

Prescot to Cronton

Road Safety Audit Designer's Response

Knowsley Metropolitan Borough Council
(KMBC)

Project number: 60629784
60629784-REP-30-PC-CT-0014

Quality information

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Revision History

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1. Introduction

The following report documents the Designer's Response to each issue raised within the Stage 1/2 Road Safety Audit (RSA) for the Prescot to Cronton scheme.

The scheme is made up of 9 phases although AECOM is commissioned to deliver 8 of the 9 phases. The phase which has been excluded and is not part of AECOM's scope is Phase 7.

Due to the phased delivery for this scheme, two separate road safety audits were carried out based on when the time was right for the audits to be undertaken.

The split of the audits and when they were carried out is as follows:

- Phases 1, 2 and 6 = RSA took place during October 2020 and the site was examined by both members of the Road Safety Audit Team together, during the hours of daylight on Wednesday October 21st, 2020.
- Phases 3, 4, 5, 8 and 9 = RSA took place during June 2021 and the site was examined by both members of the Road Safety Audit Team together, during the hours of daylight on Monday 14th June 2021.

The report indicates each of the concerns identified by the safety auditors together with the recommendation made to address the problem. The Designer's Response to the points raised and recommendations has been provided below each point.

A section for client comments has also been incorporated should the client want to add their own review of the problem raised.

2. Items Raised and Designer's / Client Response – Phases 1, 2 and 6

Problem 3.1.1

Location: Phase 6 – Stadt Moers Park

Drawing: 60629784-SHT-30-PCP6-CT-0501 to 60629784-SHT-30-PCP6-CT-0510.

Summary: Risk of injury to pedestrians / cyclists resulting from slip, trip or fall related incidents, due to ponding near shared use route. In cold weather, the ponding / standing water may freeze, forming ice, creating an unstable surface across the footway / cycleway.

Description: Drawings 60629784-SHT-30-PCP6-CT-0501 to 60629784-SHT-30-PCP6-CT-0510 show the proposed drainage improvements throughout the extents of Phase 6, however measures are limited to one location, on 60629784-SHT-30-PCP6-CT-0508. Proposed measures include the provision of linear drainage channels and an underground pipe connecting to an existing pond in Stadt Moers Park. No other drainage improvements are proposed.

During the site inspection, sections of ponding / standing water were noted within the verge, extending along both sides of the existing footpath. Should the level of ponding increase in periods of heavy rainfall, there is a risk that the standing water may spread over the footway / cycleway. In freezing temperatures, ice may form and create a slippery / unsafe surface for pedestrians and cyclists. As such, there is a risk of slip, trip or fall related incidents occurring.

**Recommendation:**

It is recommended that a review of the existing drainage provision is carried out, to identify and then provide additional drainage improvements where ponding / standing water is an issue.

Designer's Response

☐ Accepted ☐ Part Accepted ☒ Rejected

The ponding identified is found off the hard-standing extents and is sitting within the soft landscape area of the public open space.

From the design of the path being higher, it is thought that there has been a swale like feature incorporated and water is expected to sit within the depressions while the water percolates through the ground.

No users of the route should encounter this ponding water unless they are walking/cycling on the grass / verge (i.e. off the available hardstanding area).

Client Comments

Agreed - This is known to happen and does not have any bearing on the hardstanding or the users of the route.

Problem 3.3.1

Location: Phase 1 - Manchester Road / South Avenue junction

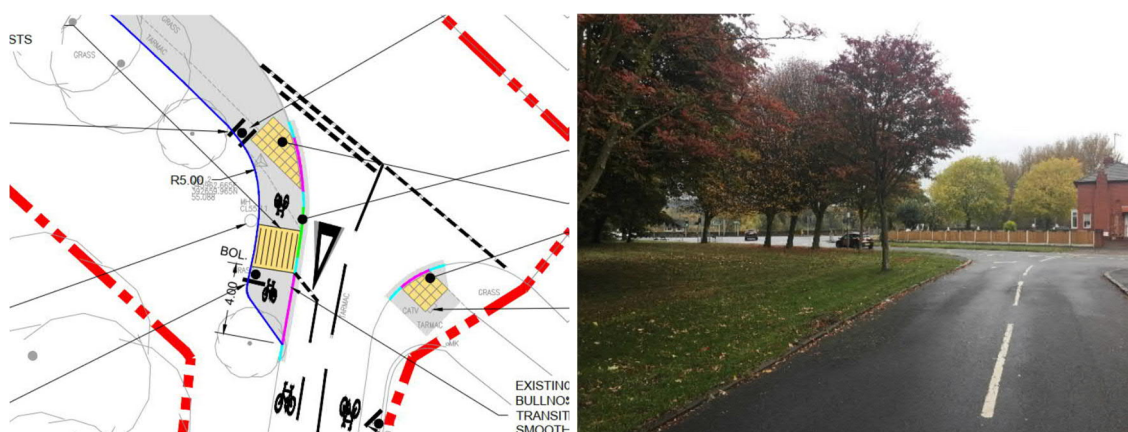
Drawing: 60629784-SHT-30-PCP1-CT-0101

Summary: Risk of injury to pedestrians and cyclists due to proposed location of cycle transition point to / from the shared use area at the Manchester Road / South Avenue junction.

Description: Drawing 60629784-SHT-30-PCP1-CT-0101 shows the General Arrangement of the proposed scheme, including the location of dropped kerbs to allow cycle transition to / from the shared use footway / cycleway at the north west corner of the Manchester Road / South Avenue junction. Due to the proposed location, it is anticipated that cyclists travelling north and south on South Avenue will be expected to use the transition point to continue their journey on the shared use route on Manchester Road (west).

The location of the dropped kerbs is such that a cyclist approaching from the northwest, travelling along the shared use footway / cycleway towards South Avenue, will need to look behind them to check if a motorist is turning right from Manchester Road to South Avenue. They will also need to check if a motorist is turning left from Manchester Road to South Avenue, and if a cyclist is turning from South Avenue onto the shared use route. In addition to this, they will also have to negotiate pedestrians using the shared use route.

The Audit Team has concern due to the level of possible conflicts at the cycle transition point, particularly as cyclists will need to look behind them to join South Avenue. The design may result in collisions between pedestrians and cyclist and / or cycles and turning vehicles.



Recommendation:

It is recommended that separate pedestrian and cycle routes are provided, utilising the area of landscaping to the south of Manchester Road, west of South Avenue. Alternatively, it is recommended that the cycle transition point is relocated to minimise the risk of conflict between pedestrian, cyclists and road users identified.

Designer's Response

☐ Accepted ☒ Part Accepted ☐ Rejected

The landscaping mentioned in the audit recommendation is not in KMBC's ownership and was not available for use during the design stage.

Ideally the routes for pedestrians and cyclists would be separated all along Manchester Road but this was not feasible as part of this scheme due to land ownership and tree removal would be needed.

When the design for this area was undertaken, safety and potential conflict was considered throughout. Such items were implemented to mitigate risks:

- Implementing buff tactile paving on either side of the crossing for pedestrians to be more DDA compliant and a benefit to the scheme and the overall area.
- The cycle transition on and off the carriageway was brought away from the bellmouth so that cyclists would not conflict with vehicles waiting at the give way.
- The cycle transition on and off the carriageway was brought away from the bellmouth so drivers have better visibility of cyclists as they are transitioning on and off the carriageway.
- The cycle transition on and off the carriageway was brought away from the bellmouth so that cyclists were transitioning away from the actual junction.
- A good length of cyclist transition with appropriate tactile paving and cycle marking symbols incorporated to designate the different provisions around the junction. The area also has good visibility so it is thought that pedestrians using the shared use route and wanting to cross from the east will be able to see approaching cyclists from all directions.

This is a concern that could be picked up during RSA Stage 3.

Client Organisation Comments

The design for this phase was developed and approved before the introduction of LTN 1/20 which moved preference away from shared use routes to having defined segregated provisions. Therefore, at the time of design development, a suitable and recognised provision via shared use areas was more acceptable.

Problem 3.3.2

Location: Phase 1 - Wood Lane

Drawing: 60629784-SHT-30-PCP1-CT-0104

Summary: Risk of injury to pedestrians and cyclists using the shared use footway / cycleway, due to collisions, caused by a narrow width / pinch point at the end of Wood Lane, with two-way cycle transition plus a pedestrian through route.

Description: Drawing 60629784-SHT-30-PCP1-CT-0104 shows the General Arrangement of the proposed scheme, including the location of dropped kerbs to allow cycle transition to / from the shared use footway / cycleway, at the western end of Wood Lane. The dropped kerbs are in proximity to two pedestrian routes, approaching the start of the shared use area. One from the north, the other from the east.

The location of the dropped kerbs is where the two pedestrian routes, the off-carriageway cycle route and the new shared use route intersect. As such, the proposed design may create a pinch point within which pedestrians and cyclists will interact. There is a risk that this interaction may result in collisions when pedestrian and cycle flows are high. Furthermore, the arrangement provided could be hazardous to vulnerable users particularly visually impaired pedestrians, as they could walk straight onto Wood Lane via dropped kerbs without encountering any corduroy paving. This may lead to injury to both pedestrians and cyclists.



Recommendation:

It is recommended that separate pedestrian and cycle routes are provided at the western end of Wood Lane to remove the interaction point shown on current proposed layout.

Designer's Response

☐ Accepted ☒ Part Accepted ☐ Rejected

Pedestrians and cyclists coming together at the end of Wood Lane will encounter corduroy paving and signage to warn pedestrians and cyclists that they are entering a space of shared use designation. The width of existing footway is ample and with the widening of the existing pinch point to 3m, forward visibility in all directions will be vastly improved. This is also further contributed by the existing vegetation which will be removed during the construction works to accommodate the widening of the hardstanding area.

Client Organisation Comments

Agreed - No further comments.

Problem 3.3.3

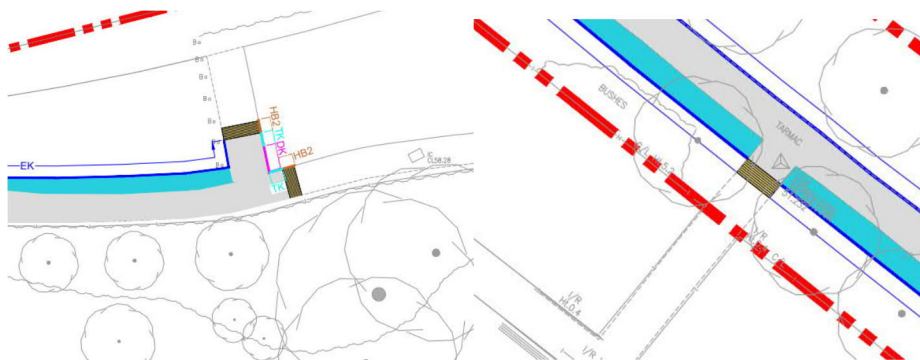
Location: All studied phases

Drawing: Several

Summary: Risk of injury to pedestrians and cyclists resulting from collisions due to shallow depth of buff.

Description: Throughout the extents of Phases 1, 2 and 6, buff coloured warning corduroy tactile paving is proposed at various locations, to delineate the start and end of the shared use routes. Corduroy paving should be used where visually impaired people need to be warned of a hazard and advised to proceed with caution, such as where a footway joins a shared use route.

In some locations, the depth of the paving looks to be too shallow. As such, there is a risk that visually impaired pedestrians approaching the shared use route in a direct line, may overstep the buff coloured warning corduroy tactile and in doing so, not realise the possibility of cyclists within the (shared) footway. This may lead to collisions, causing injury to pedestrians and cyclists.



Recommendation:

It is recommended that buff coloured warning corduroy tactile paving is provided in accordance with latest design standards, to delineate the start and end of the shared use route.

Designer's Response	☐ Accepted ☒ Part Accepted ☐ Rejected
Depth of the corduroy paving is to be 800mm in accordance with “Guidance on the use of Tactile Paving Surfaces”, as shown in the below figure, corduroy is supposed to be 800mm when there is a change to shared use designation: 	

The 2400 dimensions (shown in the above extract) is in relation to tramline and ladder paving which is to be used for segregated cycle and pedestrian routes and is therefore not applicable for shared use routes.

Client Organisation Comments

Agreed - No further comments.

Problem 3.3.4

Location: Phase 6 - Pottery Lane

Drawing: 60629784-SHT-30-PCP6-CT-0101

Summary: Risk of injury to pedestrians resulting from collisions with vehicles on Pottery Lane, due to insufficient provision of buff coloured tactile paving at uncontrolled crossing.

Description: New cycle and pedestrian facilities are proposed on Pottery Lane, which connect with an existing pedestrian route. An uncontrolled crossing is located on Pottery Lane, which, based on information provided on General Arrangement drawing 60629784-SHT-30-PCP6-CT-0101, will be retained. The crossing can be approached inline, from the south. Dropped kerbs and buff coloured tactile paving are provided.

On site observations indicate that the minimum depth of the buff coloured tactile paving is less than the required 1200mm. The area of tactile paving should be enough to provide the necessary warning to a visually impaired pedestrian, approaching the crossing at a normal walking pace. At no point across the flush dropped kerbs should the depth be less than 1200mm.

If less than 1200mm depth is provided, there is a risk that visually impaired pedestrians may overstep the tactile paving and enter the carriageway, unaware that vehicles may be present. Should this occur, there is a risk of a collision with vehicle on Pottery Lane.



Recommendation:

It is recommended that an adequate depth of tactile paving (1200mm) is provided to appropriately warn visually impaired pedestrians of the hazard.

Designer's Response

☒ Accepted ☐ Part Accepted ☐ Rejected

Agreed – the two deep tactile paving shown is an existing arrangement and is not adequate. Given the scheme proposals will encourage more use of the north / south movement, more users will be approaching the crossing in-line and therefore the designers fully accept the tactiles should be three tiles deep. The designs will be updated to allow for three rows of tactile paving.

Client Organisation Comments

Agreed - No further comments.

Problem 3.3.5

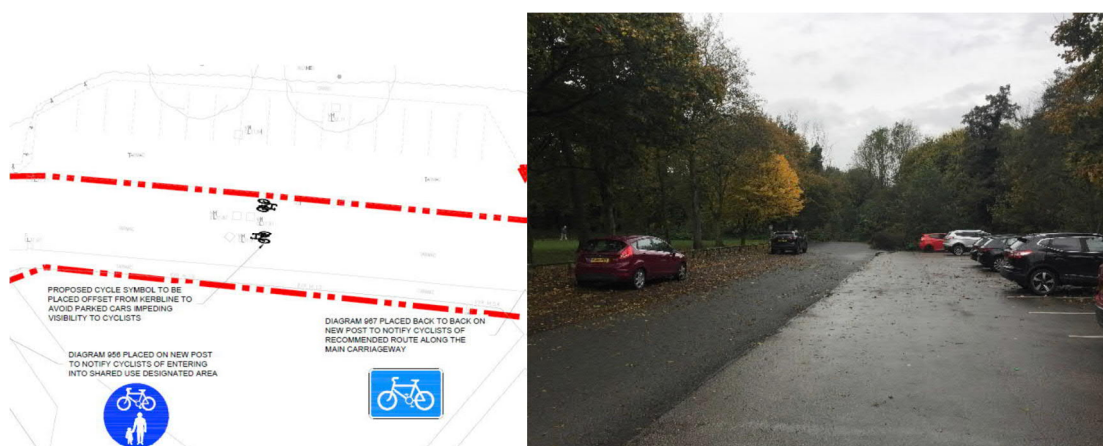
Location: Phase 6 - Stadt Moers Park car park

Drawing: 60629784-SHT-30-PCP6-CT-0101

Summary: Risk of injury to cyclists resulting from collisions with vehicles as motorists enter / exit parking bays in the Stadt Moers Park car parking, due to the alignment of the proposed cycle route.

Description: The Stadt Moers Park car park is accessed via Pottery Lane. Parking bays align the northern edge of the car park and parking activity also takes place along the southern kerb edge, although parking bays are not provided. Drawing 60629784-SHT-30-PCP6-CT-0101 shows the proposed route cyclists are encouraged to use to travel through the Stadt Moers Park car park. The eastbound route passes directly behind the parking bays to the north.

On site observations suggest that drivers drive into the parking bays, therefore requiring them to reverse out when leaving. Due to this observation and the alignment of the cycle route, as a driver exits from the parking bay, there is a risk that they may not have full visibility of a cyclist passing behind them. This may result in a collision, potentially causing an injury.



Recommendation:

It is recommended that the hatched markings are amended to provide additional merge length without compromising the Charles Edward Road junction.

Designer's Response

☐ Accepted ☐ Part Accepted ☒ Rejected

This is a quiet road for parking only and drivers should be aware (due to the new signage and road markings provided) of the close proximity to cyclists and walkers using the area. The road markings showing the cycle symbol have been purposely offset from the kerb line so that they can still be seen when vehicles are parked along it.

For the parking bays (shown on the right in the photo above), when cyclists are using the main stretch (dark grey pavement in photo), there is still sufficient space for vehicles to manoeuvre out of the parking space (using the lighter grey pavement extents) without encroaching into the path of cyclists.

This is a concern that could be picked up during RSA Stage 3.

Client Organisation Comments

Agreed - No further comments.

Problem 3.3.6

Location: Phase 6 - Stadt Moers Park car park / Pottery Lane

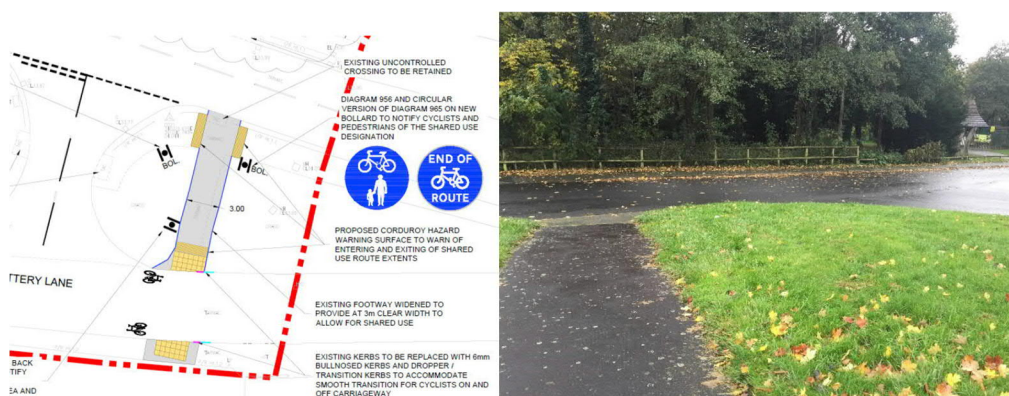
Drawing: 60629784-SHT-30-PCP6-CT-0101

Summary: Risk of injury to pedestrians and cyclists resulting from collisions within the proposed shared use area between Pottery Lane and the Stadt Moers Park car park, due to confusing access arrangement.

Description: The Stadt Moers Park car park is accessed via Pottery Lane. Pedestrian access is provided by a footway that extends through a grass verge area, between the northern and southern alignment of Pottery Lane. The proposed design, as shown on General Arrangement drawing 60629784-SHT-30-PCP6-CT-0101, includes measures to widen the footway to accommodate shared use, plus the provision of both corduroy and blister tactile paving to delineate the shared use route and uncontrolled crossing.

From a review of the information provided, cyclists will enter and exit the shared use section of footway / cycleway via a dropped kerb at the southern extent of the footway. In this same location, pedestrians will cross Pottery Lane as they enter / exit the Stadt Moers Park car park.

The Audit Team has concern due to the level of possible conflicts at the cycle transition point. Conflicts between cyclists and pedestrians may lead to collisions, potentially resulting in injury.



Recommendation:

It is recommended that separate pedestrian and cycle routes are provided, removing the risk of conflicts between pedestrians and cyclists.

Designer's Response

☐ Accepted ☒ Part Accepted ☐ Rejected

The design allows for a shared use route in the north / south direction while also maintaining the existing footways / footpaths around the area. This means that pedestrians can choose to use the pedestrian only footways / footpaths should they not want to use the shared use space.

In regard to the potential conflict with pedestrians heading east / west on the southern side with cyclists, corduroy paving has been placed on the newly widened section of hard standing, before the buff blister paving, indicating to users that they are leaving the shared use extents. This means that pedestrians can continue to cross Pottery Lane onto the existing southern footway but cyclists are to use the crossing to join the carriageway only. Therefore, conflict between pedestrians and cyclists should be limited/low risk.

Client Organisation Comments

Agreed - No further comments.

Problem 3.4.1

Location: Phase 1 - Wood Lane.

Drawing: 60629784-SHT-30-PCP1-CT-0104.

Summary: Risk of injury to pedestrians and cyclists using shared use footway / cycleway, caused by confusion due to orientation of signs.

Description: Drawing 60629784-SHT-30-PCP1-CT-0101 shows the General Arrangement of the proposed scheme on Wood Lane, including the extents of the shared use route and the proposed location of all associated shared use cycle signs. At the western end of Wood Lane, a shared use sign (dia. 956) is shown on a new post to notify pedestrians and cyclists entering a shared use area. In addition to this, a 'Cyclists Rejoin Carriageway' sign (dia. 966) is shown on a new post to notify cyclists of the recommended route along the main carriageway.

The orientation of the signs is such that the shared use route sign is facing pedestrians and cyclists approaching from the west, positioned at the end of the shared use section, and the 'Cyclists Rejoin Carriageway' sign faces cyclists already on the route extending along Wood Lane, approaching the shared use area, from the east. Due to the orientation of the proposed signs, there is a risk that pedestrians and cyclists may become confused or disorientated, causing hesitation. This may lead to collisions between pedestrians and cyclists, with a risk of causing injury.



Recommendation:

It is recommended that the orientation of the signs reflects the proposed extents of shared use footway / cycleway and where cyclists are guided to cycle on carriageway.

Designer's Response

☒ Accepted ☐ Part Accepted ☐ Rejected

Agreed – this was an error in the drawings and has been corrected. The signs have been flipped to what is shown in the extract above to ensure that the applicable sign is facing the correct way.

Client Organisation Comments

Agreed - No further comments.

Problem 3.4.2

Location: Phase 1 - Manchester Road.

Drawing: 60629784-SHT-30-PCP1-CT-0101

Summary: Risk of injury to pedestrians / cyclists due to limited warning of shared use route provision on Victoria Road.

Description: Drawing 60629784-SHT-30-PCP1-CT-0101 shows the General Arrangement of the proposed scheme, including the extents of the shared use route that extends on Manchester Road.

The north west section of Manchester Road is currently shared use, which is to be upgraded as part of the proposed cycleway scheme. However, the section extending south east, is not shared use. The information on the General Arrangement drawing suggests that Manchester Road, south of South Avenue is to remain as existing.

Buff coloured warning corduroy paving is proposed on the north west side of the Manchester Road / South Avenue junction. However, there is no provision of warning paving on the south east side of the junction. As such, should a pedestrian walk north along Manchester Road, across the junction of South Avenue and onto the upgraded shared use footway / cycleway, they will do so, unaware that they're entering an area of shared use. This may result in collisions with oncoming cyclists, or with those joining from South Avenue.



Recommendation:

It is recommended that buff coloured warning corduroy tactile paving and associated shared use signing is provided to delineate the start / end of the shared use route on Manchester Road / South Avenue.

Designer's Response

☒ Accepted ☐ Part Accepted ☐ Rejected

Agreed – the required corduroy paving has been implemented in all necessary areas on the eastern side of the crossing to notify users of the change between designation of shared and non-shared use.

Client Organisation Comments

Agreed - No further comments.

Problem 3.4.3

Location: Phase 1 - Manchester Road

Drawing: 60629784-SHT-30-PCP1-CT-0101 and 60629784-SHT-30-PCP1-CT-0201

Summary: Creation of unlit areas along shared use route, due to lack of street lighting may cause pedestrians and possibly cyclists to feel vulnerable and unsafe, which may deter use of the footway / cycleway due to concerns over personal safety.

Description: Drawings 60629784-SHT-30-PCP1-CT-0101 and 60629784-SHT-30-PCP1-CT-0201 show that an existing lighting column on Manchester Road, along the upgraded shared footway / cycleway, is proposed to be removed, however an alternative location has not been shown.

Without sufficient levels of lighting along the shared use route, there is a risk that an unlit area will be created. During hours of darkness, this may cause pedestrians and possibly cyclists to feel vulnerable and unsafe and in doing so, may deter use of the footway / cycleway due to concerns over personal safety.



Recommendation:

It is recommended that an alternative location for the street lighting column is confirmed, providing sufficient levels of light along the length of the shared use footway / cycleway.

Designer's Response

☒ Accepted ☐ Part Accepted ☐ Rejected

The relocation of the lighting column was always allowed for within the design proposals. The lighting column is to be relocated by SSE who will undertake a validation exercise to ensure the lighting column relocation will not result in any dark spots within the adopted highway extents.

Client Organisation Comments

Agreed - No further comments.

Problem 3.4.4

Location: Phase 2 - Carr Lane

Drawing: 60629784-SHT-30-PCP1-CT-0103

Summary: Location of shared use / segregated route signs may lead to confusion, resulting in collisions due to distance from start / end of shared and segregated sections of footway and cycleway.

Description: Drawing 60629784-SHT-30-PCP1-CT-0103 shows the location of two signs (dia. 956 and 957) positioned back to back on a new bollard, to notify cyclists and pedestrians of the segregated / non segregated shared use designation. A note on the drawing indicates that an existing provision of tactile corduroy hazard warning surface is to be retained to warn of the transition between the segregated and non-segregated shared use route.

Following a review of the proposed design and from observations made during the site inspection, the Audit Team are of the opinion that the bollard with back to back signs is located too far from the point where the route transitions from shared to segregated. There is a risk that pedestrians, approaching from the footway along Carr Lane, may not realise the route becomes shared at the point where the footway intersects with the shared use route. There is therefore a risk that collisions between pedestrians and cyclist may occur at this intersection point.



Recommendation:

It is recommended that a shared use sign is provided at the end of the footway, at the point where the footway intersects with the shared use route.

Designer's Response

☐ Accepted ☒ Part Accepted ☐ Rejected

As mentioned above and shown in the extract, there is a new bollard proposed which will sit where the existing tramline and ladder paving is for the transition into the segregated facilities. The sign face in these bollards is 300mm which is considered quite big for use in the footway. Therefore, although set back from the entry point into the shared use area from Carr Lane, forward visibility to these bollards in addition to encountering corduroy paving will warn of the change of designation. There is also a railing chicane incorporated into the design on the route from King George V playing field (Phase 2) and therefore cyclists should be approaching the area slower than what would be expected without the chicane.

Client Organisation Comments

Agreed - No further comments.

Problem 3.4.5

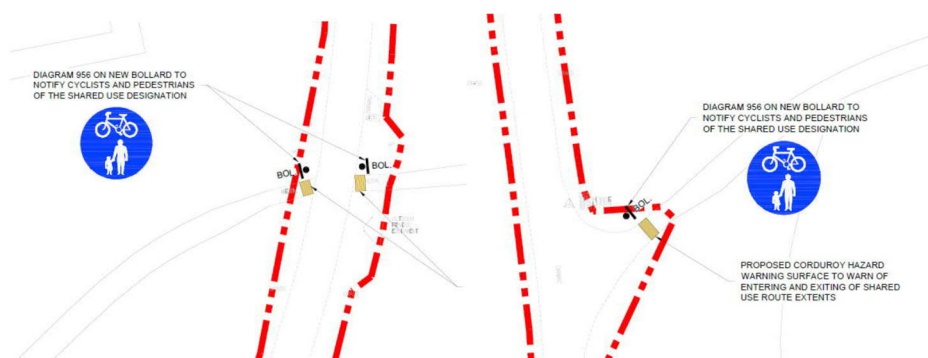
Location: Phase 6 – Various

Drawing: Several

Summary: Inconsistent use of 'End of Route' signs between Phases 1 and 2 and Phase 6 may result in collisions between pedestrians and cyclists, as cyclists continue their journey on a pedestrian only route. Additional risk of fall related injuries due to unsuitable condition of terrain.

Description: Throughout Phases 1 and 2, there are locations where 'End of Cycle Route' signs (dia. 965) and shared use signs (dia. 956) are provided, to notify pedestrians and cyclists of the start and end of the shared use route. At several intersection points through Phase 6, the 'End of Cycle Route' sign has not been provided, however buff coloured warning corduroy tactile paving is, to delineate the start and end of the shared use route.

Without the 'End of Cycle Route' signs in place, cyclists may not realise that the route becomes pedestrian only at locations along the length of Phase 6. In doing so, there is risk that cyclists will attempt to continue their journey along pedestrian only routes, into the path of pedestrians. Should this happen, there is a risk of collisions, resulting in injury. Furthermore, there is a risk that the terrain along the pedestrian only routes is unstable or unsuitable for cyclists. If so, there is a risk of fall related incidents occurring for cyclists.



Recommendation:

It is recommended that a consistent approach is adopted and where 'End of Cycle Route' signs (dia. 965) are provided at all locations where the cycle route terminates to avoid cyclists colliding with pedestrians along footpath facility.

Designer's Response

☐ Accepted ☒ Part Accepted ☐ Rejected

It was agreed with the client that the 'End of Route' signs would be incorporated for all aspects of the scheme apart from those phases which run through the parks / green areas (i.e. Phase 5 and 6).

The 'End of Route' signs have been implemented when the shared use designation finishes and it moves back to footway / footpath within the adopted highway extents.

Through the open spaces / parks, the end of route was omitted because the paths which led away from the shared use route are all narrow and therefore do not make it possible to be shared use. Therefore, it was deemed sufficient that the corduroy paving, which has been implemented on each of the side paths, would be all that was required.

Client Organisation Comments

Given the open and green space nature of the phases that the 'End of Route' signs have not been allowed, we did not want to discourage cycling in any location in these areas. This is because it is away from the highway environment and therefore, we consider different rules to apply.

As mentioned by the designer's, corduroy paving has been implemented at these end points and it is thought that if cyclists wanted to continue along these side routes, they will continue to do so regardless of an 'End of Route' sign being implemented. The corduroy paving will at least warn them of the different provision in terms of it being none shared use.

Problem: 4.2.0

Location: Hall Lane / Penny Lane

Drawing: 60629784-SHT-30-PCP8-CT-0113

Summary: Risk of cyclists / pedestrians / vehicle collisions because of observed vehicle speeds.

Description: Drawing 60629784-SHT-30-PCP8-CT-0113 shows the proposed on carriageway cycle route along Hall Lane and Penny Lane. During the site inspection the Audit Team noted that vehicle speeds on the approach to this junction were high and evidence of collisions was also noted.

The Audit Team has concerns that should vehicle speeds remain high in the vicinity of this junction, there may be an increased risk of pedestrian / cycle / vehicle collisions once the scheme has been implemented and this is a promoted pedestrian and cycle route.



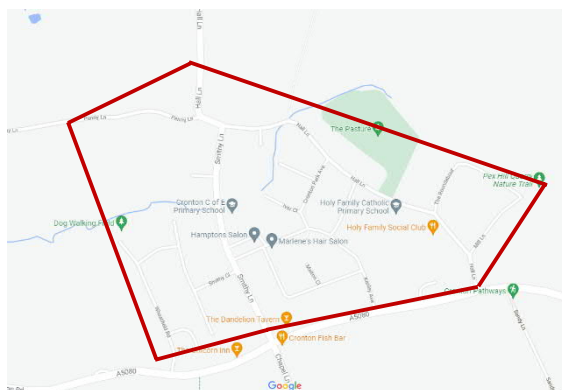
Recommendation:

It is recommended traffic calming measures are implemented on Hall Lane and Penny Lane to reduce traffic speeds.

Designer's Response

☐ Accepted ☐ Part Accepted ☒ Rejected

Penny Lane and Hall Lane, to the north of the junction, are narrow country lanes where vehicle must slow to pass. There is already a 20mph limit on the approach to the junction with 'SLOW' and '20' road markings. The proposals allow for the renewal of the existing 20mph roundel road mark on Penny Lane. Hall Lane & Smithy Lane, to the east, are also 20mph zones. The area is close to a village with narrow roads requiring oncoming traffic to give-way to allow passing and 20mph areas through-out, so the likelihood of high-speed traffic is low. The plan below shows the extent of the 20mph zone.



As well as the renewal of the existing road markings in the area, an additional 20mph roundel has been incorporated on Penny Lane further in advance of the approach to the junction. This should give further indication to drivers that they need to slow down.

Client Organisation Comments

We are aware of the previous problems with speeding and potential for conflicts around this junction and there was work done / measures implemented in 2018 to help eradicate these

problems. It is thought that any evidence of collisions is before these measures were implemented as no reports of collisions have been reported since then.

The residents located around this junction were also known to make their views and concerns heard which was a constant occurrence before measures were implemented. Since 2018, no correspondence has come from these residents suggesting things have changed for better.

Problem: 4.4.0

Location: Various

Drawing: Various

Summary: Risk of pedestrian / cycle collisions due to missing corduroy warning tactile paving at the transition between the proposed shared use route and existing footway at several locations.

Description: Throughout the scheme there are several locations where the proposed shared use pedestrian / cycle route intersects with existing pedestrian routes. In several locations, the proposed design does not include the required corduroy warning tactile paving and associated signing provision to delineate the start and end of the shared use route at the tie in points with existing footway provision. As such, there is a risk of collisions between cyclists and pedestrians, as pedestrians enter a shared use environment without warning that cyclists may be present. This is a particular risk for visually impaired pedestrians using the footway.

Recommendation:

It is recommended that corduroy warning tactile paving and associated signing is provided at all tie in locations, to delineate the start and end of the shared use route.

Designer's Response

☐ Accepted ☒ Part Accepted ☐ Rejected

Corduroy and signage has been provided at all tie in locations.

The designers are fully aware of this requirement and are unsure what specific areas the auditors are referring to.

Client Organisation Comments

Agreed - No further comments.

Problem: 4.4.1

Location: Various

Drawing: Various

Summary: Risk of cycle collisions at proposed access and egress points to / from carriageway.

Description: Throughout the scheme there are several locations where cycles are required to enter / exit a shared use facility to / from the carriageway. The design drawings provided for Audit do not state how these cycle manoeuvres will be facilitated.

The Audit Team has concerns that should formal entry / exit points not be provided there may be an increased risk of cycle loss of control type collisions with cycles negotiating a full height kerb to access / exit the carriageway.

Recommendation:

It is recommended that dropped kerbs are provided at cycle access / egress points.

Designer's Response	☐ Accepted ☒ Part Accepted ☐ Rejected
The designers are aware of the requirement for a suitable transition for cyclists on and off the carriageway and have already accommodated in the designs via drop kerbs. The designers are unsure of the specific locations being referred to by the audit team, but this principle has already been picked up through the design and during construction.	
Client Organisation Comments	
Agreed - No further comments.	

Problem: 4.4.2

Location: Carr Lane / Prescot Park Way Roundabout.

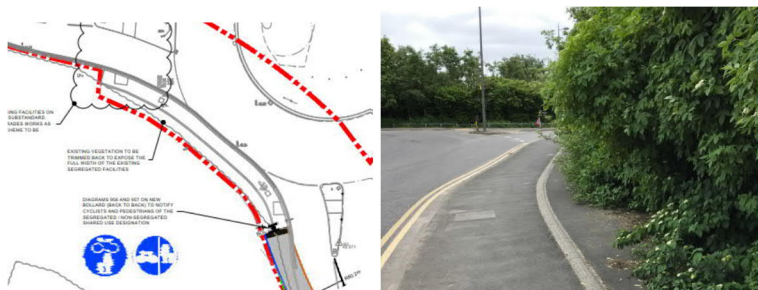
Drawing: 60629784-SHT-30-PCP3-CT-0101

Summary: Risk of pedestrian / cycle collisions as a result of overgrown vegetation affecting segregated route width.

Description: Drawing 60629784-SHT-30-PCP3-CT-0101 shows the proposed cycle route along Prescot Park Way which ties into the existing segregated pedestrian / cycle footway on the western side of the roundabout.

During the site inspection, the Audit Team noted that the vegetation adjacent to the existing segregated facility was overgrown and significantly reducing its effective width.

The Audit Team has concerns that the reduction in effective width of this facility may increase the risk of pedestrian / cycle collisions, should cycles enter the pedestrian only area.



Recommendation:

It is recommended the vegetation is maintained so that the full width of the shared use footway / cycleway can be used.

Designer's Response	☒ Accepted ☐ Part Accepted ☐ Rejected
Agreed – The design proposals always allowed for this existing vegetation to be cut back to offer the full effective width of the existing segregated facilities.	
Client Organisation Comments	
This area will be added to the council's areas of maintenance required and the vegetation will be maintained so that it does not protrude onto the newly exposed hardstanding.	

Problem: 4.4.3

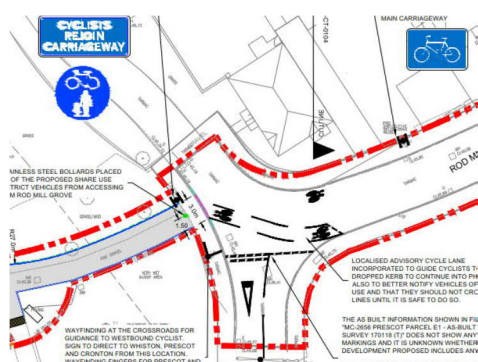
Location: Rod Mill Grove

Drawing: 60629784-SHT-30-PCP4-CT-0101

Summary: Risk of cycle / vehicle collisions as a result of proposed cycle lane alignment.

Description: Drawing 60629784-SHT-30-PCP4-CT-0101 shows the proposed on carriageway cycle route along Rod Mill Grove which links into the proposed off carriageway route to the west. Westbound cycles are guided to the shared use footway via an advisory cycle lane at the western end of Rod Mill Grove.

The Audit Team has concerns that the alignment of the advisory cycle lane, guides westbound cyclist into the middle of the carriageway in the path of vehicles exiting the Cul-de-sac to the north. This arrangement may increase the risk of cycle / vehicle collisions.



Recommendation:

It is recommended that the advisory cycle lane is realigned to follow the edge of carriageway.

Designer's Response

☒ Accepted ☐ Part Accepted ☐ Rejected

Given the low traffic flows and movement through the end of the cul-de-sac, the on-carriageway advisory cycle lane has been removed to avoid confusion of right of way.

Client Organisation Comments

Agreed - No further comments.

Problem: 4.4.4

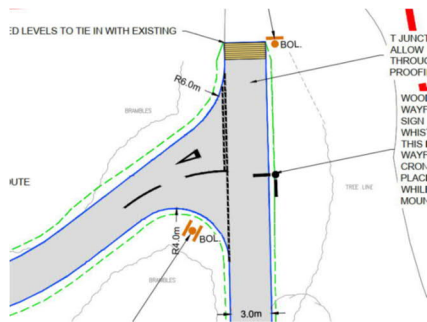
Location: Phase 5 sheet 1

Drawing: 60629784-SHT-30-PCP5-CT-0101

Summary: Risk of pedestrian / cycle collisions because of confusing proposed layout.

Description: Drawing 60629784-SHT-30-PCP5-CT-0101 shows the proposed off carriageway shared use cycle / footway. The proposed design includes a priority-controlled arrangement between the north / south route and the east / west route.

The Audit Team has concerns that this proposed formal control may be confusing to users, particularly pedestrians. User confusion at this interaction point may result in hesitation, potentially increasing the risk of pedestrian / cycle collisions.



Recommendation:

It is recommended the 'Give Way' markings are omitted, and the alignment revised to suit the need of all users.

Designer's Response ☐ Accepted ☒ Part Accepted ☐ Rejected

The give-way markings will be omitted from the design. The alignment will remain unchanged because the alignment, as it currently stands, offers significant space at the junction and any realignment will result in lost space. In addition, if the route was aligned so that the junction was further south, substantial ecological habitat would be destroyed.

Client Organisation Comments

Agreed - No further comments.

Problem: 4.4.5

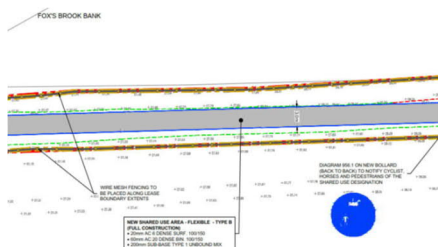
Location: Phase 8, Sheets 2, 3, 4 and 5.

Drawing: 60629784-SHT-30-PCP8-CT-0102, 0103, 0104, 0105

Summary: Risk of equestrian collisions because of vegetation along proposed multiuser route.

Description: Drawings 60629784-SHT-30-PCP8-CT-0102, 0103, 0104, and 0105 show the proposed multiuser route through an existing green field site connecting Penny Lane with the proposed Pegasus crossing on Fox Bank Lane. During the site inspection the Audit Team noted that vegetation adjacent to the proposed path is overgrown.

The Audit Team has concerns that low / overgrown vegetation may increase the risk of equestrian collisions.

**Recommendation:**

It is recommended the vegetation is maintained at the recommended height for equestrian use.

Designer's Response	☒ Accepted	☐ Part Accepted	☐ Rejected
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The existing vegetation around the crossing and any that is heavily overgrown will be cut back and cleared as part of the construction works.

The shared use route will be offset from the existing vegetation line by more than 3m. Proposed wire mesh fencing is incorporated into the design proposals which will restrict encroachment of vegetation growth onto the path.

Grass verge will require maintenance in the future to prevent overgrowth of vegetation.

Client Organisation Comments

This area will be added to the council's areas of maintenance required and the vegetation will be maintained so that it does not protrude on to the newly exposed hardstanding.

Problem: 4.4.6

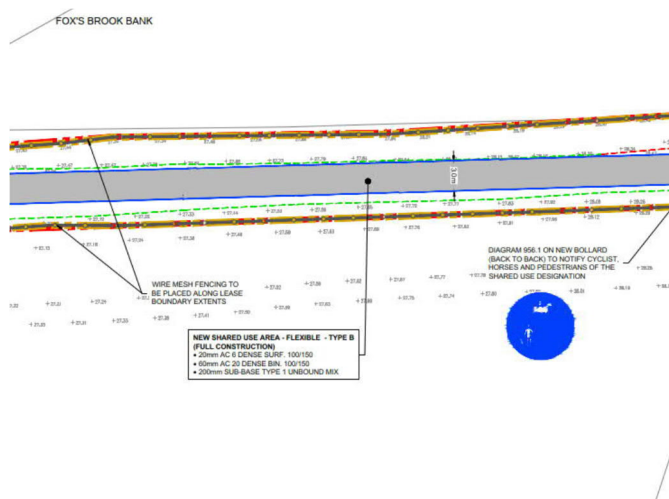
Location: Phase 8, Sheets 2, 3, 4 and 5.

Drawing: 60629784-SHT-30-PCP8-CT-0102, 0103, 0104, 0105

Summary: Risk of cycle / pedestrian / equestrian collisions because of existing drainage ditch adjacent to proposed multiuser route.

Description: Drawings 60629784-SHT-30-PCP8-CT-0102, 0103, 0104, and 0105 show the proposed multiuser route through an existing green field site connecting Penny Lane with the proposed Pegasus crossing on Fox Bank Lane. During the site inspection the Audit Team noted that there is a deep drainage ditch on the northern side of the green field site running adjacent to the proposed multiuser path.

The information provided to the Audit Team does not show any proposed fencing or similar measure, to prevent access into the drainage ditch. The Audit Team has concerns that without protection, there may be an increased risk that pedestrians / cyclist / horse riders may inadvertently enter the ditch, resulting in injury.



Recommendation:

It is recommended that fencing or similar protection is provided where the drainage ditch is adjacent to the multiuser path.

Designer's Response

☒ Accepted ☐ Part Accepted ☐ Rejected

The existing watercourse is located outside of the red line boundary / scheme extents and also lies to the north of the proposed wire mesh fence.

The note pointing to the red and yellow line in the image above and in the drawings, references a wire mesh fence to be incorporated. This fence will be installed on both sides of the route and therefore will provide containment for users to the available extents of the

scheme and therefore they will not be able to access the ditch/watercourse from the new route.

Client Organisation Comments

Agreed - No further comments.

Problem: 4.4.7

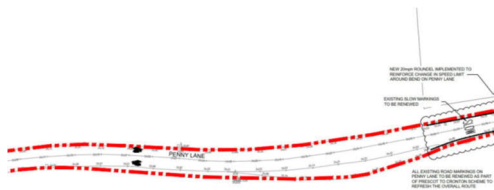
Location: Penny Lane

Drawing: 60629784-SHT-30-PCP8-CT-0110, 0111, 0112

Summary: Risk of cycle / vehicle collisions because of the existing speed limit.

Description: Drawings 60629784-SHT-30-PCP8-CT-0110, 0111 and 0112 show the proposed on carriageway cycle route along Penny Lane. The proposed works include 'Quiet Street' cycle markings along Penny Lane at regular intervals. Penny Lane is subject to National Speed limit and on-site observations made by the Audit Team indicated that vehicle speeds are perceived to be high.

The Audit Team has concerns that providing a 'Quiet Street' cycle route along a section of carriageway with high speeds may increase the risk of cycle / vehicle collisions. It also provides a conflicting message to road users.



Recommendation:

It is recommended that traffic calming and a reduction in speed limit is implemented on Penny Lane.

Designer's Response

☐ Accepted ☒ Part Accepted ☐ Rejected

This section of Penny Lane is very narrow requiring oncoming cars to give-way to allow passing. It is thought due to the narrow nature of the existing road, this acts as an artificial traffic calming feature as it feels unnatural to travel at excessive speeds. There is also very good forward visibility along this road so that all users can see other users well in advance and make the right decision of what to do to interact and pass each other.



This is a concern that could be picked up during RSA Stage 3.

Client Organisation Comments

We consider this type of road to be in line with other typical rural road environments, some of which have national cycle routes associated with them. Some that are known to us are more of a risk of conflict because Penny Lane offers much better forward visibility.

Problem: 4.4.8

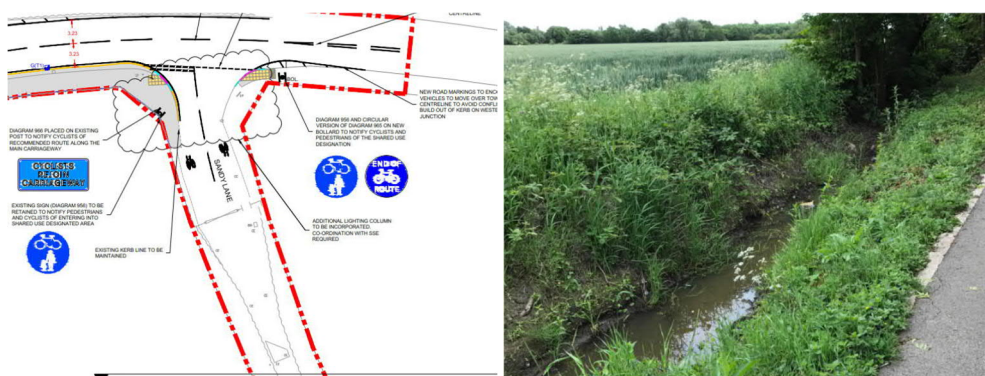
Location: Sandy Lane

Drawing: 60629784-SHT-30-PCP9-CT-0108

Summary: Risk cycle / pedestrian collisions because of existing drainage channel adjacent to proposed route.

Description: Drawing 60629784-SHT-30-PCP9-CT-0108 shows the proposed pedestrian cycle route running along the existing alignment of Sandy Lane. During the site inspection the Audit Team noted that deep drainage channels extend along both sides of Sandy Lane, adjacent to the proposed pedestrian / cycle path. The information provided to the Audit Team does not show any proposed fencing or similar measure to prevent access into the drainage channels.

The Audit Team has concerns that without protection, there may be an increased risk that pedestrians / cyclist may inadvertently enter the channels, resulting in injury.



Recommendation:

It is recommended that fencing or similar protection is provided where the drainage channels are adjacent to the pedestrian / cycle path.

Designer's Response

☐ Accepted ☒ Part Accepted ☐ Rejected

This is an existing leisure footpath; it is common for these types of path to have drainage ditches running along the side.

The majority of Sandy Lane has vegetations and trees running in very close proximity to the edge of the hard standing which would offer some form of constraint.

Towards the northern end of Sandy Lane, there is less vegetation acting as an artificial barrier (as per the photo above) however the width of the hard standing available is also sufficiently wider than what is found further down Sandy Lane.

This is a concern that could be picked up during RSA Stage 3.

Client Organisation Comments

Overgrown vegetation and landscaping will be maintained so that it does not protrude into the shared use route extents. This will maximise the effective width for users meaning they will be less likely to be near the sides of the path, near the ditches.

It is known that cyclists have been using Sandy Lane for a very long time and there have been no reports of problems or users falling into the ditches.

Problem: 4.4.9

Location: Cronton Road

Drawing: 60629784-SHT-30-PCP9-CT-0107

Summary: Risk of pedestrian / cycle collisions because of overgrown vegetation impacting the effective width of the proposed shared use footway.

Description: Drawing 60629784-SHT-30-PCP9-CT-0107 shows the proposed shared use footway on the southern side of Cronton Road. During the site inspection the Audit Team noted that the existing vegetation obstructs some of the existing footway.

The Audit Team has concerns that the existing vegetation at the back of footway reduces the effective width of the proposed shared use footway. A reduction in the effective width may increase the risk of pedestrian / cycle collisions along the shared use footway.



Recommendation:

It is recommended that the existing vegetation is cut back and maintained so that the design width of the proposed shared use footway is not affected.

Designer's Response

☒ Accepted ☐ Part Accepted ☐ Rejected

Agreed – design proposals amended to include for the cutting back of existing vegetation.

Client Organisation Comments

This area will be added to the council's areas of maintenance required and the vegetation will be maintained so that it does not protrude on to the newly exposed hardstanding.

Problem: 4.4.10

Location: Brook Close

Drawing: 60629784-SHT-30-PCP9-CT-0101

Summary: Risk of pedestrian / vehicle collisions as a result of insufficient tactile paving provision.

Description: Drawing 60629784-SHT-30-PCP9-CT-0101 shows the proposed on carriageway cycle route running along Hall Lane. During the site inspection the Audit Team noted that at the junction with Brook Street, there isn't tactile paving at the pedestrian crossing point and paving is not proposed as part of the scheme.

The Audit Team has concerns that without tactile paving informing pedestrians, particularly the visually impaired, of the hazard, there may be an increased risk of pedestrian / vehicle collisions.



Recommendation:

It is recommended that tactile paving is provided at the crossing point on Brook Close.

Designer's Response

☐ Accepted ☐ Part Accepted ☒ Rejected

This is an existing problem which is outside the remit of this scheme as cyclists will be on the carriageway not the footway.

There are other side roads which are encountered along the proposed cycle route extents which also do not have any allowance for tactile paving and therefore it is considered a wider issue.

Client Organisation Comments

Agreed - No further comments.

Problem: 4.5.0

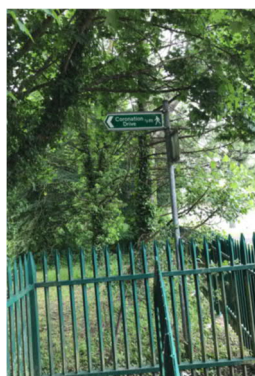
Location: Various

Drawing: Various

Summary: Risk of pedestrian / cycle collisions as a result of insufficient signing provision.

Description: Throughout the scheme there are a number of existing cycle and pedestrian wayfinding signs directing users along the existing routes. The Proposed information issued to the Audit Team does not include changes to the cycle and pedestrian wayfinding signing strategy.

The Audit Team has concerns that without the correct wayfinding signing to direct cycles and pedestrians along the propose route there may be an increased risk of users deviating from the proposed route potentially increasing the risk of pedestrian / cycle collisions.



Recommendation:

It is recommended a revised wayfinding signing strategy is provided for the proposed cycle and pedestrian route.

Designer's Response

☐ Accepted ☐ Part Accepted ☒ Rejected

For phases 5 and 6 (those which run through the open spaces / parks), way finding signage has already been incorporated as part of the design proposals.

For the other phases, pedestrians and cyclists are directed along the route via standard shared use facilities signage which utilises existing highway geometry and features to guide users along without confusion or risk of getting lost.

Client Organisation Comments

With the development of the Halsnead area of the borough via Phase 7, it is thought that the way findings strategy for the entire route would need to be reviewed as a whole and addressed via a separate scheme.

For the moment until the Phase 7 section is complete, we can review the issue as part of the RSA 3.

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