A41 NB approaches and geometric form of the junction as contributing factors. There would be a slight increase in total traffic flows on this link, and the development may have a slight impact upon these issues, although the increases in traffic flows are limited. Consequently, the impact on road user and pedestrian safety has been assessed as adverse, and of <i>minor negligible magnitude</i>.</p>
	<b>Embedded Mitigation</b>	None
	<b>Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Neutral (No effect)</b></li> <li>• Driver Delay: <b>Neutral (No effect)</b></li> <li>• NMU Delay: <b>Neutral (No effect)</b></li> <li>• NMU Amenity: <b>Neutral (No effect)</b></li> <li>• Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>• Road User and Pedestrian Safety: <b>Slight permanent adverse (Not Significant)</b></li> </ul>
	<b>Additional Mitigation</b>	None
	<b>Effect of Travel Plan</b>	Not applied
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Neutral (No effect)</b></li> <li>• Driver Delay: <b>Neutral (No effect)</b></li> <li>• NMU Delay: <b>Neutral (No effect)</b></li> <li>• NMU Amenity: <b>Neutral (No effect)</b></li> <li>• Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>• Road User and Pedestrian Safety: <b>Slight permanent adverse (Not Significant)</b></li> </ul>
<b>Link 125</b>  Middleton Stoney Road between A4095 roundabout	<b>Potential Effects</b>	<ul style="list-style-type: none"> <li>• Severance: minor magnitude (adverse)</li> <li>• Driver Delay: minor magnitude (adverse)</li> <li>• NMU Delay: minor magnitude (adverse)</li> <li>• NMU Amenity: negligible magnitude (adverse)</li> <li>• Fear and Intimidation: minor magnitude (adverse)</li> <li>• Road User and Pedestrian Safety: no change</li> </ul>

<p>and Ludlow Road</p> <p><b>Sensitivity:</b></p> <p>Medium</p>	<p>Link 125 comprises Middleton Stoney Road, between the A4095 and Ludlow Road. The link is situated in Bicester with residential development to its north and south, although there is no direct access from the link to these developments. A footway is provided along the northern edge of the link, although there are no crossing points other than at the links western extent, where an uncontrolled two-stage pedestrian crossing facilitates the desire line along the A4095. Thus, apart from at the roundabout there would be little demand for WCHs to cross the link. In terms of traffic flows, between the RC4A and DS4A scenarios, Link 125 would be subject to an 29% increase in 24-hour total vehicle traffic, equating to 5855 vehicles (an average one every 15 seconds). As a result of this change in traffic flows, based on the IEMA Guidelines, there would be a negligible magnitude of impact upon severance, although the increase is just below the threshold. As the increase is just below the threshold between a negligible and slight minor, and no signalised crossing facilities are provided, the impact on severance in the DS4A scenario, is deemed to be of adverse and of <i>minor magnitude</i>.</p> <p>In terms of NMU delay, there would be limited NMU trips across the link in the RC4A scenario, apart from at the A4095 roundabout where an uncontrolled pedestrian crossing is provided. At this location in the RC4A scenario, there would be 20076 vehicles on the link in a 24-hour period. This equates to an average of one vehicle passing a point on the link every 4 seconds, north or south bound. In DS4A, this time would decrease to 3 seconds. Thus, there would be fewer opportunities to cross the link in the DS4A scenario, thereby increasing NMU delay. This delay would be realised at the uncontrolled crossing at the A4095 roundabout, and the adverse impact is deemed to be of <i>minor magnitude</i>.</p> <p>Between the scenarios, both total vehicle and HGV 24-hour traffic flows do not double. Therefore, the changes in traffic flows are negligible in accordance with IEMA Guidelines when discussing NMU amenity. A footway is provided on the northern edge of the link, facilitating pedestrian trips along the link. Therefore, the impact of the increase in traffic flows on NMU amenity is deemed to be adverse, but of <i>negligible magnitude</i>.</p> <p>Link 125 is governed by a 30mph speed limit, and speed control features are present. Vehicles therefore would likely average between 20mph and 30mph in both scenarios, as they would slow when approaching/departing the roundabout. For RC4A, the average vehicle/hour flow over 18 hours is 1052 vehicles, and the total number of HGVs over 18 hours is 275. Accordingly, the RC4A fear and intimidation degree of hazard score is 20 (10+0+10), which equates to a 'Small' level of fear and intimidation. For DS4A, the</p>
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		<p>average vehicle/hour flow over 18 hours is 1348, and the total number of HGVs over 18 hours is 532. Accordingly, the DS4A fear and intimidation degree of hazard score is 20 (20+0+10), which equates to a 'Moderate' level of fear and intimidation.</p> <p>Therefore, there is one step change in level. In terms of traffic flows there is less than a 400 vehicle decrease in average 18-hour vehicle flow (296 vehicles), and less than a 500 HGV decrease in total 18-hour HGV flow (257 HGVs). Therefore, in accordance with IEMA guidelines, the magnitude of impact can be considered low and thus there would be a <i>minor magnitude</i> adverse impact on fear and intimidation.</p> <p>There would be an increase in traffic flows between the two scenarios, indicating a change in levels of congestion and delay on the link. The effects of this change in flows would be realised at the A4095 roundabout. The BTM modelling shows that the link would operate at a maximum of 49% (AM peak hour) in the RC4A scenario, as vehicles approach the roundabout. In the DS4A scenario roundabout approach link would operate at 97% of capacity (AM peak hour). The link would operate within capacity in both scenarios, although there is a substantial increase in operating capacity in the DS4A scenario. In actual terms, there would be an increase of 467 vehicles on the approach to the roundabout AM peak hour, 110 of which would be OxSRFI development traffic. Overall, it is considered that there would be a <i>minor magnitude</i> adverse impact upon driver delay between the scenarios.</p> <p>In terms of road user safety, the PIC analysis undertaken as part of the TA recorded no collisions on Link 125. Further, a review of a review of publicly available data (via crashmap.com) for the latest 5 years of available data (2020-2024), found that no collisions had occurred on the link. Therefore, there is no indication on an existing highway safety issue on the link that could be affected by a change in traffic flows and thus there would be no impact upon Road User and Pedestrian Safety on the link, and there would be <i>no change</i> in this criteria.</p>
	<b>Embedded Mitigation</b>	None
	<b>Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Slight permanent adverse (Not Significant)</b></li> <li>• Driver Delay: <b>Slight permanent adverse (Not Significant)</b></li> <li>• NMU Delay: <b>Slight permanent adverse (Not Significant)</b></li> <li>• NMU Amenity: <b>Neutral (No effect)</b></li> <li>• Fear and Intimidation: <b>Slight permanent adverse (Not Significant)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>

	<b>Additional Mitigation</b>	<p>The TA identifies that the A4095/B4030 roundabout would be the subject of additional mitigation to increase capacity and provide signal-controlled Toucan crossings on the B4030 arm, the A4095 southern arm, and Middleton Stoney Road. Hence, with the additional mitigation in place, there would be the following magnitude impacts:</p> <ul style="list-style-type: none"> <li>• Severance: minor magnitude (beneficial)</li> <li>• Driver Delay: minor magnitude (beneficial)</li> <li>• NMU Delay: moderate magnitude (beneficial)</li> <li>• NMU Amenity: minor magnitude (beneficial)</li> <li>• Fear and Intimidation: negligible magnitude (beneficial)</li> <li>• Road User and Pedestrian Safety: no change</li> </ul>
	<b>Effect of Travel Plan</b>	Not applied
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• Driver Delay: <b>Slight permanent beneficial (Significant)</b></li> <li>• NMU Delay: <b>Moderate permanent beneficial (Potentially Significant)</b></li> <li>• NMU Amenity: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• Fear and Intimidation: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
<p><b>Link 126</b></p> <p>Middleton Stoney Road between Ludlow Road Whitelands Way roundabout</p> <p><b>Sensitivity:</b></p> <p>Medium</p>	<b>Potential Effects</b>	<ul style="list-style-type: none"> <li>• Severance: negligible magnitude (adverse)</li> <li>• Driver Delay: negligible magnitude (adverse)</li> <li>• NMU Delay: minor magnitude (adverse)</li> <li>• NMU Amenity: negligible magnitude (adverse)</li> <li>• Fear and Intimidation: minor magnitude (adverse)</li> <li>• Road User and Pedestrian Safety: no change</li> </ul> <p>Link 126 comprises Middleton Stoney Road, between the Ludlow Road and the Whitelands Way roundabout. The link is within Bicester and has residential development situated to the north and south although there is no direct access from the link to these developments, other than via Ludlow Road to the south. A footway is provided along the northern edge of the link which widens to a shared footway/cycleway near the Whitelands Way roundabout, and a second short footway is provided on the southern edge of the link extending east for approximately 70m from Ludlow Road. This short footway provides access to a set of bus stops where a two-stage uncontrolled pedestrian crossing is present across the link facilitating NMU crossings between the northern side of the link and the stops. There are no NMU crossing points elsewhere on the link. In terms of traffic flows, between the RC4A and DS4A scenarios, Link 126 would be subject to a 29% increase in 24-hour total vehicle traffic, equating to 5702 vehicles (an average of an additional vehicle every 15 seconds). As a result of this change in traffic flows, based on the IEMA Guidelines there would be a</p>

		<p>negligible magnitude of impact upon severance. Given the provision of a pedestrian crossing where frequent crossings of the link are expected, it is deemed that a <i>negligible magnitude</i> of impact is accurate, given the relatively slight increase in traffic flows. This impact has been assessed as adverse due to the increase in traffic flows.</p> <p>In terms of NMU delay, there would be limited NMU trips across the link in the RC4A scenario, apart from at the aforementioned uncontrolled pedestrian crossing. At this location in the RC4A scenario, there would be 19536 vehicles on the link in a 24-hour period. This equates to an average of one vehicle passing a point on the link every 4 seconds. In DS4A, this time would decrease to 3 seconds. Thus, there would be fewer opportunities to cross the link in the DS4A scenario, thereby increasing NMU delay. This delay would be realised at the uncontrolled crossing adjacent to the bus stops, and the adverse impact upon NMU delay is deemed to be of <i>minor magnitude</i>.</p> <p>Between the scenarios, both total vehicle and HGV 24-hour traffic flows do not double. Therefore, the changes in traffic flows are negligible in accordance with IEMA Guidelines when discussing NMU amenity. A footway is provided on the northern edge of the link, facilitating pedestrian trips along the link and a crossing is provided over the link positioned to facilitate trips to the bus stops nearby. Therefore, the impact of the increase in traffic flows on NMU amenity is deemed to be a <i>negligible magnitude</i>. As traffic flows increase, this impact is deemed as adverse.</p> <p>Link 126 is governed by a 30mph speed limit, and speed control features are present. Vehicles therefore would likely average between 20mph and 30mph in both scenarios, as they would slow when approaching/departing the roundabout. For RC4A, the average vehicle/hour flow over 18 hours is 1024 vehicles, and the total number of HGVs over 18 hours is 303. Accordingly, the RC4A fear and intimidation degree of hazard score is 20 (10+0+10), which equates to a 'Small' level of fear and intimidation. For DS4A, the average vehicle/hour flow over 18 hours is 1312, and the total number of HGVs over 18 hours is 557. Accordingly, the DS4A fear and intimidation degree of hazard score is 10 (20+0+10), which equates to a 'Moderate' level of fear and intimidation.</p> <p>Therefore, there is one step change in level. In terms of traffic flows there is less than a 400 vehicle decrease in average 18-hour vehicle flow (288 vehicles), and less than a 500 HGV decrease in total 18-hour HGV flow (254 HGVs). Therefore, in accordance with IEMA guidelines, the magnitude of impact can be considered</p>
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		<p>low and thus there would be a <i>minor magnitude</i> adverse impact on fear and intimidation.</p> <p>There would be an increase in traffic flows between the two scenarios, indicating a change in levels of congestion and delay on the link. The effects of this change in flows would be primarily realised at the Whitelands Way roundabout. The BTM modelling shows that the link would operate at a maximum of 55% (AM peak hour) in the RC4A scenario, as eastbound vehicles approach the roundabout. In the DS4A scenario roundabout approach link would operate at 68% of capacity (AM peak hour). The link would operate within capacity in both scenarios, and the increase in operating capacity between the scenarios is slight. In actual terms, there would be an increase of 249 vehicles on the approach to the roundabout AM peak hour. In the PM peak hour 23 vehicles would be OxSRFI development traffic. Overall, it is considered that this increase in vehicles would cause a <i>negligible magnitude</i> impact in terms of driver delay between the scenarios.</p> <p>In terms of road user safety, the PIC analysis undertaken as part of the TA did not include Link 126. Nevertheless, a review of a review of publicly available data (via crashmap.com) for the latest 5 years of available data (2020-2024), found that no collisions had occurred on the link. Therefore, there is no indication on an existing highway safety issue on the link that could be affected by a change in traffic flows and thus there would be no impact upon Road User and Pedestrian Safety on the link, and there would be <i>no change</i> in this criteria.</p>
	<b>Embedded Mitigation</b>	None
	<b>Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Neutral (No effect)</b></li> <li>• Driver Delay: <b>Neutral (No effect)</b></li> <li>• NMU Delay: <b>Slight permanent adverse (Not Significant)</b></li> <li>• NMU Amenity: <b>Neutral (No effect)</b></li> <li>• Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
	<b>Additional Mitigation</b>	None
	<b>Effect of Travel Plan</b>	Not applied
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Neutral (No effect)</b></li> <li>• Driver Delay: <b>Neutral (No effect)</b></li> <li>• NMU Delay: <b>Slight permanent adverse (Not Significant)</b></li> <li>• NMU Amenity: <b>Neutral (No effect)</b></li> <li>• Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
<b>Link 128</b>  Lords Lane	<b>Potential Effects</b>	<ul style="list-style-type: none"> <li>• Severance: negligible magnitude (beneficial)</li> <li>• Driver Delay: negligible magnitude (beneficial)</li> <li>• NMU Delay: negligible magnitude (beneficial)</li> <li>• NMU Amenity: negligible magnitude (beneficial)</li> </ul>

<p><b>Sensitivity:</b></p> <p>Low</p>	<ul style="list-style-type: none"> <li>• Fear and Intimidation: negligible magnitude (beneficial)</li> <li>• Road User and Pedestrian Safety: no change</li> </ul> <p>Link 128 comprises the A4095 Lords Lane for a section that extends approximately 1km northeast from the Lords Lane/Bucknell Road roundabout. The link is situated within northwest Bicester and has residential development to the south, although there is no direct access from the link to dwellings other than via two vehicular accesses: Trefoil Drive and Purslane Drive. Accordingly key WCH receptors are all south of the link. No NMU infrastructure is provided across the link, and frequent crossings of the link are not expected in either scenario. In terms of traffic flows; between the RC4A and DS4A scenarios, Link 128 would be subject to an 13% reduction in 24-hour total vehicle traffic, equating to 756 vehicles (an average of one fewer vehicle every 2 minutes). As a result of this change in traffic flows, based on the IEMA Guidelines there would be a negligible magnitude of impact upon severance. In terms of actual vehicle numbers, the change in traffic flows is small and thus it is deemed that a <i>negligible magnitude</i> of impact is accurate. As traffic flows reduce, this impact has been assessed as beneficial.</p> <p>In terms of NMU delay, there would be limited NMU trips across the link in both scenarios. For NMUs that do wish to cross the link no infrastructure is provided and thus they would have to wait for gaps in the traffic. In the RC4A scenario, there would be 5850 vehicles on the link in a 24-hour period. This equates to an average of one vehicle passing a point on the link every 15 seconds. In DS4A, this time would increase to 17 seconds. The change between scenarios is slight, and it is considered that there would be a <i>negligible magnitude</i> of impact in terms of NMU delay. As traffic flows reduce, this impact has been assessed as beneficial.</p> <p>Between the scenarios, the number of total vehicles or total HGV numbers in a 24-hour period do not halve or double. Therefore, the changes in traffic flows could be considered negligible based on IEMA Guidelines when discussing NMU amenity. There is an increase in HGV flows; however, this comprises 4 HGVs only, a trivial amount over a 24-hour period. Further, NMUs travelling along the link would walk/ride along a shared footway/cycleway setback south from the link and would be off carriageway. Therefore, the impact of the reduction in traffic flows on NMU amenity is deemed to be a <i>negligible magnitude</i>. As the change in HGV flows is small, and total traffic flows reduce, this impact has been assessed as beneficial.</p> <p>Link 128 is governed by a 40mph speed limit, and vehicles would likely average between 30mph and 40mph in both scenarios. For RC4A, the average</p>
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		<p>vehicle/hour flow over 18 hours is 307 vehicles, and the total number of HGVs over 18 hours is 6. Accordingly, the RC4A fear and intimidation degree of hazard score is 20 (0+0+20), which equates to a 'Small' level of fear and intimidation. For DS34A, the average vehicle/hour flow over 18 hours is 267, and the total number of HGVs over 18 hours is 9. Accordingly, the DS4A fear and intimidation degree of hazard score is 20 (0+0+20), which equates to a 'Small' level of fear and intimidation. Therefore, there is no step change between scenarios and hence the impact is of <i>negligible magnitude</i>. As total traffic flows decrease between scenarios, this impact has been assessed as beneficial.</p> <p>There would be an decrease in traffic flows between the two scenarios, indicating a change in levels of congestion and delay on the link. The effects of this change in flows would primarily be realised at the western end of the link where a new junction would be constructed on Lords Lane in both scenarios. BTM modelling shows that the link approaching this new junction would operate at a maximum of 18% of capacity in the RC4A scenario, and at 12% of capacity in the DS4A scenario. The link would operate within capacity in both scenarios, and the change in operating capacity between the scenarios is slight. Thus, it is considered that this change in traffic flows vehicles would cause a beneficial, but <i>negligible magnitude</i> of impact in terms of driver delay between the scenarios.</p> <p>In terms of road user safety, the PIC analysis undertaken as part of the TA observed three collisions on Link 128 in the time period studied. Of these, two were serious and one was slight. The two serious incidents involved; a singular car travelling south west exiting the carriageway to the inside, and a car travelling south west on Lords Lane which moved to the offside crossing the centreline of the carriageway and colliding with a second car travelling north east. A third car travelling north east then collided with the rear of the second. The TA concluded three incidents in a five-year period does not indicate the presence of an underlying highway safety issue that would be exacerbated by the changes in traffic flows. Therefore, there would be no impact upon Road User and Pedestrian Safety on the link, and there would be <i>no change</i> in this criteria.</p>
	<b>Embedded Mitigation</b>	None
	<b>Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Neutral (No effect)</b></li> <li>• Driver Delay: <b>Neutral (No effect)</b></li> <li>• NMU Delay: <b>Neutral (No effect)</b></li> <li>• NMU Amenity: <b>Neutral (No effect)</b></li> <li>• Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
	<b>Additional Mitigation</b>	None
	<b>Effect of Travel Plan</b>	Not applied

	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Neutral (No effect)</b></li> <li>• Driver Delay: <b>Neutral (No effect)</b></li> <li>• NMU Delay: <b>Neutral (No effect)</b></li> <li>• NMU Amenity: <b>Neutral (No effect)</b></li> <li>• Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
<b>Link 134</b>  Alchester Road  <b>Sensitivity:</b>  High	<b>Potential Effects</b>	<ul style="list-style-type: none"> <li>• Severance: negligible magnitude (beneficial)</li> <li>• Driver Delay: negligible magnitude (beneficial)</li> <li>• NMU Delay: minor magnitude (beneficial)</li> <li>• NMU Amenity: minor magnitude (beneficial)</li> <li>• Fear and Intimidation: negligible magnitude (beneficial)</li> <li>• Road User and Pedestrian Safety: no change</li> </ul> <p>Link 134 comprises the Alchester Road, running between the Orchard Rise and Green Lane. The link is approximately 275m in length. The Chesterton C Of E Primary School is located nearby the link, which would be a significant generator of walking and cycling trips. The link benefits from footways on either side for its northern section. To the south of the link a footway is only present on the link's eastern edge. No formal pedestrian or cycle crossing points are provided. In terms of traffic flows between the RC4A and DS4A scenarios, Link 134 would be subject to an 16% reduction in 24-hour total vehicle traffic, equating to 458 vehicles. Based on the IEMA Guidelines this change in traffic flows, suggests a negligible magnitude of impact upon severance. The decrease in traffic flows equates to one fewer vehicle on the link approximately every 3 minutes on average, which would present as a minimal change for NMUs. Therefore, it is considered there would be a <i>negligible magnitude</i> impact in terms of severance in the DS4A scenario. As traffic flows decrease, this impact has been assessed as beneficial.</p> <p>In terms of NMU delay, there would frequent NMU trips across the link in both scenarios, as children walk to the nearby school. No formal crossing points are provided and NMUs would have to wait for gaps in the traffic. In the RC4A scenario, there would be 2849 vehicles on the link in a 24-hour period. This equates to an average of one vehicle passing a point on the link every 30 seconds, in either direction. In DS4A, this time would increase to 36 seconds. Therefore, there more opportunities for NMUs to cross the link, however, the change is slight. However, as frequent trips are expected, the impact is deemed to be beneficial, but of <i>minor magnitude</i>.</p> <p>HGV flows halve (53% reduction), and thus the impact upon NMU Amenity is deemed to be non-negligible in accordance with IEMA Guidelines. In terms of vehicle numbers, the decrease in traffic flows equates to one fewer vehicle in an 5-minute period. On average, there</p>

		<p>would be 1-2 fewer HGVs an hour on the link. This is a small change and thus it is considered that the conclusion that the impact is beneficial, but limited to <i>minor magnitude</i>, in terms of NMU Amenity.</p> <p>The link would be governed by a 20mph speed limit, and it considered that vehicles would average under 20mph in both scenarios. In RC4A the average vehicle/hour over 18 hours is 149 vehicles and the 18-hour HGVs is 73 vehicles. Accordingly, the RC4A fear and intimidation degree of hazard score is 0 (0+0+0), which equates to a 'Small' level of fear and intimidation. In DS4A the average vehicle/hour over 18 hours is 125 vehicles and the 18-hour HGVs is 34 vehicles. Accordingly, the DS4A fear and intimidation degree of hazard score is 0 (0+0+0), which equates to a 'Small' level of fear and intimidation. Therefore, there is no step change between scenarios and hence the impact is of <i>negligible magnitude</i>. As traffic flows reduce, this impact has been assessed as beneficial.</p> <p>Although there are no points on Link 134 where vehicles can make turning movements; there would be reduction in traffic flows between the two scenarios, indicating a change in levels of congestion and delay on the link. The BTM modelling shows that the link would operate at a maximum of 17% in the RC4A scenario, and at a maximum of 11% in the DS4A scenario. In both scenarios, the BTM modelling shows the link working within capacity, with minimal change between the maximum operating capacities. Therefore, overall, it is considered that there would be a beneficial <i>negligible magnitude</i> impact in terms of driver delay between the scenarios.</p> <p>In terms of road user safety, the PIC analysis undertaken as part of the TA identified one slight incident that occurred on Alchester Road. One incident in a 5-year period does not indicate an existing highway safety issue on the link that could be affected by a change in traffic flows and thus there would be no impact upon Road User and Pedestrian Safety on the link, and there would be <i>no change</i> in this criteria.</p>
	<p><b>Embedded Mitigation Effects (Significance)</b></p>	<p>None</p> <ul style="list-style-type: none"> <li>• Severance: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• Driver Delay: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• NMU Delay: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• NMU Amenity: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• Fear and Intimidation: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
	<p><b>Additional Mitigation</b></p>	<p>None</p>

	<b>Effect of Travel Plan</b>	Not applied
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• Driver Delay: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• NMU Delay: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• NMU Amenity: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• Fear and Intimidation: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
<p><b>Link 135</b></p> <p>Green Lane</p> <p><b>Sensitivity:</b></p> <p>Low</p>	<b>Potential Effects</b>	<ul style="list-style-type: none"> <li>• Severance: negligible magnitude (beneficial)</li> <li>• Driver Delay: negligible magnitude (beneficial)</li> <li>• NMU Delay: negligible magnitude (beneficial)</li> <li>• NMU Amenity: negligible magnitude (beneficial)</li> <li>• Fear and Intimidation: negligible magnitude (beneficial)</li> <li>• Road User and Pedestrian Safety: no change</li> </ul> <p>Link 135 comprises Green Lane which runs west from Chesterton for approximately 1500m to Wendlebury Road. There are limited WCH receptors adjacent the link other than within Chesterton where a few private dwellings and public house are adjacent the link. Few NMU trips would be expected across the link, other than within Chesterton where pedestrians following Green Lane would cross the link. In this location a two-stage crossing is provided. Elsewhere on the link no NMU specific infrastructure is provided. In terms of traffic flows between the RC4A and DS4A scenarios, Link 135 would be subject to an 7% reduction in 24-hour total vehicle traffic, equating to 353 vehicles. Based on the IEMA Guidelines this change in traffic flows suggests a negligible magnitude of impact upon severance. The decrease in traffic flows equates to one fewer vehicle on the link every 4 minutes on average, which would present as a minimal change for NMUs, especially given the presence of a two-stage crossing over Green Lane. Therefore, it is considered there would be a <i>negligible magnitude</i> impact in terms of severance in the DS4A scenario. As traffic flows decrease, this has been assessed as beneficial.</p> <p>In terms of NMU delay, there would be limited NMU trips across the link in both scenarios, apart from at Green Lane where a two-stage uncontrolled crossing is provided. Nevertheless, NMUs would have to wait for gaps in the traffic here also. In the RC4A scenario, there would be 5332 vehicles on the link in a 24-hour period. This equates to an average of one vehicle passing the crossing point on the link every 16 seconds. In DS4A, this time would increase to 17 seconds. Therefore, there more opportunities for NMUs to cross the link, however,</p>

		<p>the change is slight (1 second). Therefore, the impact is deemed to be beneficial, but of <i>negligible magnitude</i>.</p> <p>HGV flows halve and thus the impact upon NMU Amenity is deemed to be non-negligible in accordance with IEMA Guidelines. There is a reduction of 69 HGVs between the scenarios; equivalent to one less HGVe in an 3-minute period. On average, there would be 3 fewer HGVs an hour on the link. This is a minimal change and thus it is considered that the conclusion that there is a <i>negligible magnitude</i> impact in terms of NMU Amenity in the DS4A scenario is suitable. As HGV flows reduce, this impact has been assessed as beneficial.</p> <p>The link would be governed by the national (60mph) speed limit in both scenarios, although given the nature of the link it is expected that vehicles would average between 30mph and 40mph. In RC4A the average vehicle/hour over 18 hours is 280 vehicles and the 18-hour HGVs is 127 vehicles. Accordingly, the RC4A fear and intimidation degree of hazard score is 20 (0+0+20), which equates to a 'Small' level of fear and intimidation. In DS4A the average vehicle/hour over 18 hours is 261 vehicles and the 18-hour HGVs is 62 vehicles. Accordingly, the DS4A fear and intimidation degree of hazard score is 20 (0+0+20), which equates to a 'Small' level of fear and intimidation. Therefore, there is no step change between scenarios and hence the impact is of <i>negligible magnitude</i>. As traffic flows reduce, this impact has been assessed as beneficial.</p> <p>Although there are no points on Link 135 where vehicles can make turning movements; there would be reduction in traffic flows between the two scenarios, indicating a change in levels of congestion and delay on the link. The BTM modelling shows that the link would operate at a maximum of 25% in the RC4A scenario, and at a maximum of 22% in the DS4A scenario. In both scenarios, the BTM modelling shows the link working within capacity, with minimal change between the maximum operating capacities. Therefore, overall, it is considered that there would be a beneficial <i>negligible magnitude</i> impact in terms of driver delay between the scenarios.</p> <p>In terms of road user safety, the PIC analysis undertaken as part of the TA identified three slight incidents that occurred on Green Lane. There were no trends in location or causality between the incidents and three incidents in a 5-year period does not indicate an existing highway safety issue on the link that could be affected by a change in traffic flows. There would be no impact upon Road User and Pedestrian Safety on the link, and there would be <i>no change</i> in this criteria.</p>
	<p><b>Embedded Mitigation Effects (Significance)</b></p>	<p>None</p> <ul style="list-style-type: none"> <li>• Severance: <b>Neutral (No effect)</b></li> <li>• Driver Delay: <b>Neutral (No effect)</b></li> </ul>

		<ul style="list-style-type: none"> <li>• NMU Delay: <b>Neutral (No effect)</b></li> <li>• NMU Amenity: <b>Neutral (No effect)</b></li> <li>• Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
	<b>Additional Mitigation</b>	None
	<b>Effect of Travel Plan</b>	Not applied
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Neutral (No effect)</b></li> <li>• Driver Delay: <b>Neutral (No effect)</b></li> <li>• NMU Delay: <b>Neutral (No effect)</b></li> <li>• NMU Amenity: <b>Neutral (No effect)</b></li> <li>• Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
<p><b>Link 137</b></p> <p>A4095 between B430 and Bicester Golf Hotel</p> <p><b>Sensitivity:</b></p> <p>Low</p>	<b>Potential Effects</b>	<ul style="list-style-type: none"> <li>• Severance: negligible magnitude (beneficial)</li> <li>• Driver Delay: negligible magnitude (beneficial)</li> <li>• NMU Delay: negligible magnitude (beneficial)</li> <li>• NMU Amenity: negligible magnitude (beneficial)</li> <li>• Fear and Intimidation: negligible magnitude (beneficial)</li> <li>• Road User and Pedestrian Safety: no change</li> </ul> <p>Link 137 comprises the A4095 between the Golf Hotel and the B430. The link runs east to west approximately 2km. The link has no key WCH receptors adjacent to it, although benefits from a 2m footway for the eastern half of the link. In terms of traffic flows between the RC4A and DS4A scenarios, Link 137 would be subject to a 14% reduction in 24-hour total vehicle traffic, equating to 1053 vehicles. Based on the IEMA Guidelines this change in traffic flows, suggests a negligible magnitude of impact upon severance. There are no key WCH receptors adjacent the link and the decrease in traffic flows equates to one fewer vehicles on the link approximately every 2 minutes on average, which would present as a minimal change for NMUs. Therefore, there would be a <i>negligible magnitude</i> impact in terms of severance in the DS4A scenario. As traffic flows reduce, this impact has been assessed as beneficial.</p> <p>In terms of NMU delay, there would be limited NMU trips across the link in both scenarios. A formal crossing point is provided where the footway swaps from north to south of the link, although NMUs would have no notable reason to cross the link in any case. Nevertheless, NMUs would have to wait for gaps in the traffic. In the RC4A scenario, there would be 7388 vehicles on the link in a 24-hour period. This equates to an average of one vehicle passing a point on the link every 12 seconds, in either direction. In DS4A, this time would increase to 14 seconds. Therefore, there would be slightly more opportunities for NMUs to cross the link, however, as there would be few crossings of the link, the impact in terms of NMU delay is considered to be limited to be of <i>negligible magnitude</i>. As the opportunities for NMUs increase, this impact has been assessed as beneficial.</p>

		<p>In the DS4A scenario, total 24-hour vehicles and HGV flows do not halve nor double and therefore the changes in traffic flows are negligible in accordance with IEMA Guidelines. There would be a 35% reduction in HGV flows on the link (29 HGVs). On average, there would be 1-2 fewer HGVs an hour on the link. This is a minimal change, and it is considered that although beneficial, the impact would be limited to a <i>negligible magnitude</i>.</p> <p>The link would be governed by the national speed limit, and it is considered that vehicles would average over 40mph in both scenarios. In RC4A the average vehicle/hour over 18 hours is 387 vehicles and the 18-hour HGVs is 80 vehicles. Accordingly, the RC4A fear and intimidation degree of hazard score is 30 (0+0+30), which equates to a 'Moderate' level of fear and intimidation. In DS4A the average vehicle/hour over 18 hours is 332 vehicles and the 18-hour HGVs is 52 vehicles. Accordingly, the DS4A fear and intimidation degree of hazard score is 30 (0+0+30), which equates to a 'Moderate' level of fear and intimidation. Therefore, there is no step change between scenarios and hence the impact is of <i>negligible magnitude</i>. As traffic flow reduce, this impact has been assessed as beneficial.</p> <p>Although there are no points on Link 137 where vehicles can make turning movements; there would be reduction in traffic flows between the two scenarios, indicating a change in levels of congestion and delay on the link. The BTM modelling shows that the link would operate at a maximum of 29% in the RC4A scenario, and at a maximum of 19% in the DS4A scenario. In both scenarios, the BTM modelling shows the link working within capacity, and a slight change between the maximum operating capacities. Therefore, overall, it is considered that there would be a <i>negligible magnitude</i> impact in terms of driver delay between the scenarios. As traffic flows and the operating capacity reduces, this impact has been assessed as beneficial.</p> <p>In terms of road user safety, the PIC analysis undertaken as part of the TA did not include Link 137. Nevertheless, a review of a review of publicly available data (via crashmap.com) for the latest 5 years of available data (2020-2024), found no collisions that had occurred on the link and thus no indication of a highway safety issue on the link that could be affected by a change in traffic flows and thus there would be no impact upon Road User and Pedestrian Safety on the link, and there would be <i>no change</i> in this criteria.</p>
	<p><b>Embedded Mitigation Effects (Significance)</b></p>	<p>None</p> <ul style="list-style-type: none"> <li>• Severance: <b>Neutral (No effect)</b></li> <li>• Driver Delay: <b>Neutral (No effect)</b></li> <li>• NMU Delay: <b>Neutral (No effect)</b></li> <li>• NMU Amenity: <b>Neutral (No effect)</b></li> <li>• Fear and Intimidation: <b>Neutral (No effect)</b></li> </ul>

		<ul style="list-style-type: none"> <li>Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
	<b>Additional Mitigation</b>	None
	<b>Effect of Travel Plan</b>	Not applied
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>Severance: <b>Neutral (No effect)</b></li> <li>Driver Delay: <b>Neutral (No effect)</b></li> <li>NMU Delay: <b>Neutral (No effect)</b></li> <li>NMU Amenity: <b>Neutral (No effect)</b></li> <li>Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
<p><b>Link 141</b></p> <p>Upper Heyford Road between Camp Road and new Chilgrove Drive junction</p> <p><b>Sensitivity:</b></p> <p>Medium</p>	<b>Potential Effects</b>	<ul style="list-style-type: none"> <li>Severance: minor magnitude (adverse)</li> <li>Driver Delay: minor magnitude (beneficial)</li> <li>NMU Delay: minor magnitude (adverse)</li> <li>NMU Amenity: negligible magnitude (adverse)</li> <li>Fear and Intimidation: negligible magnitude (adverse)</li> <li>Road User and Pedestrian Safety: no change</li> </ul> <p>Between the RC4A and DS4A scenarios, Link 141 would be subject to a 48% increase in 24-hour total vehicle traffic. This equates to 3612 additional vehicles in a 24-hour period – or one additional vehicle every 24 seconds. IEMA Guidelines therefore suggest there would be a minor change in severance. Currently there are no notable WCH receptors to the south of the link and there is no regular need for NMUs to cross this link. Nevertheless, OxSRFI would generate WCH trips along this link in the DS4A scenario and constitutes a key WCH receptor. A committed footway and/or footway/cycleway would be provided to the north of the link, provided by a third party. Therefore, this change in traffic flows suggests a <i>minor magnitude</i> of impact on severance in the DS4A scenario. As traffic flows increase, this impact has been assessed as adverse.</p> <p>Similarly, the 48% increase in traffic flows indicates minor impact on NMU delay. In actual terms, this equates to 3612 additional vehicles in a 24-hour period – or one additional vehicle every 24 seconds. NMU movements across the link road are facilitated: at the eastern extent, the link road would tie in with the signalised junction constructed as part of Heyford Park, where a crossing would be provided. Consequently, there would be a <i>minor magnitude</i> adverse impact on NMU delay.</p> <p>No junctions are proposed on this link as part of the OxSRFI development, although at the eastern extent the link road would tie in with the signalised junction constructed as part of Heyford Park. BTM modelling shows that the link would operate at a maximum of 81% of capacity in the RC4A scenario decreasing to 35% of capacity in the DS4A scenario. The link would operate with spare capacity in both scenarios, with a moderate change between the RC4A and DS4A scenarios.</p>

		<p>Therefore, it is considered that there would be a <i>minor magnitude</i> beneficial impact on driver delay on this link.</p> <p>HGV flows double between the RC4A and DS4A scenarios, and therefore in terms of NMU Amenity the changes in traffic flows are non-negligible in accordance with IEMA Guidelines. HGV increase by 230%, and this increase comprises 352 HGVs in a 24-hour period, or approximately one extra every 4 minutes. This is not considered a significant increase and thus the impact on NMU Amenity would be of <i>negligible magnitude</i>. As traffic flows increase, this impact has been assessed as adverse.</p> <p>As Link 141 is situated between two junction, it is expected that vehicles would be travelling between 20mph and 30mph. This would be the same in both scenarios. For RC4A, the average vehicle/hour flow over 18 hours is 396 and the total number of HGVs over 18 hours is 145. Accordingly, the RC4A fear and intimidation degree of hazard score is 10 (0+0+10), which equates to a 'Small' level of fear and intimidation. For DS4A, the average vehicle/hour flow over 18 hours is 581 and the total number of HGVs over 18 hours is 479. Accordingly, the DS4A fear and intimidation degree of hazard score is 10 (0+0+10), which equates to a 'Small' level of fear and intimidation. Therefore, there is no step change between scenarios and hence the impact is suggested to be of <i>negligible magnitude</i>. As traffic flows increase, this impact has been assessed as adverse.</p> <p>As part of the collision records obtained for analysis within the TA, Link 141 was analysed for the 5-year period studied. No incidents were observed, and therefore there is no indication of an existing Road User and Pedestrian Safety Issue. Thus, there would be a <i>no change</i> of impact on conditions as a result of the proposals.</p>
	<b>Embedded Mitigation</b>	<p>The link would be replaced with the HPLR. At its eastern extent, the link road would tie in with the signalised junction constructed as part of Heyford Park. On the northern side of the carriageway a 5.2m segregated footway/cycleway would be provided alongside the link road. This will aid WCH traversing the route, where previously there was no provision.</p>
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Slight permanent adverse (No effect)</b></li> <li>• Driver Delay: <b>Slight permanent beneficial (No effect)</b></li> <li>• NMU Delay: <b>Slight permanent adverse (No effect)</b></li> <li>• NMU Amenity: <b>Slight permanent adverse (No effect)</b></li> <li>• Fear and Intimidation: <b>Slight permanent adverse (No effect)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
	<b>Additional Mitigation</b>	None

	<p><b>Effect of Travel Plan</b></p> <p><b>Residual Effects (Significance)</b></p>	<p>Not applied</p> <ul style="list-style-type: none"> <li>Severance: <b>Slight permanent adverse (No effect)</b></li> <li>Driver Delay: <b>Slight permanent beneficial (No effect)</b></li> <li>NMU Delay: <b>Slight permanent adverse (No effect)</b></li> <li>NMU Amenity: <b>Slight permanent adverse (No effect)</b></li> <li>Fear and Intimidation: <b>Slight permanent adverse (No effect)</b></li> <li>Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
<p><b>Link 144</b></p> <p>Church Lane (Weston-on-the-Green)</p> <p><b>Sensitivity:</b></p> <p>Very High</p>	<p><b>Potential Effects</b></p>	<ul style="list-style-type: none"> <li>Severance: negligible magnitude (adverse)</li> <li>Driver Delay: negligible magnitude (adverse)</li> <li>NMU Delay: negligible magnitude (adverse)</li> <li>NMU Amenity: negligible magnitude (adverse)</li> <li>Fear and Intimidation: negligible magnitude (adverse)</li> <li>Road User and Pedestrian Safety: no change</li> </ul> <p>Link 144 comprises Church Lane, between the B430 within Weston-on-the-Green and Stonehouse Farm. The link is approximately 1750m in length and mostly rural. Within Weston-on-the-Green however, several private dwellings front the link, with no specific NMU infrastructure serving them, although there is an intermittent footway at times. Outside of the Weston-on-the-Green, there are few WCH receptors, and although there would be limited WCH trips along or across the link, no infrastructure for NMUs is provided. In terms of traffic flows, between the RC4A and DS4A scenarios there would be a 69% increase in total vehicles on Link 144 and a 38% increase in HGV flows. This indicates (based on IEMA Guidelines) a moderate magnitude of impact upon severance. In terms of actual vehicles, this increase comprises 627 additional vehicles in a 24-hour period: the equivalent to one every 2 minutes on average. This is a small change and thus there would be a <i>negligible magnitude</i> adverse impact in terms of severance.</p> <p>In terms of NMU delay, as no crossings are provided over the link, pedestrians and cyclists would have to wait for gaps in the traffic to cross the link. Crossings would be most common in Weston-on-the-Green, where several WCH receptors are found adjacent the link. In the RC4A scenario there would 907 vehicles on the link in a 24-hour period. This equates to an average of one vehicle passing a point on the link every 95 seconds. In DS4A, this time would decrease to 56 seconds. Hence, there would be fewer opportunities for NMUs to cross the link, however, the change is slight and, in any case, there would be many opportunities to cross the link in either scenario. Consequently, the adverse impact upon NMU delay is deemed to be of <i>negligible magnitude</i>.</p> <p>In terms of NMU amenity, total vehicle flows and HGV flows do not double or halve, and thus there is a</p>

		<p>negligible impact in accordance with IEMA Guidelines. As traffic flows increase, this <i>negligible magnitude</i> impact has been assessed as adverse.</p> <p>For the majority of Link 144 the national (60mph) speed limit governs the link, albeit within Weston-on-the-Green where a 20mph limit is enforced. Given the rural, narrow nature of the link, it is considered that on average vehicles would be travelling between 30mph and 40mph in both scenarios. In RC4A the average vehicle/hour over 18 hours is 48 vehicles and the 18-hour HGVs is 192 vehicles. Accordingly, the RC4A fear and intimidation degree of hazard score is 20 (0+0+20), which equates to a 'Small' level of fear and intimidation. In the DS4A scenario the average vehicle/hour over 18 hours is 80 vehicles and the 18-hour HGVs is 264 vehicles. Accordingly, the DS4A fear and intimidation degree of hazard score is 20 (0+0+20), which equates to a 'Small' level of fear and intimidation. Therefore, there is no step change between scenarios and hence the impact is of <i>negligible magnitude</i>. As traffic flows increase, this impact has been assessed as adverse.</p> <p>In terms of driver delay, the BTM modelling shows the link would operate at a maximum of 7% of capacity in the RC4A scenario, increasing to 16% of capacity in the DS4A scenario. The link operates within capacity in both scenarios and there is a minimal change in operating capacity thus there would be a minimal impact on congestion or delay. Therefore, although adverse, the impact on driver delay on this link is considered to be of <i>negligible magnitude</i>.</p> <p>In terms of road user safety, the PIC analysis undertaken as part of the TA did not include Link 144. Instead, a review of publicly available data (via crashmap.com) for the latest 5 years of available data (2020-2024), found no collisions on the link. Thus, there is no indication of any underlying highway safety issue that could be worsened by the changes in traffic flows. Therefore, in the DS4A scenario, there is deemed to be <i>no change</i> in Road User and Pedestrian Safety on Link 144.</p>
	<p><b>Embedded Mitigation</b></p> <p><b>Effects (Significance)</b></p>	<p>None</p> <ul style="list-style-type: none"> <li>• Severance: <b>Slight permanent adverse (Not Significant)</b></li> <li>• Driver Delay: <b>Slight permanent adverse (Not Significant)</b></li> <li>• NMU Delay: <b>Slight permanent adverse (Not Significant)</b></li> <li>• NMU Amenity: <b>Slight permanent adverse (Not Significant)</b></li> <li>• Fear and Intimidation: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
	<p><b>Additional Mitigation</b></p>	<p>None</p>

	<b>Effect of Travel Plan</b>	Not applied
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Slight permanent adverse (Not Significant)</b></li> <li>• Driver Delay: <b>Slight permanent adverse (Not Significant)</b></li> <li>• NMU Delay: <b>Slight permanent adverse (Not Significant)</b></li> <li>• NMU Amenity: <b>Slight permanent adverse (Not Significant)</b></li> <li>• Fear and Intimidation: <b>Slight permanent adverse (Not Significant)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
<p><b>Link 145</b></p> <p>Stonehouse Farm (between Church Lane and B4027)</p> <p><b>Sensitivity:</b></p> <p>Low</p>	<b>Potential Effects</b>	<ul style="list-style-type: none"> <li>• Severance: negligible magnitude (adverse)</li> <li>• Driver Delay: negligible magnitude (adverse)</li> <li>• NMU Delay: negligible magnitude (adverse)</li> <li>• NMU Amenity: minor magnitude (adverse)</li> <li>• Fear and Intimidation: negligible magnitude (adverse)</li> <li>• Road User and Pedestrian Safety: no change</li> </ul> <p>Link 145 comprises Stonehouse Farm, between Church Lane and the B4027. The link is approximately 1150m in length and mostly rural, with limited WCH receptors adjacent to it. In terms of traffic flows, between the RC4A and DS4A scenarios there would be a 104% increase in total vehicles on Link 145. This indicates (based on IEMA Guidelines) a substantial magnitude of impact upon severance. In terms of actual vehicles, this increase comprises 282 additional vehicles in a 24-hour period: the equivalent to one every 5 minutes on average. This is a trivial change and thus the conclusion that there would be a <i>negligible magnitude</i> of impact in terms of severance on this link is suitable. As traffic flows increase, this impact has been assessed as adverse.</p> <p>In terms of NMU delay, as no crossings are provided over the link, pedestrians and cyclists would have to wait for gaps in the traffic to cross the B430. In the RC4A scenario there would be 270 vehicles on the link in a 24-hour period. This equates to an average of one vehicle passing a point on the link every 5-6 minutes. In DS4A, this time would decrease to 2-3 minutes. Hence, there would be fewer opportunities for NMUs to cross the link, however, the change is slight and, in any case, there would be many opportunities to cross the link in either scenario. Consequently, the impact upon NMU delay is deemed to be adverse but of <i>negligible magnitude</i>.</p> <p>In terms of NMU amenity, total vehicle traffic flows double. Therefore, the changes in flows are non-negligible in accordance with IEMA Guidelines. In the RC4A scenario there would be 270 vehicles on the link in a 24-hour period. This equates to an average of one vehicle passing a point on the link every 5-6 minutes and thus the impact of this change would have limited effect</p>

		<p>on NMU amenity. Therefore, while non-negligible, it is considered that there would be a <i>minor magnitude</i> adverse impact on NMU Amenity between the scenarios.</p> <p>For the majority of Link 145 the national (60mph) speed limit governs the link, and it is considered that vehicles would be averaging over 40mph in both scenarios. In RC4A the average vehicle/hour over 18 hours is 14 vehicles and the 18-hour HGVs is 192 vehicles. Accordingly, the RC4A fear and intimidation degree of hazard score is 30 (0+0+30), which equates to a 'Moderate' level of fear and intimidation. In the DS4A scenario the average vehicle/hour over 18 hours is 29 vehicles and the 18-hour HGVs is 264 vehicles. Accordingly, the DS4A fear and intimidation degree of hazard score is 30 (0+0+30), which equates to a 'Moderate' level of fear and intimidation. Therefore, there is no step change between scenarios and hence the impact is of <i>negligible magnitude</i>. As traffic flows increase, the impact has been assessed as adverse.</p> <p>In terms of driver delay, the BTM modelling shows the link would operate at a maximum of 6% of capacity in the RC4A scenario, increasing to 10% of capacity in the DS4A scenario. The link operates within capacity in both scenarios and there is a minimal change in operating capacity between them and thus there would be a minimal impact on congestion or delay. Therefore, the impact on driver delay on this link is considered to be of adverse <i>negligible magnitude</i>.</p> <p>In terms of road user safety, the PIC analysis undertaken as part of the TA did not include Link 145. Instead, a review of publicly available data (via crashmap.com) for the latest 5 years of available data (2020-2024), found one collision on the link. One collision in 5-year period does not indicate any underlying highway safety issue that could be worsened by the changes in traffic flows. Therefore, in the DS4A scenario, there is deemed to be <i>no change</i> in Road User and Pedestrian Safety on Link 145.</p>
	<p><b>Embedded Mitigation Effects (Significance)</b></p>	<p>None</p> <ul style="list-style-type: none"> <li>• Severance: <b>Neutral (No effect)</b></li> <li>• Driver Delay: <b>Neutral (No effect)</b></li> <li>• NMU Delay: <b>Neutral (No effect)</b></li> <li>• NMU Amenity: <b>Neutral (No effect)</b></li> <li>• Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
	<p><b>Additional Mitigation Effect of Travel Plan</b></p>	<p>None</p> <p>Not applied</p>
	<p><b>Residual Effects (Significance)</b></p>	<ul style="list-style-type: none"> <li>• Severance: <b>Neutral (No effect)</b></li> <li>• Driver Delay: <b>Neutral (No effect)</b></li> <li>• NMU Delay: <b>Neutral (No effect)</b></li> <li>• NMU Amenity: <b>Neutral (No effect)</b></li> </ul>

		<ul style="list-style-type: none"> <li>• Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
<p><b>Link 146</b></p> <p>B4027 between Stonehouse Farm and A34</p> <p><b>Sensitivity:</b></p> <p>Low</p>	<p><b>Potential Effects</b></p>	<ul style="list-style-type: none"> <li>• Severance: negligible magnitude (beneficial)</li> <li>• Driver Delay: negligible magnitude (beneficial)</li> <li>• NMU Delay: negligible magnitude (beneficial)</li> <li>• NMU Amenity: negligible magnitude (beneficial)</li> <li>• Fear and Intimidation: negligible magnitude (beneficial)</li> <li>• Road User and Pedestrian Safety: no change</li> </ul> <p>Between the RC4A and DS4A scenarios, Link 146 would be subject to a 18% reduction in 24-hour total vehicle traffic. This, based on IEMA Guidelines suggests a negligible impact upon severance. Link 146 comprises the B4027 north of the A43 to Stonehouse Farm. The link is approximately 650m in length and has no WCH receptors adjacent to it, other than a few private dwellings. No WCH specific infrastructure is provided on the link and NMUs would be unlikely to cross the link in both scenarios. In terms of actual vehicle numbers, there would be 1353 fewer vehicles on the link in a 24-hour period, the equivalent, on average, one fewer vehicle each minute. This is a minimal change and thus it is considered there would be a <i>negligible magnitude</i> of impact upon severance in DS4A. As traffic flows reduce, this impact has been assessed as beneficial.</p> <p>In terms of NMU delay, there would be limited NMU trips across the link in both scenarios. Nevertheless, any NMUs crossing the link would have to wait for gaps in the traffic. In the RC4A scenario, there would be 7650 vehicles on the link in a 24-hour period. This equates to an average of one vehicle passing a point on the link every 11 seconds, in either direction. In DS4A, this time would increase to 14 seconds. Therefore, there would be the more opportunities for NMUs to cross the link, although the change is slight, and thus the impact is deemed to <i>negligible magnitude</i> in terms of NMU delay and beneficial.</p> <p>Total vehicle and HGV flows do not double or halve, and thus the impact upon NMU amenity is deemed to be negligible in accordance with IEMA Guidelines. In terms of vehicle numbers, the decrease in traffic flows equates to one fewer vehicle in an 1 minute period. On average, there would be 1 additional HGVs an hour on the link. This is a slight change, and although total flows decrease, HGV flows increase. Nevertheless, it is considered that overall, there would be a <i>negligible magnitude</i> beneficial impact in terms of NMU Amenity in the DS4A scenario.</p> <p>In terms of driver delay, the BTM modelling shows the link would operate at a maximum of 55% of capacity in the RC4A scenario, decreasing to 47% of capacity in the DS4A scenarios). Both links operate within capacity and</p>

		<p>there is a limited change in operating capacity between scenarios, and thus there would be a minimal impact on congestion or delay. Therefore, the impact on driver delay on this link is considered to be beneficial and of <i>negligible magnitude</i>.</p> <p>Link 146 is subject to a 50mph speed limit, and vehicles would likely average over 40mph. This would be the case in both scenarios. For RC4A, the average vehicle/hour flow over 18 hours is 401 vehicles, and the total number of HGVs over 18 hours is 428. Accordingly, the RC4A fear and intimidation degree of hazard score is 30 (0+0+30), which equates to a 'Moderate' level of fear and intimidation. For DS4A, the average vehicle/hour flow over 18 hours is 330, and the total number of HGVs over 18 hours is 456. Accordingly, the DS4A fear and intimidation degree of hazard score is 30 (0+0+30), which equates to a 'Moderate' level of fear and intimidation. Therefore, there is no step change between scenarios and hence the impact is of <i>negligible magnitude</i>. As traffic flows decrease, this impact is assessed as beneficial.</p> <p>In terms of road user safety, the PIC analysis undertaken as part of the TA did not include Link 146. Instead, a review of publicly available data (via crashmap.com) for the latest 5 years of available data (2020-2024), found no collisions on the link. Thus, there is no indication of any underlying highway safety issue that could be worsened by the changes in traffic flows. Therefore, in the DS4A scenario, there is deemed to be <i>no change</i> in Road User and Pedestrian Safety on Link 146.</p>
	<b>Embedded Mitigation</b>	None
	<b>Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Neutral (No effect)</b></li> <li>• Driver Delay: <b>Neutral (No effect)</b></li> <li>• NMU Delay: <b>Neutral (No effect)</b></li> <li>• NMU Amenity: <b>Neutral (No effect)</b></li> <li>• Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
	<b>Additional Mitigation</b>	None
	<b>Effect of Travel Plan</b>	Not applied
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Neutral (No effect)</b></li> <li>• Driver Delay: <b>Neutral (No effect)</b></li> <li>• NMU Delay: <b>Neutral (No effect)</b></li> <li>• NMU Amenity: <b>Neutral (No effect)</b></li> <li>• Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
<b>Link 148</b>  Bicester Road between A4157 and	<b>Potential Effects</b>	<ul style="list-style-type: none"> <li>• Severance: negligible magnitude (adverse)</li> <li>• Driver Delay: negligible magnitude (adverse)</li> <li>• NMU Delay: negligible magnitude (adverse)</li> <li>• NMU Amenity: negligible magnitude (adverse)</li> <li>• Fear and Intimidation: negligible magnitude (adverse)</li> </ul>

<p>A413 (Aylesbury)</p> <p><b>Sensitivity:</b></p> <p>Medium</p>	<ul style="list-style-type: none"> <li>Road User and Pedestrian Safety: negligible magnitude (adverse)</li> </ul> <p>Between the RC4A and DS4A scenarios there would be a 3% increase in the total vehicles on Link 148. This indicates (in accordance with IEMA Guidelines) a negligible magnitude of impact upon severance. There are several WCH receptors adjacent the link, primarily within Aylesbury, although suitable infrastructure is provided here. Thus, there would be a <i>negligible magnitude</i> adverse impact upon severance and NMU delay in the DS4A scenario.</p> <p>Total vehicle traffic flows and HGV flows do not double between the two scenarios and thus the impact on NMU Amenity should be considered negligible. Frequent NMU trips along the link are expected, and suitable NMU infrastructure is provided including two uncontrolled two pedestrian crossings and a zebra crossing at both ends of the link. Although HGV flows increase moderately (66% increase); in actuality, this increase of HGVs comprises 526 HGVs, or the approximate equivalence of an additional HGV passing a point in either direction every two-three minutes. It is considered that an additional HGV in either direction every two minutes would only have a minimal impact on NMU amenity. Thus, the impact has been assessed as <i>negligible magnitude</i> and adverse.</p> <p>Link 148, in both scenarios, is governed by a 30mph speed limits and it is expected that on average vehicle speeds would be approximately 30mph, in both scenarios. In RC4A the average vehicle/hour over 18 hours is 787 vehicles and the 18-hour HGVs is 760 vehicles. Accordingly, the RC4A fear and intimidation degree of hazard score is 30 (10+0+20), which equates to a 'Moderate' level of fear and intimidation. In the DS4A scenario the average vehicle/hour over 18 hours is 803 vehicles and the 18-hour HGVs is 1172 vehicles. Accordingly, the DS4A fear and intimidation degree of hazard score is 40 (10+10+20), which equates to a 'Moderate' level of fear and intimidation. Therefore, there is no step change between scenarios and hence the impact is of <i>negligible magnitude</i>. As traffic flows increase, this impact has been assessed as adverse.</p> <p>The link is within the buffer zone of the BTM model meaning that V/C ratios are not available for interrogation. Nevertheless, there is a small increase (3%) in total vehicle traffic indicating a negligible impact on driver delay. Therefore, the impact has been assessed as adverse, and of <i>negligible magnitude</i>.</p> <p>In terms of road user safety, the PIC analysis undertaken as part of the TA did not include Link 148. Instead, a review of publicly available data (via crashmap.com) for the latest 5 years of available data</p>
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		(2020-2024), found several collisions on the link. However, there were no trends in location of these incidents, and this number of collisions is not indicative of an underlying highway safety issue that could be worsened by the changes in traffic flows. Therefore, in the DS4A scenario, the impact is deemed to be of <i>negligible magnitude</i> (adverse) of impact on Road User and Pedestrian Safety on Link 148.
	<b>Embedded Mitigation Effects (Significance)</b>	None <ul style="list-style-type: none"> <li>Severance: <b>Neutral (No effect)</b></li> <li>Driver Delay: <b>Neutral (No effect)</b></li> <li>NMU Delay: <b>Neutral (No effect)</b></li> <li>NMU Amenity: <b>Neutral (No effect)</b></li> <li>Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
	<b>Additional Mitigation Effect of Travel Plan</b>	None Not applied
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>Severance: <b>Neutral (No effect)</b></li> <li>Driver Delay: <b>Neutral (No effect)</b></li> <li>NMU Delay: <b>Neutral (No effect)</b></li> <li>NMU Amenity: <b>Neutral (No effect)</b></li> <li>Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
<b>Link 152</b>  B4027 between A34 on and off slips  <b>Sensitivity:</b>  Low	<b>Potential Effects</b>	<ul style="list-style-type: none"> <li>Severance: negligible magnitude (beneficial)</li> <li>Driver Delay: negligible magnitude (beneficial)</li> <li>NMU Delay: no change</li> <li>NMU Amenity: no change</li> <li>Fear and Intimidation: negligible magnitude (beneficial)</li> <li>Road User and Pedestrian Safety: no change</li> </ul> <p>Between the RC4A and DS4A scenarios, Link 152 would be subject to a 12% reduction in 24-hour total vehicle traffic. This, based on IEMA Guidelines suggests a negligible impact upon severance. Link 152 comprises the B4027 between the on/off slips to/from the A43. The link is short and no WCH receptors are adjacent. NMUs would be very unlikely to cross the link in both scenarios. Furthermore, the difference in traffic flows over 24 hours equates to -673 vehicles: a minimal number in absolute terms over 24 hours. Therefore, it is considered there would be a <i>negligible magnitude</i> of impact upon severance in DS4A. As traffic flows decrease, this impact has been assessed as beneficial.</p> <p>As NMUs would not cross the link in either scenario, there would also be a <i>no change</i> of impact on NMU delay and NMU amenity as a result of the change in traffic flows between RC4A and DS4A.</p> <p>BTM modelling shows the link would operate at a maximum of 24% of capacity in the RC4A scenario decreasing to 21% of capacity in the DS4A scenario. Both links operate within capacity and there is a limited</p>

		<p>change in operating capacity between scenarios and vehicle numbers, and thus there would be a minimal impact on congestion or delay. Therefore, the impact on driver delay on this link is considered to be of <i>negligible magnitude</i>. As traffic flows decrease, this impact has been assessed as beneficial.</p> <p>Link 152 is subject to a 50mph speed limit, and vehicles would likely average over 40mph. This would be the case in both scenarios. For RC4A, the average vehicle/hour flow over 18 hours is 292 vehicles, and the total number of HGVs over 18 hours is 299. Accordingly, the RC4A fear and intimidation degree of hazard score is 30 (0+0+30), which equates to a 'Moderate' level of fear and intimidation. For DS4A, the average vehicle/hour flow over 18 hours is 256, and the total number of HGVs over 18 hours is 317. Accordingly, the DS4A fear and intimidation degree of hazard score is 30 (0+0+30), which equates to a 'Moderate' level of fear and intimidation. Therefore, there is no step change between scenarios and hence the impact is of <i>negligible magnitude</i>. As traffic flows decrease, this impact has been assessed as beneficial.</p> <p>In terms of road user safety, the PIC analysis undertaken as part of the TA did not include Link 152. Instead, a review of publicly available data (via crashmap.com) for the latest 5 years of available data (2020-2024), found no collisions on the link. Thus, there is no indication of any underlying highway safety issue that could be worsened by the changes in traffic flows. Therefore, in the DS4A scenario, there is deemed to be <i>no change</i> in Road User and Pedestrian Safety on Link 152.</p>
	<b>Embedded Mitigation</b>	None
	<b>Effects (Significance)</b>	<ul style="list-style-type: none"> <li>Severance: <b>Neutral (No effect)</b></li> <li>Driver Delay: <b>Neutral (No effect)</b></li> <li>NMU Delay: <b>Neutral (No effect)</b></li> <li>NMU Amenity: <b>Neutral (No effect)</b></li> <li>Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
	<b>Additional Mitigation</b>	None
	<b>Effect of Travel Plan</b>	Not applied
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>Severance: <b>Neutral (No effect)</b></li> <li>Driver Delay: <b>Neutral (No effect)</b></li> <li>NMU Delay: <b>Neutral (No effect)</b></li> <li>NMU Amenity: <b>Neutral (No effect)</b></li> <li>Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
<b>Link 153</b> A34 northbound	<b>Potential Effects</b>	<ul style="list-style-type: none"> <li>Severance: negligible magnitude (beneficial)</li> <li>Driver Delay: negligible magnitude (beneficial)</li> <li>NMU Delay: no change</li> <li>NMU Amenity: no change</li> </ul>

<p>B4027 on and off slips</p> <p><b>Sensitivity:</b></p> <p>Low</p>	<ul style="list-style-type: none"> <li>• Fear and Intimidation: negligible magnitude (beneficial)</li> <li>• Road User and Pedestrian Safety: no change</li> </ul> <p>Between the RC4A and DS4A scenarios, Link 153 would be subject to a 10% reduction in 24-hour total vehicle traffic. This, based on IEMA Guidelines, therefore, suggests that there may be a negligible impact upon severance. However, Link 153 comprises an slip to/from the A43 from the B4027. The link is short and no WCH receptors are adjacent. NMUs would not cross the link in both scenarios. Furthermore, the difference in traffic flows over 24 hours equates to -528 vehicles and +11 HGVs: a minimal number in absolute terms. Therefore, it is considered there would be a <i>negligible magnitude</i> of impact in terms of severance in DS4A scenario. As total traffic flows decrease, this impact has been assessed as beneficial.</p> <p>As NMU would not cross the link in either scenario, there would also be a <i>no change</i> of impact on NMU delay and NMU amenity as a result of the change in traffic flows between RC4A and DS4A.</p> <p>In terms of driver delay, the BTM modelling shows that the link would operate at a maximum of 46% of capacity in the RC4A scenario decreasing to 43% of capacity in the DS4A scenario. There is a limited shift, and thus a limited impact on congestion or delay. Thus, the impact on driver delay on this link is considered to be beneficial, but of <i>negligible magnitude</i>.</p> <p>Link 153 is subject to the national speed limit, and vehicles would likely average over 40mph. This would be the case in both scenarios. For RC4A, the average vehicle/hour flow over 18 hours is 265 vehicles, and the total number of HGVs over 18 hours is 129. Accordingly, the RC4A fear and intimidation degree of hazard score is 30 (0+0+30), which equates to a 'Moderate' level of fear and intimidation. For DS4A, the average vehicle/hour flow over 18 hours is 237, and the total number of HGVs over 18 hours is 138. Accordingly, the DS4A fear and intimidation degree of hazard score is 30 (0+0+30), which equates to a 'Moderate' level of fear and intimidation. Therefore, there is no step change between scenarios and hence the impact is of <i>negligible magnitude</i>. As traffic flows decrease, this impact has been assessed as beneficial.</p> <p>In terms of road user safety, the PIC analysis undertaken as part of the TA did not include Link 153. Instead, a review of publicly available data (via crashmap.com) for the latest 5 years of available data (2020-2024), found no collisions on the link and thus there is no indication of an underlying highway safety issue that could be worsened by the changes in traffic flows. Therefore, in the DS4A scenario, there is deemed</p>
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		to be <i>no change</i> in Road User and Pedestrian Safety on Link 153.
	<b>Embedded Mitigation</b>	None
	<b>Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Neutral (No effect)</b></li> <li>• Driver Delay: <b>Neutral (No effect)</b></li> <li>• NMU Delay: <b>Neutral (No effect)</b></li> <li>• NMU Amenity: <b>Neutral (No effect)</b></li> <li>• Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
	<b>Additional Mitigation</b>	None
	<b>Effect of Travel Plan</b>	Not applied
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Neutral (No effect)</b></li> <li>• Driver Delay: <b>Neutral (No effect)</b></li> <li>• NMU Delay: <b>Neutral (No effect)</b></li> <li>• NMU Amenity: <b>Neutral (No effect)</b></li> <li>• Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
<p><b>Link 154</b></p> <p>A34 southbound B4027 on and off slips</p> <p><b>Sensitivity:</b></p> <p>Low</p>	<b>Potential Effects</b>	<ul style="list-style-type: none"> <li>• Severance: negligible magnitude (beneficial)</li> <li>• Driver Delay: negligible magnitude (adverse)</li> <li>• NMU Delay: no change</li> <li>• NMU Amenity: no change</li> <li>• Fear and Intimidation: negligible magnitude (beneficial)</li> <li>• Road User and Pedestrian Safety: no change</li> </ul> <p>Between the RC4A and DS4A scenarios, Link 154 would be subject to a 22% reduction in 24-hour total vehicle traffic and a 6% increase in HGV flows. This, based on IEMA Guidelines suggests a negligible impact upon severance. Link 154 comprises on/off slips to/from the A43 from the B4027. The link is short and no WCH receptors are adjacent. NMUs would not cross the link in both scenarios. Furthermore, the difference in traffic flows over 24 hours equates to -730 vehicles and +20 HGVs: a minimal number in absolute terms over 24 hours. Therefore, it is considered there would be a <i>negligible magnitude</i> of impact upon severance in DS4A. As total traffic flows decrease, this impact has been assessed as beneficial.</p> <p>Similarly, as NMUs would not cross the link in either scenario, there would also be a <i>no change</i> of impact on NMU delay and NMU amenity as a result of the change in traffic flows between the RC4A and DS4A scenarios.</p> <p>In terms of driver delay, the BTM modelling shows the link would operate at a maximum of 19% of capacity in the RC4A scenario decreasing to 24% of capacity in the DS4A scenario. Both links operate within capacity and there is a limited change in operating capacity between scenarios, and thus there would be a minimal impact on congestion or delay. Therefore, the impact on driver delay on this link is considered to be adverse but of <i>negligible magnitude</i>.</p>

		<p>Link 154 is subject to the national (60mph) speed limit, and vehicles would likely average over 40mph. This would be the case in both scenarios. For RC4A, the average vehicle/hour flow over 18 hours is 176 vehicles, and the total number of HGVs over 18 hours is 299. Accordingly, the RC4A fear and intimidation degree of hazard score is 30 (0+0+30), which equates to a 'Moderate' level of fear and intimidation. For DS4A, the average vehicle/hour flow over 18 hours is 138, and the total number of HGVs over 18 hours is 317. Accordingly, the DS4A fear and intimidation degree of hazard score is 30 (0+0+30), which equates to a 'Moderate' level of fear and intimidation. Therefore, there is no step change between scenarios and hence the impact is of <i>negligible magnitude</i>. As traffic flows decrease, this impact is assessed as beneficial.</p> <p>In terms of road user safety, the PIC analysis undertaken as part of the TA did not include Link 153. Instead, a review of publicly available data (via crashmap.com) for the latest 5 years of available data (2020-2024), found one serious collision on the link. One collision in a five-year period does not indicate any underlying highway safety issue that could be worsened by the changes in traffic flows. Therefore, in the DS4A scenario, there is deemed to be <i>no change</i> in Road User and Pedestrian Safety on Link 154.</p>
	<b>Embedded Mitigation</b>	None
	<b>Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Neutral (No effect)</b></li> <li>• Driver Delay: <b>Neutral (No effect)</b></li> <li>• NMU Delay: <b>Neutral (No effect)</b></li> <li>• NMU Amenity: <b>Neutral (No effect)</b></li> <li>• Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
	<b>Additional Mitigation</b>	None
	<b>Effect of Travel Plan</b>	Not applied
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Neutral (No effect)</b></li> <li>• Driver Delay: <b>Neutral (No effect)</b></li> <li>• NMU Delay: <b>Neutral (No effect)</b></li> <li>• NMU Amenity: <b>Neutral (No effect)</b></li> <li>• Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
<p><b>Link 157</b></p> <p>Charlotte Avenue</p> <p><b>Sensitivity:</b></p> <p>Medium</p>	<b>Potential Effects</b>	<ul style="list-style-type: none"> <li>• Severance: negligible magnitude (adverse)</li> <li>• Driver Delay: negligible magnitude (adverse)</li> <li>• NMU Delay: negligible magnitude (adverse)</li> <li>• NMU Amenity: negligible magnitude (adverse)</li> <li>• Fear and Intimidation: negligible magnitude (adverse)</li> <li>• Road User and Pedestrian Safety: no change</li> </ul> <p>Link 157 comprises the Charlotte Avenue within Elmsbrook. Several pedestrian crossing points are provided across the link, which is a residential access road. In terms of traffic flows between the RC4A and</p>

		<p>DS4A scenarios, Link 157 would be subject to a 1% increase in 24-hour total vehicle traffic, equating to 5 vehicles. There would be a 0% change in HGV flows on the link (0 HGVs). These changes are minimal and therefore there would be a <i>negligible magnitude</i> impact in terms of severance in the DS4A scenario. As total traffic flows increase, this impact has been assessed as adverse.</p> <p>In terms of NMU delay, there would frequent NMU trips across the link in both scenarios, as children walk to the nearby school. Several formal crossing points are provided, although these are uncontrolled and NMUs would have to wait for gaps in the traffic. In the RC4A scenario, there would be 831 vehicles on the link in a 24-hour period. This equates to an average of one vehicle passing a point on the link every 104 seconds, in either direction. In DS4A, this time would decrease to 103 seconds. Therefore, there more opportunities for NMUs to cross the link; however, the change is trivial and the impact can be assessed as a <i>negligible magnitude</i>, although adverse.</p> <p>Total flows and HGV flows do not double or halve, and thus the impact upon NMU amenity is deemed to be negligible in accordance with IEMA Guidelines. In terms of vehicle numbers there would be one additional vehicle approximately every five hours on the link. This is a minimal change and thus there would be an adverse but <i>negligible magnitude</i> in terms of NMU Amenity between the scenarios.</p> <p>The link would be governed by a 20mph speed limit, and it considered that vehicles would average under 20mph in both scenarios. In RC4A the average vehicle/hour over 18 hours is 44 vehicles and the 18-hour HGVs is 28 vehicles. Accordingly, the RC4A fear and intimidation degree of hazard score is 0 (0+0+0), which equates to a 'Small' level of fear and intimidation. In DS4A the average vehicle/hour over 18 hours is 44 vehicles and the 18-hour HGVs is 28 vehicles. Accordingly, the DS4A fear and intimidation degree of hazard score is 0 (0+0+0), which equates to a 'Small' level of fear and intimidation. Therefore, there is no step change between scenarios and hence the impact is of <i>negligible magnitude</i>. As total 24 hour traffic flows increase, there is an adverse impact.</p> <p>Although there are no points on Link 157 where vehicles can make turning movements; there would be reduction in traffic flows between the two scenarios, indicating a change in levels of congestion and delay on the link. The BTM modelling shows that the link would operate at a maximum of 6% in the RC4A scenario and would remain at 6% in the DS4A scenario. In both scenarios, the BTM modelling shows the link working within capacity, with minimal change between the maximum operating</p>
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		<p>capacities. Therefore, overall, it is considered that there would be <i>no change</i> in terms of driver delay between the scenarios.</p> <p>In terms of road user safety, the PIC analysis undertaken as part of the TA did not include Link 157. Instead, a review of publicly available data (via crashmap.com) for the latest 5 years of available data (2020-2024), found no collisions on the link. Therefore, there is nothing indicative of an underlying highway safety issue that would be affected by the changes in traffic flows and thus in the DS4A scenario, there is deemed to be <i>no change</i> in Road User and Pedestrian Safety on Link 157.</p>
	<b>Embedded Mitigation</b>	None
	<b>Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Neutral (No effect)</b></li> <li>• Driver Delay: <b>Neutral (No effect)</b></li> <li>• NMU Delay: <b>Neutral (No effect)</b></li> <li>• NMU Amenity: <b>Neutral (No effect)</b></li> <li>• Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
	<b>Additional Mitigation</b>	None
	<b>Effect of Travel Plan</b>	Not applied
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Neutral (No effect)</b></li> <li>• Driver Delay: <b>Neutral (No effect)</b></li> <li>• NMU Delay: <b>Neutral (No effect)</b></li> <li>• NMU Amenity: <b>Neutral (No effect)</b></li> <li>• Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
<p><b>Link 166</b></p> <p>B430 SB exit from Ardley Roundabout</p> <p><b>Sensitivity:</b></p> <p>Low</p>	<b>Potential Effects</b>	<ul style="list-style-type: none"> <li>• Severance: negligible magnitude (beneficial)</li> <li>• Driver Delay: negligible magnitude (beneficial)</li> <li>• NMU Delay: negligible magnitude (beneficial)</li> <li>• NMU Amenity: minor magnitude (beneficial)</li> <li>• Fear and Intimidation: negligible magnitude (beneficial)</li> <li>• Road User and Pedestrian Safety: minor magnitude (beneficial)</li> </ul> <p>Between the RC4A and DS4A scenarios there would be a 59% reduction in total vehicles on Link 166. This indicates (in accordance with IEMA Guidelines) a slight impact upon severance. However, in terms on NMU demand, there are no WCH receptors adjacent the link and the B430 is not a desire line for pedestrians in this location. Therefore, it is considered that there would be a beneficial, but <i>negligible magnitude</i> of impact upon severance in the DS4A scenario on Link 166.</p> <p>In terms of NMU delay, as no crossings are provided over the link, pedestrians and cyclists would have to wait for gaps in the traffic to cross the B430. However, there are no WCH receptors adjacent the link and although this reduction in total traffic volumes would help to reduce crossing times for NMUs, very few crossings are</p>

	<p>expected. For those travelling along the link, the reduction would have small impact. Thus, given the limited number of NMUs that would cross the link, it is considered that the reduction in traffic flows would have a beneficial, but <i>negligible magnitude</i> impact on NMu delay.</p> <p>In terms of NMu amenity, no footways are provided on Link 166. HGV flows are expected to halve, and therefore the changes in total traffic flows are non-negligible in accordance with IEMA Guidelines. Nevertheless, limited WCH trips are expected on or across the link and so the impact of this change would have limited effect. The 85% reduction in HGV flows equates to 228 HGVs, or an average of one fewer every six minutes. The 59% reduction in total vehicle flows equates to 4424 HGVs, or an average of one fewer every 20 seconds. It is considered that the reduction in traffic flows would have a beneficial, but of <i>minor magnitude</i> impact on NMu amenity.</p> <p>Link 166, in both scenarios, would be governed by the national speed limit, and it is considered that on average vehicles would be travelling in excess of 40mph in both scenarios. In RC4A the average vehicle/hour over 18 hours is 383. vehicles and the 18-hour HGVs is 249 vehicles. Accordingly, the RC4A fear and intimidation degree of hazard score is 30 (0+0+30), which equates to a 'Moderate' level of fear and intimidation. In the DS4A scenario the average vehicle/hour over 18 hours is 152 vehicles and the 18-hour HGVs is 38 vehicles. Accordingly, the DS4A fear and intimidation degree of hazard score is 30 (0+0+30), which equates to a 'Moderate' level of fear and intimidation. Therefore, there is no step change in level and thus the impact on fear and intimidation can be considered to be of <i>negligible magnitude</i>. As traffic flows decrease, this impact has been assessed as beneficial.</p> <p>The stopping up of the B430 to the south would reduce traffic flows on this link, in turn reducing delay for drivers. To the north, Ardley Roundabout is subject to a substantial redesign as part of the embedded highway mitigation work, aimed at reducing congestion and driver delay on the network. In the RC4A, the link would operate at 46% of capacity (PM peak), compared to at a maximum of 19% of capacity (PM peak) in the DS4A scenario. There is a decrease in operating capacity, although the link operates with spare capacity in both scenarios. Therefore, there would be a beneficial, but <i>negligible magnitude</i> of impact in terms of driver delay.</p> <p>In terms of road user safety, the PIC analysis undertaken as part of the TA identified no collisions within the vicinity of Link 166. The analysis concluded that there is no underlying collision problem on the B430 in this location. Nevertheless, the reduction in traffic</p>
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		flows would improve safety conditions for road users and pedestrians. This beneficial impact is deemed to be of <i>minor magnitude</i> of impact on road user safety.
	<b>Embedded Mitigation</b>	None
	<b>Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Neutral (No effect)</b></li> <li>• Driver Delay: <b>Neutral (No effect)</b></li> <li>• NMU Delay: <b>Neutral (No effect)</b></li> <li>• NMU Amenity: <b>Neutral (No effect)</b></li> <li>• Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
	<b>Additional Mitigation</b>	None
	<b>Effect of Travel Plan</b>	Not applied
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Neutral (No effect)</b></li> <li>• Driver Delay: <b>Neutral (No effect)</b></li> <li>• NMU Delay: <b>Neutral (No effect)</b></li> <li>• NMU Amenity: <b>Neutral (No effect)</b></li> <li>• Fear and Intimidation: <b>Neutral (No effect)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
<p><b>Link 180</b></p> <p>Hethe Road between A421 and Cottisford</p> <p><b>Sensitivity:</b></p> <p>High</p>	<b>Potential Effects</b>	<ul style="list-style-type: none"> <li>• Severance: negligible magnitude (beneficial)</li> <li>• NMU Delay: negligible magnitude (beneficial)</li> <li>• NMU Amenity: negligible magnitude (beneficial)</li> <li>• Fear and Intimidation: negligible magnitude (beneficial)</li> <li>• Driver Delay: negligible magnitude (beneficial)</li> <li>• Road User and Pedestrian Safety: no change</li> </ul> <p>Link 180 comprises Hethe Road between Cottisford and the A421. The link runs in a north/south direction for approximately 2.7km. For the majority of the link, the road is rural and has limited WCH receptors adjacent to it. Nevertheless, the route is not wide and has no NMU infrastructure. While limited WCH trips would be expected along or across most of the link, there are several private dwellings within Cottisford residents of which would routinely walk on the carriageway of the link. In terms of traffic flows, between the RC4A and DS4A scenarios, the link would be subject to an 33% reduction in 24-hour total vehicle traffic: indicating a slight magnitude of impact upon severance, based on IEMA Guidelines. In absolute terms, there would be 2229 vehicles on the link in the RC4A scenario, equivalent to one every 39 seconds on average. This number of vehicles is not sufficient to cause a severance effect, in either scenario. In the DS4A scenario, there would be 1498 vehicles, equivalent to a vehicle every 57 seconds. Thus, between the scenarios, there would be a limited change in the opportunities to cross the link and therefore the impact is deemed to be beneficial, but of <i>negligible magnitude</i> in terms of severance and NMU delay.</p> <p>In terms of NMU amenity, neither total traffic flows or HGV flows halve, and thus IEMA Guidelines indicate the impact is potentially negligible. The reduction in total</p>

		<p>vehicles comprises 731 vehicles, or the equivalent of one less every 2 minutes, on average. This would not provide a notable change in the experience of pedestrians and cyclists on the link, and thus the conclusion that there would be a <i>negligible magnitude</i> beneficial impact on NMU amenity is suitable.</p> <p>The link would be governed by the national (60mph) speed limit for its majority, and a 30mph limit within Cottisford. Overall, it is considered that vehicles would average over 40mph in both scenarios. In RC4A the average vehicle/hour over 18 hours is 117 vehicles and the 18-hour HGVs is 0 vehicles. Accordingly, the RC4A fear and intimidation degree of hazard score is 30 (0+0+30), which equates to a 'Moderate' level of fear and intimidation. In DS4A the average vehicle/hour over 18 hours is 79 vehicles and the 18-hour HGVs is 0 vehicles. Accordingly, the DS4A fear and intimidation degree of hazard score is 30 (0+0+30), which equates to a 'Moderate' level of fear and intimidation. Therefore, there is no step change between scenarios and hence the impact is of <i>negligible magnitude</i> (beneficial).</p> <p>In terms of driver delay, there is a change of traffic flows that suggests a potential impact upon congestion and driver delay on the link. BTM modelling shows the link operating at a maximum of 36% of capacity in the RC4A scenario, and at 23% of capacity in the DS4A scenario. In both cases the link would operate well within capacity and there is a limited change between scenarios. Therefore, there would be a beneficial, but <i>negligible magnitude</i> impact in terms of driver delay.</p> <p>In terms of road user safety, the PIC analysis undertaken as part of the TA did not include the link. Instead, a review of the last five years of publicly available data (accessed via crashmap.com) found one collision on the link. The incident was fatal and involved one vehicle and with one casualty. There is no indication of an underlying highway safety issue that influenced the collision, and in-any-case, one collision in a five-year period does not imply the presence of a collision problem. Therefore, there is no issue that would be affected by the changes in traffic flows and thus in the DS4A scenario, there is deemed to be <i>no change</i> in Road User and Pedestrian Safety on Link 180.</p>
	<b>Embedded Mitigation</b>	None
	<b>Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• Driver Delay: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• NMU Delay: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• NMU Amenity: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• Fear and Intimidation: <b>Slight permanent beneficial (Not Significant)</b></li> </ul>

		<ul style="list-style-type: none"> <li>Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
	<b>Additional Mitigation</b>	None
	<b>Effect of Travel Plan</b>	Not applied
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>Severance: <b>Slight permanent beneficial (Not Significant)</b></li> <li>Driver Delay: <b>Slight permanent beneficial (Not Significant)</b></li> <li>NMU Delay: <b>Slight permanent beneficial (Not Significant)</b></li> <li>NMU Amenity: <b>Slight permanent beneficial (Not Significant)</b></li> <li>Fear and Intimidation: <b>Slight permanent beneficial (Not Significant)</b></li> <li>Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
<p><b>Link 186</b></p> <p>Middleton Road, Bucknell</p> <p><b>Sensitivity:</b></p> <p>Very High</p>	<b>Potential Effects</b>	<ul style="list-style-type: none"> <li>Severance: negligible magnitude (beneficial)</li> <li>NMU Delay: negligible magnitude (beneficial)</li> <li>NMU Amenity: negligible magnitude (beneficial)</li> <li>Fear and Intimidation: negligible magnitude (beneficial)</li> <li>Driver Delay: negligible magnitude (beneficial)</li> <li>Road User and Pedestrian Safety: no change</li> </ul> <p>Middleton Road is a sensitive link within Bucknell, running for approximately 160m between New Row and the loading point adjacent School Paddock. Several private dwellings are found adjacent the link and no footways are provided, and pedestrians would walk on the carriageway of Middleton Road in both scenarios. In terms of traffic flows, between the RC4A and DS4A scenarios, the link would be subject to an 31% reduction in 24-hour total vehicle traffic: indicating a slight magnitude of impact upon severance, based on IEMA Guidelines. In absolute terms, there would be 3844 vehicles on the link in the RC4A scenario, equivalent to one every 22 seconds on average. In the DS4A scenario, there would be 2658 vehicles, equivalent to one every 33 seconds. This is not a volume of vehicles that would give rise to any notable severance effect and there would remain sufficient gaps in traffic to cross the link. Thus, between the scenarios, there would be a small change in the opportunities to cross the link and therefore the impact is deemed to be beneficial, but of <i>negligible magnitude</i> in terms of severance and NMU delay.</p> <p>In terms of NMU amenity, neither total traffic flows nor HGV flows halve or double, and thus IEMA Guidelines indicate the impact is potentially negligible. The reduction in total vehicles comprises 1186 vehicles, or the equivalent of one fewer vehicle every one-two minutes, on average. There would be no HGVs on the link in either scenario. The reduction in traffic flows would not provide a substantial change in the experience for pedestrians and cyclists on the link, and</p>

		<p>thus the conclusion that there would be a <i>negligible magnitude</i> beneficial impact on NMU amenity is suitable.</p> <p>The link would be governed by a 20mph speed limit, and it considered that vehicles would average under 20mph in both scenarios. In RC4A the average vehicle/hour over 18 hours is 201 vehicles and the 18-hour HGVs is 0 vehicles. Accordingly, the RC4A fear and intimidation degree of hazard score is 0 (0+0+0), which equates to a 'Small' level of fear and intimidation. In DS4A the average vehicle/hour over 18 hours is 139 vehicles and the 18-hour HGVs is 0 vehicles. Accordingly, the DS4A fear and intimidation degree of hazard score is 0 (0+0+0), which equates to a 'Small' level of fear and intimidation. Therefore, there is no step change between scenarios and hence the impact is of <i>negligible magnitude</i> (beneficial).</p> <p>In terms of driver delay, there is a change of traffic flows that suggests a potential impact upon congestion and driver delay on the link. BTM modelling shows the link operating at a maximum of 19% of capacity in the RC4A scenario, and at 12% of capacity in the DS4A scenario. In both cases the link would operate well within capacity and there is limited change between scenarios. Therefore, there would be a <i>negligible magnitude</i> beneficial impact in terms of driver delay.</p> <p>In terms of road user safety, the PIC analysis undertaken as part of the TA found no collisions on the link. Therefore, there is nothing indicative of an underlying highway safety issue that would be affected by the changes in traffic flows and thus in the DS4A scenario, there is deemed to be <i>no change</i> in Road User and Pedestrian Safety on Link 186.</p>
	<p><b>Embedded Mitigation Effects (Significance)</b></p>	<p>None</p> <ul style="list-style-type: none"> <li>• Severance: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• Driver Delay: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• NMU Delay: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• NMU Amenity: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• Fear and Intimidation: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
	<p><b>Additional Mitigation</b></p>	<p>Embedded highway work which would be constructed in the DS4A scenario has been modelled in the BTM. In the DS4A scenario, the MSRR is constructed, thus eliminating a potential rat-running effect discussed within the DS2A scenario. Nevertheless, in the DS2A scenario, said effect was successfully mitigated through other means, not accounted for in the BTM embedded mitigation. Primarily, the works to Middleton Road to reallocate road space over the M40 by implementing</p>

		<p>traffic signals on Middleton Road for shuttle working, and the reduction of the Middleton Road speed limit to 40mph, which would slow vehicles and increase journey times. Further detailed analysis of this is provided within the TA.</p> <p>In the DS4A scenario, this additional mitigation is not required to eliminate the rat-running issue, but would remain in place, nevertheless. Thus, traffic flows through Bucknell, and Link 186 may be reduced further – although this has not accounted for within the residual effects below.</p>
	<b>Effect of Travel Plan</b>	Not applied
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• Driver Delay: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• NMU Delay: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• NMU Amenity: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• Fear and Intimidation: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
<p><b>Link 199</b></p> <p>The Hale between A41 and Green Lane</p> <p><b>Sensitivity:</b></p> <p>Very High</p>	<b>Potential Effects</b>	<ul style="list-style-type: none"> <li>• Severance: negligible magnitude (beneficial)</li> <li>• NMU Delay: negligible magnitude (beneficial)</li> <li>• NMU Amenity: negligible magnitude (beneficial)</li> <li>• Fear and Intimidation: negligible magnitude (beneficial)</li> <li>• Driver Delay: negligible magnitude (beneficial)</li> <li>• Road User and Pedestrian Safety: no change</li> </ul> <p>Link 199 comprises, 'The Hale' between the A41 and Green Lane, a stretch of approximately 1.5km. The link is mostly rural, albeit from where it passes through the village of Little Chesterton where several private dwellings front to the link. Further, the link is narrow (and signed as a single-track road) and no NMU specific infrastructure is provided. In terms of traffic flows, between the RC4A and DS4A scenarios, the link would be subject to an 41% decrease in 24-hour total vehicle traffic: indicating a slight magnitude of impact upon severance, based on IEMA Guidelines. In absolute terms, there would be 832 vehicles on the link in the RC4A scenario, equivalent to one vehicle every 104 seconds on average. In the DS4A scenario, there would be 493 vehicles, equivalent to one vehicle every 175 seconds on average. Thus, between the scenarios, there would be limited change in the opportunities to cross the link and therefore the impact is deemed to be beneficial, but of <i>negligible magnitude</i> in terms of severance and NMU delay.</p> <p>In terms of NMU amenity, total traffic flows do not halve – indeed there is a 41% reduction, however the data</p>

		<p>suggests there would be three HGVs on the link in the DS4A scenario: with none in the DS4A scenario. Therefore, based on IEMA Guidelines, the impact could be considered non-negligible. However, this increase in HGV traffic is trivial and likely to conjecture of the model, which includes a distribution of OxSRFI HGV traffic by population centroids; and thus, when used to interpret effects as forensically as this, does not provide a complete view. In actuality, no HGVs would route via this link and there would be no HGV traffic on this link in either scenario. Thus, there may be a slight improvement in NMU amenity as a result of the reduction in total vehicle flows; and overall, the impact has been assessed as a beneficial impact, but of <i>negligible magnitude</i>.</p> <p>The link would be governed by the national (60mph) speed limit, although given the narrow nature of the link, it is considered that vehicles would average between 30mph and 40mph on the link in both scenarios. In RC4A the average vehicle/hour over 18 hours is 44 vehicles and the 18-hour HGVs is 0 vehicles. Accordingly, the RC4A fear and intimidation degree of hazard score is 20 (0+0+20), which equates to a 'Small' level of fear and intimidation. In DS4A the average vehicle/hour over 18 hours is 26 vehicles and the 18-hour HGVs is 2 (0 in reality) vehicles. Accordingly, the DS4A fear and intimidation degree of hazard score is 20 (0+0+20), which equates to a 'Small' level of fear and intimidation. Therefore, there is no step change between scenarios and hence the impact is of <i>negligible magnitude</i> (beneficial).</p> <p>In terms of driver delay, there is a change of traffic flows that suggests a potential impact upon congestion and driver delay on the link. BTM modelling shows the link operating at a maximum of 8% of capacity in the RC4A scenario, and at 6% of capacity in the DS4A scenario. In both cases the link would operate well within capacity and there is no change between scenarios. Therefore, there would be a beneficial impact of <i>negligible magnitude</i> in terms of driver delay.</p> <p>In terms of road user safety, the PIC analysis undertaken as part of the TA identified a notable incident concern at the Green Lane/The Hale crossroads (at the links) northern most point with vehicles entering the junction from the northern minor arm into the path of vehicles travelling west on the mainline flow. Four incidents occurred during the period studied, three slight and one serious. The serious collision involved a car travelling south on The Hale entering the junction into the path of a car travelling east on Green Lane. The accident occurred in wet and light conditions. The other incidents occurred during similar circumstances. While there is a potential collision accident problem at this junction, there is a slight decrease on traffic flows on this</p>
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		link. It is not considered that this would have a substantial impact on the incident rate at this junction, which is currently less than one a year. Overall, there is deemed to be a beneficial impact on Road User and Pedestrian Safety on Link 199, of <i>negligible magnitude</i> .
	<b>Embedded Mitigation Effects (Significance)</b>	None
	<b>Additional Mitigation Effect of Travel Plan</b>	None
	<b>Residual Effects (Significance)</b>	Not applied
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• Driver Delay: <b>Neutral (No effect)</b></li> <li>• NMU Delay: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• NMU Amenity: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• Fear and Intimidation: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• Road User and Pedestrian Safety: <b>Slight permanent beneficial (Not Significant)</b></li> </ul>
<b>Link 206</b>  Middleton Road, Bucknell  <b>Sensitivity:</b>  Very High	<b>Potential Effects</b>	<ul style="list-style-type: none"> <li>• Severance: negligible magnitude (beneficial)</li> <li>• NMU Delay: negligible magnitude (beneficial)</li> <li>• NMU Amenity: negligible magnitude (beneficial)</li> <li>• Fear and Intimidation: negligible magnitude (beneficial)</li> <li>• Driver Delay: negligible magnitude (beneficial)</li> <li>• Road User and Pedestrian Safety: no change</li> </ul> <p>Middleton Road is a sensitive link within Bucknell, running for approximately 30m between the entries/exits of New Row, south of the link. Private dwellings are found north of the link and no footways are provided. Thus, pedestrians would walk on the carriageway of Middleton Road in both scenarios. In terms of traffic flows, between the RC4A and DS4A scenarios, the link would be subject to a 31% reduction in 24-hour total vehicle traffic: indicating a slight magnitude of impact upon severance, in accordance with IEMA Guidelines. In absolute terms, there would be 3844 vehicles on the link in the RC4A scenario, equivalent to one every 22 seconds on average. In the DS4A scenario, there would be 2658 vehicles, equivalent to one every 33 seconds. This is not a volume of vehicles that would give rise to any notable severance effect and there would remain sufficient gaps in traffic to cross the link. Thus, between the scenarios, there would be a slight change in the</p>

		<p>opportunities to cross the link and therefore the impact is deemed to be beneficial, but of <i>negligible magnitude</i> in terms of severance and NMU delay.</p> <p>In terms of NMU amenity, neither total traffic flows nor HGV flows halve or double, and thus IEMA Guidelines indicate the impact is potentially negligible. There are no HGVs on the link in either scenario. The reduction in total vehicles comprises 1186 vehicles, or the equivalent of one fewer vehicle every one-two minutes, on average. This would not provide a substantial change in the experience of pedestrians and cyclists on the link, and thus the conclusion that there would be a <i>negligible magnitude</i> beneficial impact on NMU amenity is suitable.</p> <p>The link would be governed by a 20mph speed limit, and it considered that vehicles would average under 20mph in both scenarios. In RC4A the average vehicle/hour over 18 hours is 201 vehicles and the 18-hour HGVs is 0 vehicles. Accordingly, the RC4A fear and intimidation degree of hazard score is 0 (0+0+0), which equates to a 'Small' level of fear and intimidation. In DS4A the average vehicle/hour over 18 hours is 139 vehicles and the 18-hour HGVs is 0 vehicles. Accordingly, the DS4A fear and intimidation degree of hazard score is 0 (0+0+0), which equates to a 'Small' level of fear and intimidation. Therefore, there is no step change between scenarios and hence the impact is of <i>negligible magnitude</i> (beneficial).</p> <p>In terms of driver delay, there is a change of traffic flows that suggests a potential impact upon congestion and driver delay on the link. BTM modelling shows the link operating at a maximum of 19% of capacity in the RC4A scenario, and at 12% of capacity in the DS4A scenario. In both cases the link would operate well within capacity and there is limited change between scenarios. Therefore, there would be a <i>negligible magnitude</i> beneficial impact in terms of driver delay.</p> <p>In terms of road user safety, the PIC analysis undertaken as part of the TA found one collision on the link. Therefore, there is nothing indicative of an underlying highway safety issue that would be affected by the changes in traffic flows and thus in the DS4A scenario, there is deemed to be <i>no change</i> in Road User and Pedestrian Safety on Link 206.</p>
	<p><b>Embedded Mitigation Effects (Significance)</b></p>	<p>None</p> <ul style="list-style-type: none"> <li>• Severance: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• Driver Delay: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• NMU Delay: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• NMU Amenity: <b>Slight permanent beneficial (Not Significant)</b></li> </ul>

		<ul style="list-style-type: none"> <li>• Fear and Intimidation: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>
	<b>Additional Mitigation</b>	<p>Embedded highway work which would be constructed in the DS4A scenario has been modelled in the BTM. In the DS4A scenario, the MSRR is constructed, thus eliminating a potential rat-running effect discussed within the DS2A scenario. Nevertheless, in the DS2A scenario, said effect was successfully mitigated through other means, not accounted for in the BTM embedded mitigation. Primarily, the works to Middleton Road to reallocate road space over the M40 by implementing traffic signals on Middleton Road for shuttle working, and the reduction of the Middleton Road speed limit to 40mph, which would slow vehicles and increase journey times. Further detailed analysis of this is provided within the TA.</p> <p>In the DS4A scenario, this additional mitigation is not required to eliminate the rat-running issue, but would remain in place, nevertheless. Thus, traffic flows through Bucknell, and Link 206 may be reduced further – although this has not accounted for within the residual effects below.</p>
	<b>Effect of Travel Plan</b>	Not applied
	<b>Residual Effects (Significance)</b>	<ul style="list-style-type: none"> <li>• Severance: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• Driver Delay: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• NMU Delay: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• NMU Amenity: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• Fear and Intimidation: <b>Slight permanent beneficial (Not Significant)</b></li> <li>• Road User and Pedestrian Safety: <b>Neutral (No effect)</b></li> </ul>