

Cambridgeshire County Council Road Safety Audit Response Sheet

Project name	C2C Cambourne to Cambridge				
Audit Number & Stage	1				
Date:	Date of Report: 27th February 2023	Date of Response:19 th June 2023	Date of meeting to discuss and agree actions: 25 th August 2023		
Prepared by:	WSP				
On behalf of:	Greater Cambridge Partnership				

Road safety audit decision log

#	RSA Problem	Recommendation	Designer Organisation Response	Overseeing Organisation Response	Agreed Action(s)
1.1	<p>Location: General</p> <p>Summary: Maintenance bays on the busways presents a risk of collision between maintenance vehicles and buses.</p> <p>Provision of maintenance laybys throughout the scheme will requires the maintenance vehicles to enter into the busway with no clear exit. Whilst it is feasible these staff may be permitted to proceed along the busway to a safe exit (not shown) the likelihood is that such users will 'U' turn on the busway and risk collision with a bus turning into the busway.</p>	As a minimum, clarify a safe system of access and egress for maintenance staff servicing the proposed signals.	<p>Agreed</p> <p>This recommendation will be taken forward as part of the subsequent design stages following the submission of the TWAO.</p> <p>Further details and confirmation of the final guidance mode for the busway would need to be confirmed before the locations and access arrangements for the maintenance bays can be finalised.</p> <p>Method statements and safe systems of work covering the use of the maintenance bays would be developed before they come into operation.</p>		
1.2	<p>Location: General</p> <p>Summary: Proposed controlled junctions.</p> <p>Controlled junctions and crossings have been shown in many locations throughout the proposed scheme. No details have been provided at this stage relating to the provision of High Friction Surfacing (HFS). An absence of HFS could increase the risk of rear end shunt, loss of control or collisions with pedestrians using the controlled crossings as a result of vehicles braking sharply on the approach to the signals.</p>	It is recommended that High Friction Surfacing (HFS) or a wearing course with a PSV value of 68+ should be provided on the approaches to the proposed controlled junctions and crossings.	<p>Agreed</p> <p>This recommendation will be taken forward as part of the subsequent design stages following the submission of the TWAO.</p> <p>High PSV surface course (68+) may be sufficient at many of the junctions when taking the expected traffic flows into account. The condition of any existing road surfaces that are proposed to be used as a potential substrate for the application of HFS will need to be assessed for suitability.</p>		
1.3.	<p>Location: General.</p> <p>Summary: Risk of road users leaving the carriageway or travel path down the embankment. No cross-section or vertical alignment detail has been provided for the busway corridor and adjacent NMU travel path throughout the scheme. It is unclear from the information provided whether barriers would be required to protect road users from the adjacent steep embankments.</p>	it is recommended that an assessment should be undertaken (RRRAP or other) throughout the scheme to identify the need for safety barriers to prevent vehicles and NMU's from the embankment.	<p>Agreed</p> <p>This recommendation will be taken forward as part of the subsequent design stages following the submission of the TWAO.</p> <p>Some allowances have already been included in the verge widths of the outline design to accommodate VRS on the approaches to the proposed structures.</p> <p>Further details and confirmation of the final guidance mode for the busway would need to be confirmed before a risk-</p>		

	<p>Failure to provide any barriers could lead to vehicles, pedestrians or cyclists falling down the embankment resulting in injury.</p>		<p>based assessment for the provision of vehicle restraints can be undertaken.</p> <p>The limits of deviation will provide sufficient flexibility to accommodate any additional vehicle or pedestrian restraint requirements identified in the subsequent design stages.</p>		
1.4	<p>Location: St Neots Road west of Highfields Roundabout</p> <p>Summary: Proposed 40mph speed limit. A 330m length of 40mph speed limit is proposed on St Neots Road to encompass both approaches to the proposed busway signalised junction.</p> <p>Providing a 40mph length to encompass the busway crossing is unlikely to achieve compliance and at the current time, this length of A1303 is a popular overtaking length in Cambridgeshire's rural network owing to its improved forward visibility and clear verges. Failure to achieve the proposed 40mph is likely to make the proposed signals ineffective and dangerous risking red-light running and overshoot type collisions.</p>	<p>Public highways should have speed limits that are clear, self-enforcing and self-evident to drivers. To achieve this clear national guidance is given in Circular 01/13 Setting Local Speed Limits published by DfT with speeds recorded as stipulated in CA185. This has supporting guidance produced by the Police Federation. Controlled junctions with the busway route should be appropriately designed to an equivalent speed limit and not more than 85kph to comply with visibility requirements of TSM Chapter 6.</p>	<p>Agreed</p> <p>Cambridgeshire Constabulary (Derek Crosby, TM Officer and Peter Wood, TM Officer) and Cambridgeshire County Council (Sharon Piper, Policy and Regulation Manager) have been consulted on the proposed speed limit changes on the highway.</p> <p>The proposed speed limits in this area have been rationalised and a 50mph buffer has been introduced on the eastbound approach from St Neots Road to bring vehicle speeds down in stages to aid compliance.</p> <p>Cambridgeshire Constabulary and Cambridgeshire County Council have confirmed their agreement in principle for the revised speed limit proposals.</p>		
1.5	<p>Location: St Neots Road west of Dry Dayton Roundabout</p> <p>Summary: No maintenance access shown to service balancing pond risking maintenance vehicles waiting on-carriageway obscuring signals and crossing movements.</p> <p>No maintenance access shown to service balancing pond risking maintenance vehicles waiting on-carriageway or on the proposed travel path obscuring signals and route for pedestrian and cycles using the travel path and crossings. These activities, therefore, risk increasing the risk of collisions at the proposed signal junction.</p>	<p>Ensure safe and direct access is provided for maintenance staff to access the proposed balancing pond from the highway network.</p>	<p>Agreed</p> <p>A maintenance access from St Neots Road has been included in the outline design. This will be taken forward and developed further as part of the subsequent design stages following the submission of the TWAO.</p>		
1.6	<p>Location: St Neots Road tie-in to busway route and Busway route north of St Neots Road.</p> <p>Summary: Risk of NMUs (cyclists in particular) being forced off the embankment and entering the balancing pond.</p> <p>No cross-section or vertical alignment detail has been provided for the busway corridor and adjacent NMu route. It is believed protection will be needed in this area to protect pedestrians and cyclists using the travel path from the adjacent steep embankment and</p>	<p>it is recommended that barriers should be included to prevent pedestrians from the embankment and balancing pond.</p>	<p>Partly Agreed</p> <p>Any potential hazards adjacent to the cycle route shall be subject to a risk assessment to determine the need for protective measures as part of the subsequent design stages following the submission of the TWAO.</p> <p>The limits of deviation will provide sufficient flexibility to accommodate any additional cycle/pedestrian restraint requirements identified in the subsequent design stages.</p>		

	balancing pond. Failure to provide any barriers could lead to pedestrians and cyclists falling down the embankment into the balancing pond resulting in injury or death.				
1.7	<p>Location: St Neots Road leaving Dry Drayton junction with A428.</p> <p>Summary: Risk of westbound cyclists being struck as they cross eastbound flows to turn right into the proposed travel path alongside the busway.</p> <p>Phase 1 of the signals shows free flow for eastbound traffic. Westbound cyclists staying on-carriageway will need to cross the ahead vehicles to wait for Phase 2 and cross safely into the proposed travel path alongside the busway. Less confident cyclists are catered for through the connection from Old St Neots Road to the south however no provision has been provided for cyclists on St Neots Road to join the travel path alongside the busway.</p>	It is recommended that the proposed design includes for westbound cyclists to leave the carriageway to the nearside to enable them to use the crossing facility provided giving them access to the proposed travel path.	<p>Agreed</p> <p>This recommendation will be taken forward as part of the subsequent design stages following the submission of the TWAO.</p> <p>Consideration should be given to inclusion of a dropped/flush kerb and additional area of footway construction to provide an opportunity for cyclists to exit the carriageway in advance of the crossing.</p>		
1.8	<p>Location: A1303 St Neots Road west of Dry Drayton Interchange.</p> <p>Summary: Absence of street lighting risks collisions and overshoots at proposed crossing.</p> <p>Provision of a controlled crossing without street lighting in an area that lies adjacent to a lit area risks drivers failing to approach the crossing safely. Westbound drivers may accelerate leaving the 40mph limit and overshoot the signals or fail to allow for a vehicle waiting at the signals – in either case crossing movements are at risk of collision. Eastbound drivers, particularly after dark are likely to struggle to clearly see crossing movements with lighting behind them and fail to adjust their progress to stop as needed.</p>	Extend the street lighting to include the proposed signalised junction and crossing.	<p>Agreed</p> <p>This recommendation will be taken forward as part of the subsequent design stages following the submission of the TWAO.</p> <p>Lighting will be designed to provide the requisite levels of illumination at each of the proposed junctions, taking any potential environmental constraints into account.</p>		
1.9	<p>Location: St Neots Road junction with Meridian Close.</p> <p>Summary: Absence of tactile paving could lead to vehicle collisions with pedestrians or cyclists.</p> <p>During the site visit it was observed that there is an absence of tactile paving at the junction of Meridian Close and St Neots Road. The proposed scheme sees the travel path running through this junction which could increase the number of pedestrians and cyclists crossing at this location. This increases the likelihood of a collision between a vehicle and a pedestrian/cyclist at this location particularly a blind</p>	It is recommended that tactile paving should be provided at the junction of St Neots Road and Meridian Close.	<p>Agreed</p> <p>This recommendation will be taken forward as part of the subsequent design stages following the submission of the TWAO.</p> <p>Tactile paving will be provided on this and all other junctions as appropriate in accordance with the relevant standards and guidance.</p>		

	or partially sighted pedestrian who relies on tactile paving to warn them they are about to enter a carriageway.				
1.10	<p>Location: St Neots Road travel path link.</p> <p>Summary: Level difference could lead to pedestrian or cyclist injury.</p> <p>During the site visit it was observed that there is a level difference across the land between the two St Neots Roads at the location where a travel path link is proposed to connect the two. No details have been provided on the expected levels and whether there would be a requirement for barriers or fencing to prevent pedestrians or cyclists from injury should they veer off the travel path. This problem would be exacerbated by the absence of street lighting along this travel path link.</p>	It is recommended that an assessment should be undertaken to assess the need for barrier or fencing along the proposed travel path link path.	<p>Agreed</p> <p>Any potential hazards adjacent to the cycle route shall be subject to a risk assessment to determine the need for protective measures as part of the subsequent design stages following the submission of the TWAO.</p> <p>The limits of deviation will provide sufficient flexibility to accommodate any additional cycle/pedestrian restraint requirements identified in the subsequent design stages.</p>		
1.11	<p>Location: Park and Ride site.</p> <p>Summary: Absence of tactile paving could lead to vehicle collisions with pedestrians or cyclists.</p> <p>The drawings provided show an absence of tactile paving across one of the internal access roads of the park and road car park. The proposed scheme sees the travel path running through this road which could lead to a collision between a vehicle and a pedestrian/cyclist at this location particularly a blind or partially sighted pedestrian who relies on tactile paving to warn them they are about to enter a carriageway.</p>	It is recommended that dropped kerbs and tactile paving should be provided at the internal road of the park and ride site where the travel path crosses.	<p>Agreed</p> <p>This recommendation will be taken forward as part of the subsequent design stages following the submission of the TWAO.</p> <p>Tactile paving will be provided on this and all other junctions as appropriate in accordance with the relevant standards and guidance.</p>		
1.12	<p>Location: Park and Ride site Maintenance Bay.</p> <p>Summary: Maintenance vehicles could collide with other vehicles when entering or exiting the maintenance bay.</p> <p>The drawings provided show proposed maintenance bay to the north side of the park and ride access road just to the east of the junction with Scotland Road. This maintenance bay is located close to the junction and concern arises that a vehicle entering or exiting the bay may be at risk of collisions with vehicles turning into the park and ride access road from Scotland Road</p>	It is recommended that the maintenance bay is relocated further away from the signalled junction within the park and ride site.	<p>Agreed</p> <p>This recommendation will be taken forward as part of the subsequent design stages following the submission of the TWAO.</p> <p>An alternative location for the maintenance bay within the park and ride site should be explored to keep the risks as low as reasonably practicable.</p>		
1.13	Location: Scotland Road approaching Dry Drayton junction with A428.	it is recommended that the design should provide an adequate weaving length based upon vehicle	<p>Partly Agreed</p> <p>This recommendation will be taken forward as part of the subsequent design stages following the submission of the TWAO.</p>		

	<p>Summary: Inadequate length for traffic to switch between lanes risks side-swipe collisions.</p> <p>A 30mph speed limit is proposed to cover the access/egress location for the proposed P&R site. In the event that the traffic speeds are relatively high between the park and ride site and the A428 roundabout, there is a concern that the length may be inadequate to safely accommodate all weaving movements. Limitations on this weaving length risks both sideswipe and potential shunt collisions as drivers attempt to change into the correct lane.</p>	<p>movements to prevent vehicle collisions.</p>	<p>Considering the proposed road layout and speed limits in this area, traffic speeds are anticipated to be low between the park and ride site and the A428 roundabout. However, it is accepted that there is a potential for conflicts occurring in this area due to lane changing manoeuvres on the approach to the A428 roundabout.</p>		
1.14	<p>Location: Scotland Road at Dry Drayton junction with A428.</p> <p>Summary: Inadequate protection for NMUs crossing the A428 on shared use route could lead to vehicle collisions with pedestrians/cyclists.</p> <p>The parapet between these roundabouts on the overbridge is only some 1,100mm high. Whilst sufficient for traffic due to the wide offset from the carriageway it does not comply the minimum required for adjacent safe pedestrian or cyclist use of this route. At the current time there is a risk either type of NMU could cross the parapet and fall onto the trunk road, incurring serious or fatal injuries. Placement of a new P&R site as proposed with a direct NMU route crossing the trunk road in this location can reasonably be expected to increase the number of these users.</p>	<p>Development of the P&R site on Scotland Road with an NMU route leading to the A1303 St Neots Road in Hardwick requires this NMU route to be constructed to a safe standard for these users. The parapet on the eastern crossing of Dry Drayton interchange needs to be replaced with an appropriate height feature of at least 1.3m but preferably 1.6m. A RRRAP assessment is needed to determine details of features compliant with CD377 in this location.</p>	<p>Agreed</p> <p>This recommendation will be taken forward as part of the subsequent design stages following the submission of the TWAO.</p> <p>Replacing the existing parapet with one appropriate for cyclists and pedestrians has already been discussed with National Highways, who have confirmed this is acceptable in principle, provided that the appropriate technical approval processes are followed in the subsequent design stages.</p>		
1.15	<p>Location: Travel path on the north side of St Neots Road.</p> <p>Summary: Level difference could lead to pedestrian or cyclist injury.</p> <p>During the site visit it was observed that there is a level difference to the rear of the proposed travel path extension in two locations along the northern side of St Neots Road. No details have been provided on the expected levels and whether there would be a requirement for barriers or fencing to prevent pedestrians or cyclists from injury should they veer off the rear of the travel path.</p>	<p>It is recommended that an assessment should be undertaken to assess the need for barrier or fencing along the rear of the travel path at these locations.</p>	<p>Agreed</p> <p>Any potential hazards adjacent to the cycle route shall be subject to a risk assessment to determine the need for protective measures as part of the subsequent design stages following the submission of the TWAO.</p>		
1.16	<p>Location: Travel path on the north side of St Neots Road.</p> <p>Summary: Absence of separation strip could lead to pedestrian or cyclist injury.</p>	<p>It is recommended that a minimum 0.5m separation strip should be provided in line with CD195 and LTN 1/20</p>	<p>Partly Agreed</p> <p>This recommendation will be taken forward as part of the subsequent design stages following the submission of the TWAO.</p>		

	<p>The drawings provided show an absence of separation strip between the travel path and carriageway along the northern side of St Neots Road. This leaves pedestrians and cyclists travelling along the travel path closer to the edge of carriageway leaving them at risk of being clipped by the wingmirror of a passing vehicle particularly a larger HGV.</p>		<p>Additional horizontal separation should be provided, land constraints permitting. However, the final layout will need to be accommodated within the existing highway boundary.</p>		
1.17	<p>Location: St Neots Road to the west of Howells Way.</p> <p>Summary: Proximity of crossing to junction could lead to vehicle collisions with users of the crossing.</p> <p>The drawings provided show a proposed signalised crossing on St Neots Road to the west of Howells Way. It is unclear to the Audit Team the exact location of the crossing in relation to Howells Way and whether this may lead to vehicle collisions with pedestrians or cyclists using the crossing due to the close proximity of the junction.</p>	<p>It is recommended that the location of the crossing is confirmed in line with Howells Way and relocated further away from the junction if necessary.</p>	<p>Agreed</p> <p>This recommendation will be taken forward as part of the subsequent design stages following the submission of the TWAO.</p> <p>Howells Way is a recent development that was not picked up on the topographical survey or the OS mapping used for the outline design. The crossing point has been relocated further away from the junction but will need to be reviewed against an updated topographical survey in the subsequent design stages.</p>		
1.18	<p>Location: St Neots Road junction with Cambridge Road.</p> <p>Summary: Absence of uncontrolled crossing facilities could lead to vehicle collisions with pedestrians or cyclists.</p> <p>The drawings provided show the proposed travel path on the southern side of St Neots Road crossing Cambridge Road whereby no uncontrolled crossing facilities in the form of dropped kerb or tactile paving have been proposed. This could lead to vehicle collisions with pedestrians particularly blind or partially sighted who rely on the tactile paving to locate a safe place to cross and to warn them they are about to enter a live carriageway. In addition to this, it is unclear to the Audit Team how wide the crossing path is across Cambridge Road. A crossing width of over 10m could lead to pedestrian collisions with vehicles due to the extended time it would take pedestrians to cross the road.</p>	<p>It is recommended that uncontrolled crossing facilities in the form of dropped kerbs and tactile paving are provided at Cambridge Road and all other side roads throughout the scheme.</p>	<p>Agreed</p> <p>This recommendation will be taken forward as part of the subsequent design stages following the submission of the TWAO.</p> <p>Tactile paving and dropped kerbs will be provided on this and all other junctions as appropriate in accordance with the relevant standards and guidance.</p>		
1.19	<p>Location: Cambridge Road, Coton</p> <p>Summary: Risk of visually impaired crossing into carriageway or busway and being struck by a vehicle.</p> <p>'L' shaped tactile paving associated with the signalised crossings is proposed around the Cambridge Road busway junction. The 'L' stick of the tactile paving does not extend to the back of the</p>	<p>It is recommended that the tactile paving 'L' stick extends to the back of the footway.</p>	<p>Agreed</p> <p>This recommendation will be taken forward as part of the subsequent design stages following the submission of the TWAO.</p> <p>Tactile paving will be provided on this and all other junctions as appropriate in accordance with the relevant standards and guidance.</p>		

	<p>footway whereby pedestrians, in particular the blind or partially sighted, could struggle to locate the tactile paving provided leaving them unable to find the proposed push-button locations. This could lead to pedestrians attempting to cross away from the crossing provided resulting in collisions with vehicles.</p>				
1.20	<p>Location: Grange Road at proposed busway tie-in.</p> <p>Summary: Vehicle tracking could lead to vehicles colliding with pedestrians or cyclists.</p> <p>The drawing provided shows buses turning left from Grange Road onto the busway are shown to pass close to adjacent shared-use routes and whilst turning may overrun the travel path leading to collisions with pedestrians or cyclists on the footway or waiting at the tactile paving at this location.</p>	<p>It is recommended that there should be additional space for the bus to make the left turn without encroaching onto the proposed travel path.</p>	<p>Partly Agree</p> <p>This recommendation will be taken forward as part of the subsequent design stages following the submission of the TWAO.</p> <p>There are land constraints around the Grange Road junction which necessitate the use of more compact junction geometry at this location. A strategic decision was made not to compulsorily acquire any land from Clare Hall at this location as to do so may potentially put the scheme in jeopardy. Land take from the Rugby Club on the opposite side of the junction needs to be kept to a minimum to limit the impacts on its activities and to avoid material detriment.</p> <p>The swept path analysis completed at the outline design stage demonstrates that buses will be able to negotiate the junction without overhanging the footways around the junction. The swept path analysis will be reviewed in further detail in the subsequent stages and opportunities for refinement of the junction geometry within the available land constraints will be explored.</p>		
1.21	<p>Location: Grange Road at proposed busway tie-in.</p> <p>Summary: Property access could lead to collisions with pedestrians and cyclists.</p> <p>The property immediately to the northwest of the proposed junction, part of Clare College, has a direct access onto the carriageway in this location. It is unclear to the Audit Team how this access will be incorporated within the proposed design. The proposed design would currently require vehicles to overrun the travel path and tactile paving to gain access whilst also having to negotiate the signal equipment such as traffic signal poles. Vehicles using this access risk collisions with pedestrians and cyclists or collisions with vehicles on Grange Road.</p>	<p>it is recommended that the design should maintain a safe or alternative access arrangement into the existing property.</p>	<p>Agree</p> <p>This recommendation will be taken forward as part of the subsequent design stages following the submission of the TWAO.</p> <p>There are land constraints around the Grange Road junction which necessitate the use of more compact junction geometry at this location. A strategic decision was made not to compulsorily acquire any land from Clare Hall at this location as to do so may potentially put the scheme in jeopardy. Land take from the Rugby Club on the opposite side of the junction needs to be kept to a minimum to limit the impacts on its activities and to avoid material detriment.</p> <p>If the existing access needs to be retained suitable dropped kerbs would need to be provided. Consideration should also be given to the use of alternative tactile paving materials (e.g., stick down or small element block paving) in any areas potentially subject to vehicle overrun. The traffic signals equipment would need to be suitably located to accommodate the movements of vehicles using the access.</p> <p>The use of alternative secure fencing which may help to improve intervisibility should be considered. However, any alternative fencing would also need to be suitable from an aesthetic point of view given the Conservation Area status.</p>		

			<p>The use of convex safety mirrors to improve drivers' visibility when exiting the access should be considered.</p> <p>The use of an automated gate system to avoid the need for vehicles entering/exiting the access to stop and manually operate the gates should be considered.</p> <p>Consideration should be given to removing the proposed NMU crossing point on the north arm of the junction and the potential use of physical barriers, deterrent paving, low level planting or other measures to encourage NMU's to use the crossing on the south arm of the junction.</p> <p>A safe system of work covering the use of the access would also need to be developed in conjunction with Clare Hall.</p>		
1.22	<p>Location: Grange Road at proposed busway tie-in.</p> <p>Summary: Restricted visibility to the left for NMUs and vehicles could increase the risk of collisions.</p> <p>The property immediately to the northwest of the proposed junction, part of Clare College, has a 2.0m high close-boarded fence at the rear of the footway that obscures vision to and of vehicles and NMUs approaching the signals from the north. If the signals failed, this could lead to side impact collisions with buses leaving the busway or collisions between vehicles and pedestrians.</p>	<p>A junction envelope should be provided and maintained with clear unrestricted visibility through the junction.</p>	<p>Partly Agree</p> <p>This recommendation will be taken forward as part of the subsequent design stages following the submission of the TWAO.</p> <p>There are land constraints around the Grange Road junction which necessitate the use of more compact junction geometry at this location. A strategic decision was made not to compulsorily acquire any land from Clare Hall at this location as to do so may potentially put the scheme in jeopardy. Land take from the Rugby Club on the opposite side of the junction needs to be kept to a minimum to limit the impacts on its activities and to avoid material detriment.</p> <p>The outline design proposes to limit movements at the junction. Buses will only be permitted to turn right at the junction when joining Grange Road and left when joining the busway.</p> <p>The use of alternative secure fencing which may help to improve intervisibility should be considered. However, any alternative fencing would also need to be suitable from an aesthetic point of view given the Conservation Area status.</p> <p>The use of convex safety mirrors to improve drivers' visibility to the left should be considered.</p> <p>A departure from standard will be required for substandard intervisibility at this junction.</p>		
1.23	<p>Location: Grange Road at proposed busway tie-in.</p> <p>Summary: Removal of pedestrian guardrail could lead to pedestrian collisions with vehicles.</p> <p>Pedestrians use the gated egress from Kings School lies opposite the proposed busway link. This is currently protected with pedestrian guard rail to</p>	<p>it is recommended that the existing pedestrian guardrail should be reinstated as part of the works.</p>	<p>Partly Agreed</p> <p>The decision to retain or remove the existing guardrail shall be subject to a risk assessment as part of the subsequent design stages following the submission of the TWAO.</p> <p>Further details on the usage/operation of the gated egress from Kings School will be required to accurately assess the risks. If large groups of students regularly congregate on</p>		

	<p>assist with ensuring pedestrians associated with the school do not stray into Grange Road carriageway. the drawings provided to not detail whether this guardrail is to be reinstated as part of the scheme. The removal of the guardrail could lead to pedestrian collisions with vehicles.</p>		<p>the footway the existing guardrail may help to prevent them from inadvertently stepping out into the carriageway. However, if that is not the case it may be difficult to justify retaining the existing guardrail at this location as it does not appear to be serving any useful purpose.</p>		
1.24	<p>Location: Grange Road at proposed busway tie-in.</p> <p>Summary: Vehicle collisions with pedestrians using the crossings as a result of the narrow carriageway.</p> <p>The proposed busway tie-in on Grange Road is to be signalised. For north and southbound vehicles on Grange Road, there is a narrowing of the carriageway to the north of the busway which restricts two vehicles from passing each other at this location, particularly larger vehicles. This could lead to vehicles passing the signals on a green light and being stuck within the junction whilst they give way to an oncoming vehicle. If the signals were to change this could result in a pedestrian using one of the controlled crossings on a green man and being struck by a vehicle as it continues its journey once the oncoming vehicle has passed.</p>	<p>it is recommended that the carriageway should be widened to allow two vehicles to pass each other at this location.</p>	<p>Partly Agree</p> <p>This recommendation will be taken forward as part of the subsequent design stages following the submission of the TWAO.</p> <p>There are land constraints around the Grange Road junction which necessitate the use of more compact junction geometry at this location. A strategic decision was made not to compulsorily acquire any land from Clare Hall at this location as to do so may potentially put the scheme in jeopardy. Land take from the Rugby Club on the opposite side of the junction needs to be kept to a minimum to limit the impacts on its activities and to avoid material detriment.</p> <p>Balancing the use of the available space between the carriageway and footways at the pinch point will be assessed further as part of the subsequent design stages. If it is not possible to provide the requisite width for two vehicles to pass each other and the risks are not considered tolerable or broadly acceptable, then it may be necessary to consider alternative signal phasing/staging to remove the potential conflict.</p>		

Design organisation statement:

On behalf of the design organisation, I certify that the actions identified in response to the road safety audit problems in this safety audit have been discussed and agreed with the Overseeing Organisation.

Name: Ben Newman _____

 Expired certificate

X Ben Newman

Signed:

Signed by: ben.newman@wsp.com

Position: Associate (C2C Design Coordinator) _____

Organisation: WSP _____

Date: 29/08/2023 _____

Overseeing organisation statement

On behalf of the overseeing organisation, I certify that:

- (1) the actions identified in response to the road safety audit problems in this safety audit have been discussed and agreed with the design organisation; and
- (2) the agreed actions will be progressed.

Name: David Mitchell _____

X _____

Signed:

Position: Team Leader Infrastructure MID _____

Organisation: Cambridgeshire County Council _____

Date: 29/08/2023 _____
