

Reserved Matters Application 039578

Northern Link Road (East) – Active Travel Evaluation

Generally, the cycling provision along the proposed Northern Link Road (east) is positive, where once complete, it should provide a safe, comfortable, highly visible, traffic free east-west link, negating the need to travel into the town centre and out again when connecting between the two new areas of Nuneaton.

However, there are weak points that need addressing, one of which is a major failing of the scheme that jeopardises its attractiveness and usefulness through its motor-first design that leaves walking, wheeling, and cycling as an afterthought.

While these issues are not resolved, the application as given must not be approved.

This document therefore serves as an objection to the Reserved Matters application, in the consultation that ends on 17 May 2023.

Issues

Connection to north-side roads

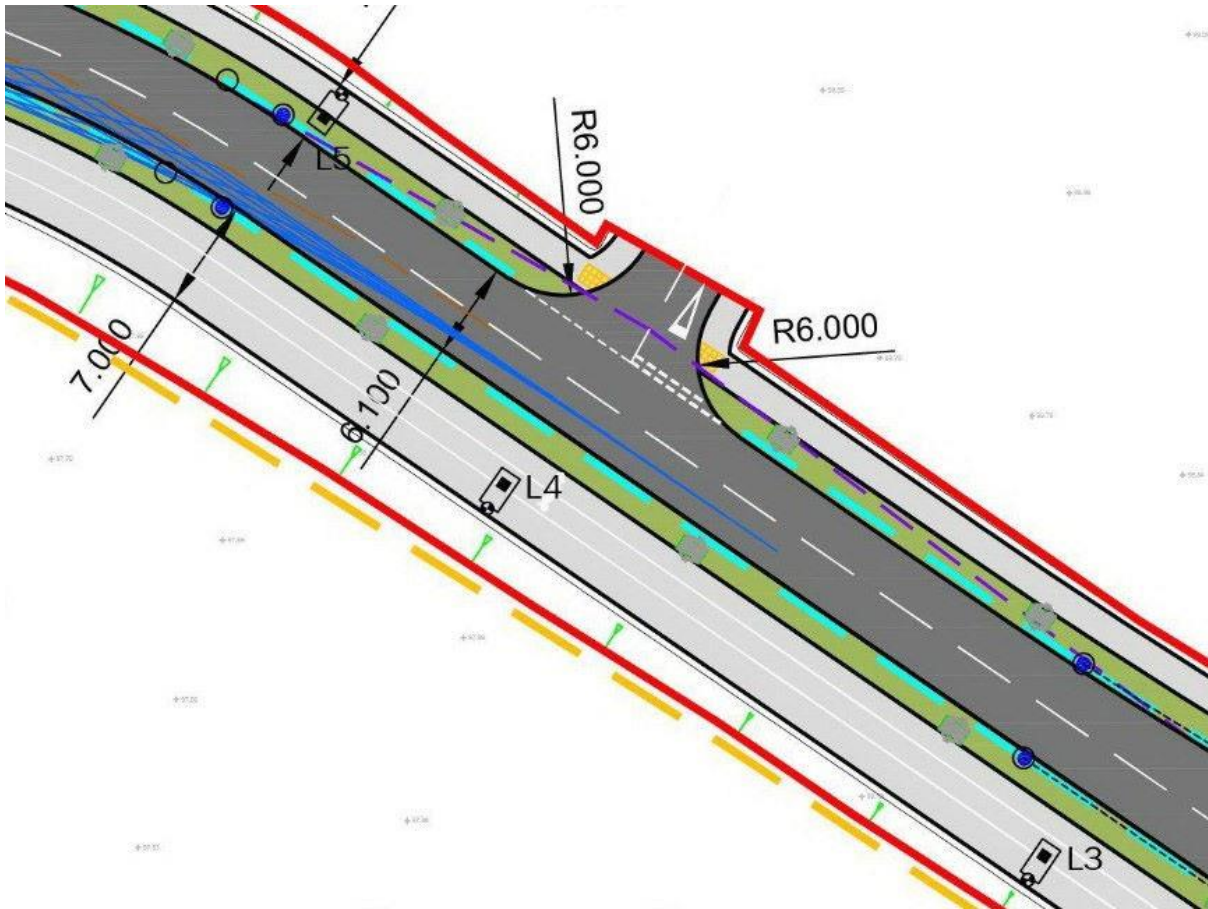


Figure 1 - Side roads on the north side of the Link Road

There is no indicated provision for connections between the cycleway and side roads on the north side of the carriageway. Using the layout as indicated in “General Arrangement Sheet 1”, the buffer between the cycleway and main carriageway is continuous opposite to the side road.

Provision must be made to allow riders to connect between the side road and the cycleway in a manner that adheres to the core principles of LTN 1/20, where that provision is safe and accessible for riders of all ages and abilities (including unaccompanied children). Depending on expected traffic flows and speeds, this may require a signalised junction, or a signalised pedestrian and parallel cycle crossing with appropriate feed-in infrastructure to connect with the side road (even if the side road itself does not require fully separated provision).

Non-continuous north-side footpath



Figure 2 - Continuous footpath on the south side of the Link Road, not present on the north side.

The footpath on the north side of the main carriageway (see Figure 1, above) is not continuous across side road junctions in the manner that it is indicated to be on the south side (where it inherits that continuous provision from the cycle lane).

The footpath on the north side should be given the same treatment as on the south side, with continuous level provision over the side road for improved comfort and accessibility. Highway Code revisions have clarified that drivers should yield to pedestrians crossing and wishing to cross side roads; the road layout must reinforce this pedestrian priority.

Footway/cycleway priority over side roads

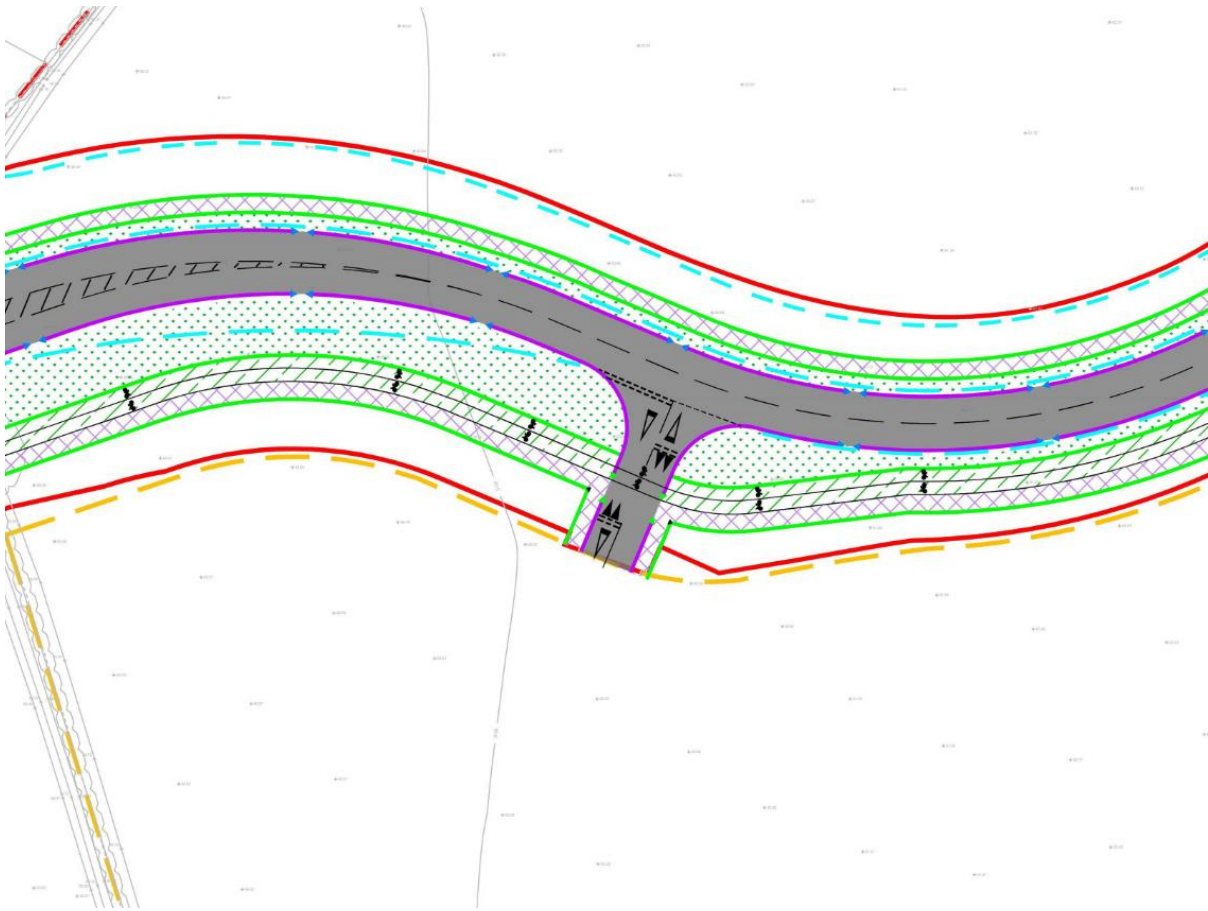


Figure 3 - Side Road Priority (039578-Paving and Kerbing Sheet 2.pdf)

While active travel priority over side roads is welcome, there appears to be no surface material difference from the general carriageway which would communicate this priority to drivers.

Road markings do indicate that drivers should yield, and the crossing will presumably be on a raised table (speed bump). However, priority should be further enforced by continuing the foot and cycleway surface colours/material across the junction. Alternatively, coloured tarmac could be used on the raised table to communicate the risk of conflict to all users. However, there is no indication that this is to be the case.

Footway and cycleway separation

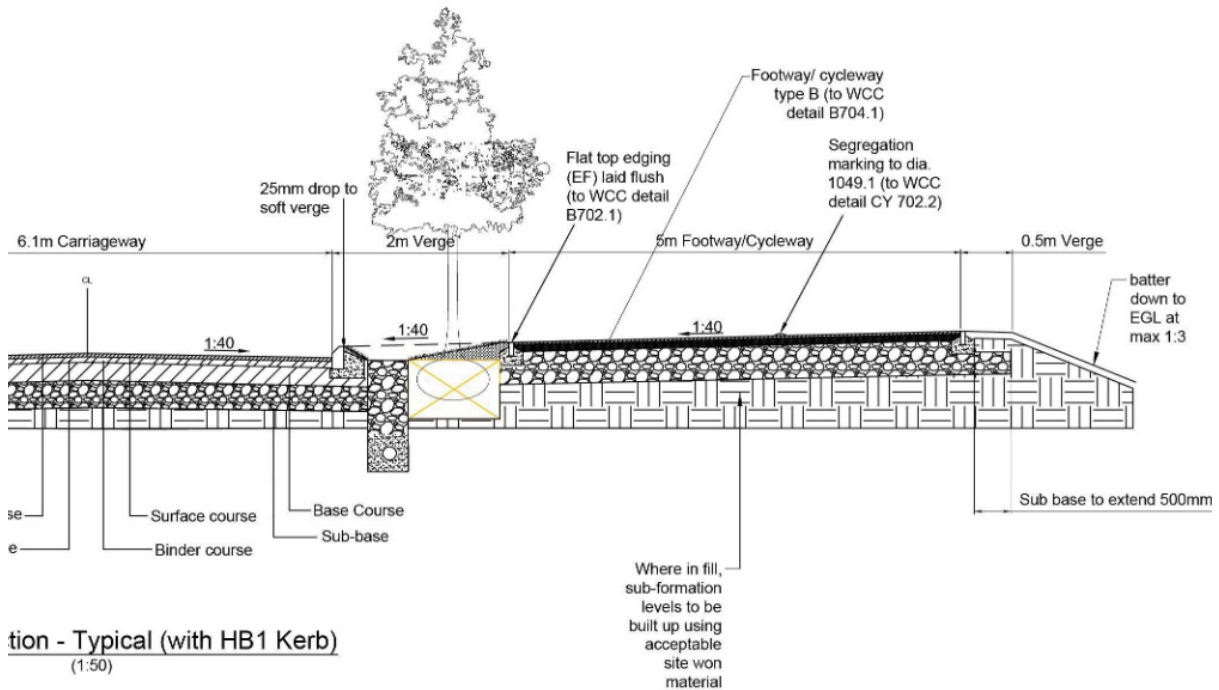
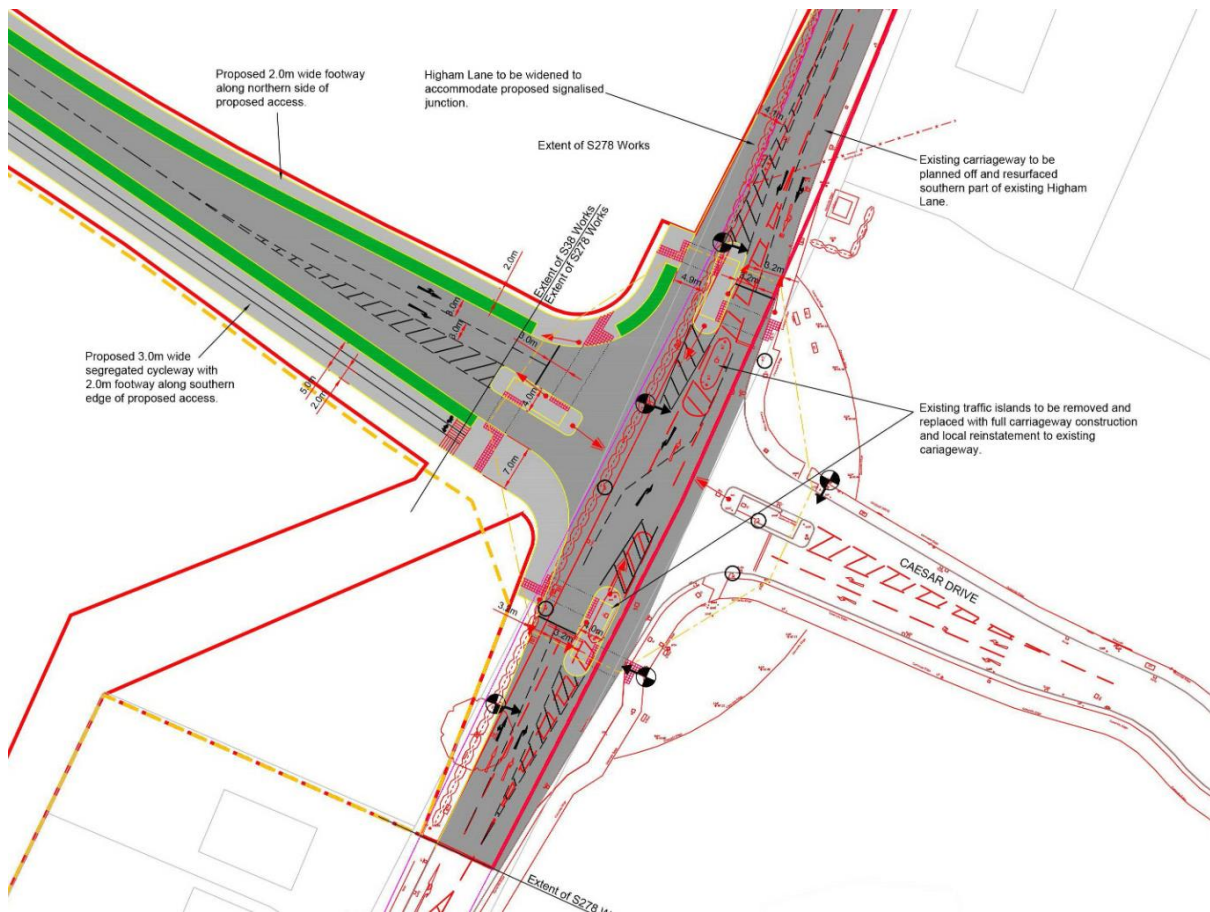


Figure 4 - Link Road Cross Section (039578-Typical Sections.pdf)

The delineation between the footway and cycleway does not appear to be clearly defined with both operating at the same physical level but with just a raised strip between the two. Poor definitions risk riders and pedestrians crossing into each other's space with associated risks. The cycleway should present as a small step down from the footway in order that pedestrians are minded to see and treat the space as they would the general carriageway. This is especially important if surfaces are visually similar. An inclined kerb edge to the cycleway would minimise the risks of riders 'clipping' the edge.

Junction with Higham Lane/Caesar Drive



The junction with Higham Lane is extremely poor and lets down what is otherwise a good scheme for walking, wheeling, and cycling. High quality integration across the junction with Higham Lane and Caesar Drive is essential to the usability of the route for active travel, yet this is missing in the proposed design. The layout takes a motor-first approach leaving other users with a compromised sub-standard solution.

Users of all ages and abilities must be able to navigate the junction safely and easily, but at present conflict is built in. Cyclists and pedestrians merge into shared use space at the eastern limit of the separated cycle provision, creating the potential for conflict. Crossings are numerous, slow, and difficult to use with very narrow space – particularly to the north-west and north-east corners. Some routes through the junction may require tight turns which may hinder accessibility and useability for people wheeling and cycling.

Major junctions such as this one present as a significant hazard for cyclists. In its current planned layout, it offers either no protection for people moving through the junction (where they remain on carriageway), or it puts pedestrians and cyclists into conflict through sub-standard shared use spaces.

For those who cycle on carriageway (e.g., north-south along Higham Lane), refuge islands present as pinch points where riders are at particular risk of dangerous close passes by drivers – especially given the wide lanes shown here. Otherwise, movements through the junction are slow and cumbersome, either reducing the appeal of using dedicated infrastructure compared to remaining on the carriageway or limiting the appeal of choosing active travel for local journeys at all.

In order to be useful, attractive, comfortable and accessible, proper cycle provision must also be established throughout the junction, not just to run parallel with the new Link Road. Good quality connections to the general road network beyond the junction must be provided and designed in such a manner where riders can comfortably join and leave them, and that they can also be easily upgraded and linked to further cycle schemes in the future (e.g., continuing separated provision on Higham Lane northbound to the A5; continuing separated provision on Higham Lane southbound).

This junction as designed takes a motor-first approach. It fails to properly consider and accommodate active travel, users who are at the top of the road user hierarchy, including the differing needs of those walking and wheeling to those cycling. In the current layout, all active travel users are expected to accept significant compromise to the quality of their infrastructure versus what is presented to people driving. It fails to provide connections to the broader road network that are as safe as reasonably practical given the geographical limits of the scheme, and it does not meet minimum standards for cycling provision as defined in guidance LTN 1/20. Given these failings, it must be entirely redesigned to address these clear issues before approval is granted.

Any redesign must follow the road user hierarchy in terms of priority – designing first for people walking and wheeling, then for people cycling, and lastly for those driving. Conflict between all three user groups must be designed out from the start.

The crossroad layout here is an ideal candidate for the provision of a CYCLOPS junction^{1,2}. This would maintain separated cycle and pedestrian provision throughout all arms of the signalised junction, provide cyclists with a single green phase in which to follow any chosen route in one manoeuvre, and allow riders to join and leave dedicated infrastructure as necessary with minimal conflict. With such an arrangement, all shared use provision would be removed with clearly defined spaces for each category of road user – pedestrian, cyclist, and driver.

Each of the potential journeys through the junction are evaluated in the section that follows, below.

¹ <https://www.newcivilengineer.com/latest/greater-manchester-set-revamped-traffic-junction-design-29-07-2019/>

² https://en.wikipedia.org/wiki/Protected_intersection#CYCLOPS_junction

Cycle Journey Evaluations

Journey Example 1: Link Road eastbound to Higham Lane northbound

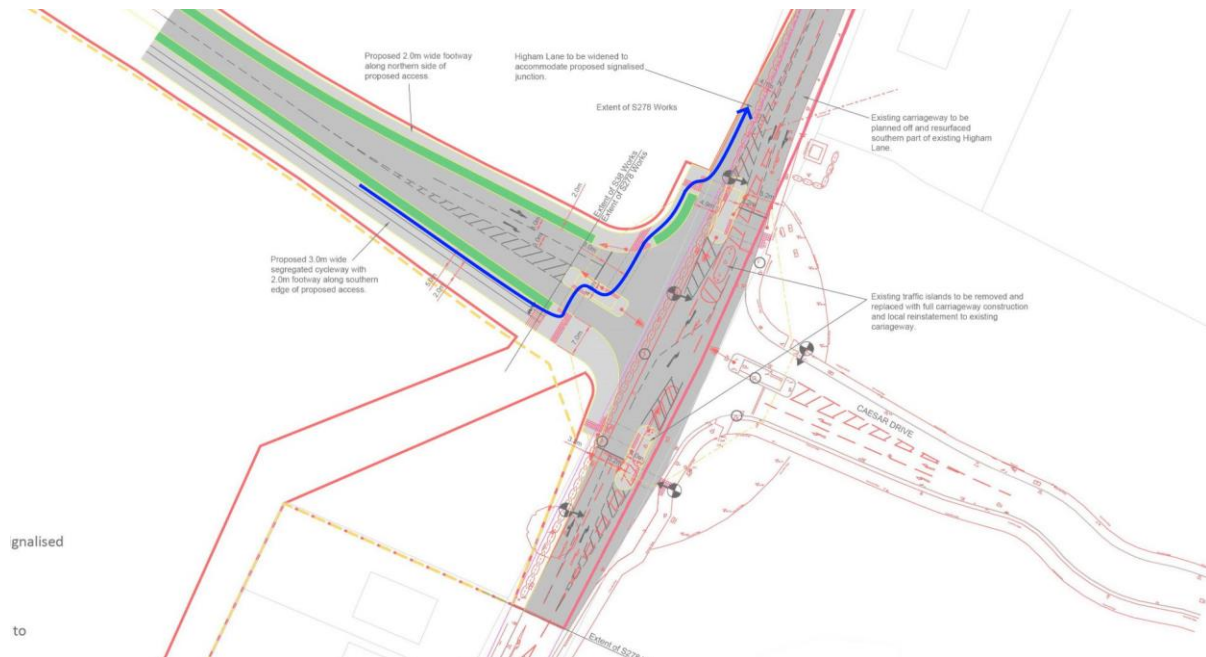


Figure 5 - Cycling Route

Cyclists travelling eastbound on the Link Road to continue north on Higham Lane must merge into shared space to use a two-stage staggered crossing over the new road. The central island is space restricted and may quickly become congested when mixing with just a few pedestrians and other cyclists. Tight turning angles on these crossings introduce accessibility issues.

Path space on the north-east corner of the junction is not indicated as shared provision and is extremely limited if used as such (only 2m on the corner). This is significantly below standards for shared use space, assuming this path is allocated as such. If it is not, cyclists are then given no viable safe route.

Note that guidance generally recommends against the use of shared space particularly in new urban road developments.

There is no safe and comfortable provision for cyclists to merge into the main carriageway on Higham Lane to continue their journey. Riders would need to join the carriageway at the north arm crossing point, potentially in conflict with other users waiting to cross.

Journey Example 2: Link Road eastbound to Higham Lane southbound

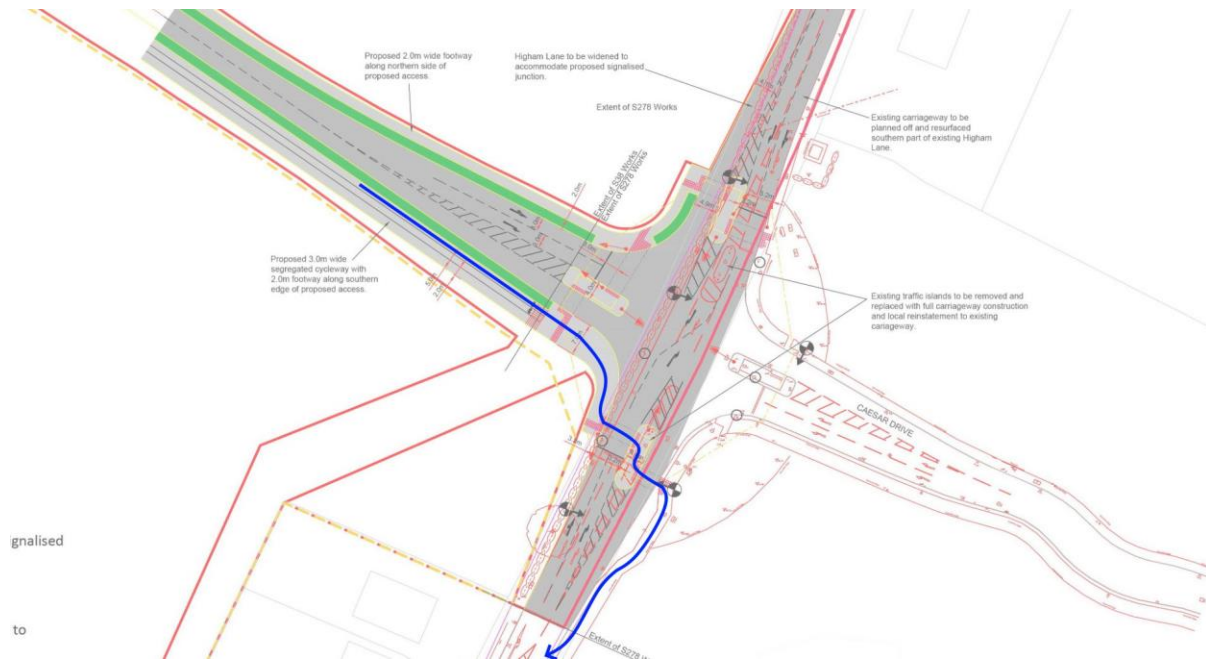


Figure 6 - Cycling Route

Cyclists must first merge into shared space with the potential conflict with pedestrians. Moving around the south-east corner of the junction, space narrows furthering conflict difficulties. Tight turns are required across the two-stage staggered crossing creating accessibility issues. The central island is space restricted and may easily become congested when mixing pedestrians and other cyclists.

No safe and comfortable feed-in to Higham Lane is provided from the existing shared use provision.

Journey Example 3: Link Road eastbound to Caesar Road

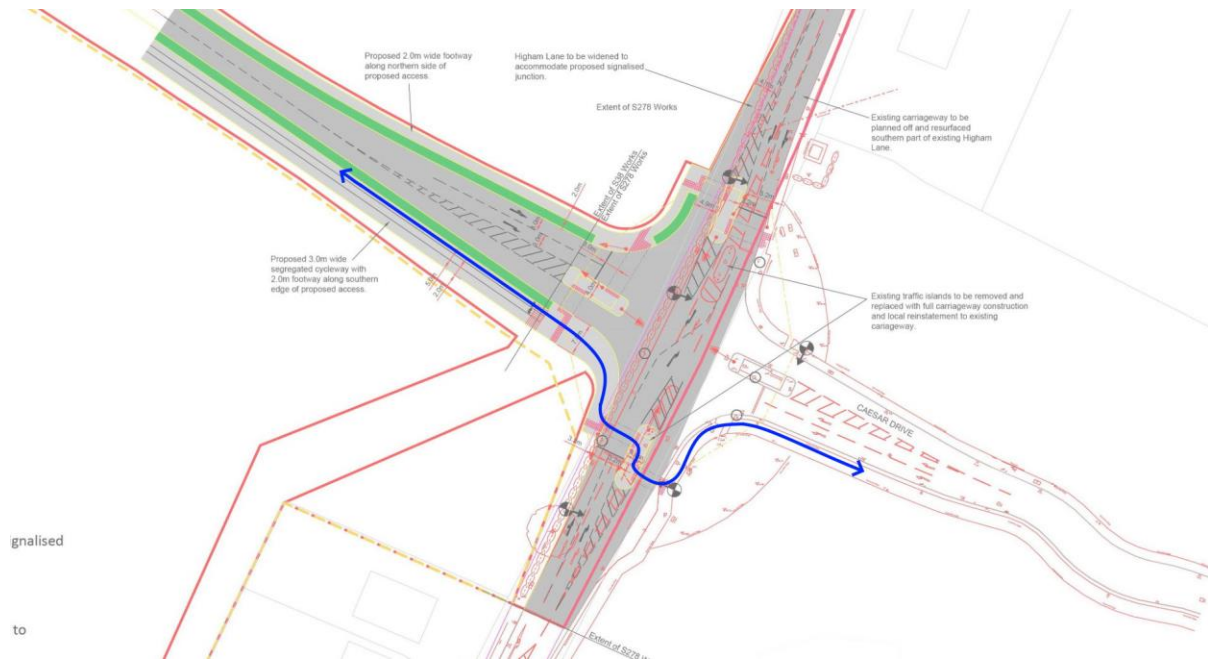


Figure 7 - Cycling Route

Issues are similar to those noted in Journey Example 2, above.

Journey Example 4: Northbound on Higham Lane to Link Road westbound

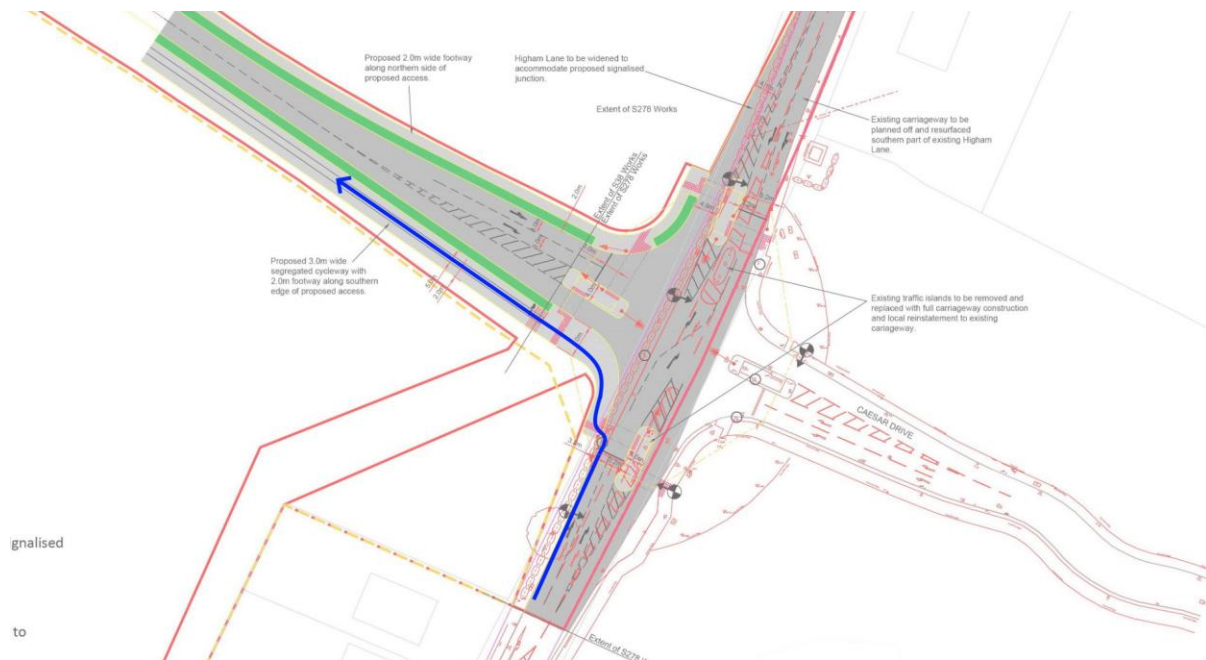


Figure 8 - Cycling Route

Cyclists travelling northbound on Higham Lane intending to turn left must first remain in the general carriageway, mixing with motor traffic at the traffic signals, before being able to exit the carriageway to the shared space. No provision to aid rider safety is given - not even advance stop lines.

No dedicated pick-up from Higham Lane is provided. This will lead to cyclists joining the shared space at the southern arm crossing, with potential for conflict with users (pedestrians and other cyclists) waiting to use that crossing.

Journey Example 5: Northbound on Higham Lane to Caesar Road

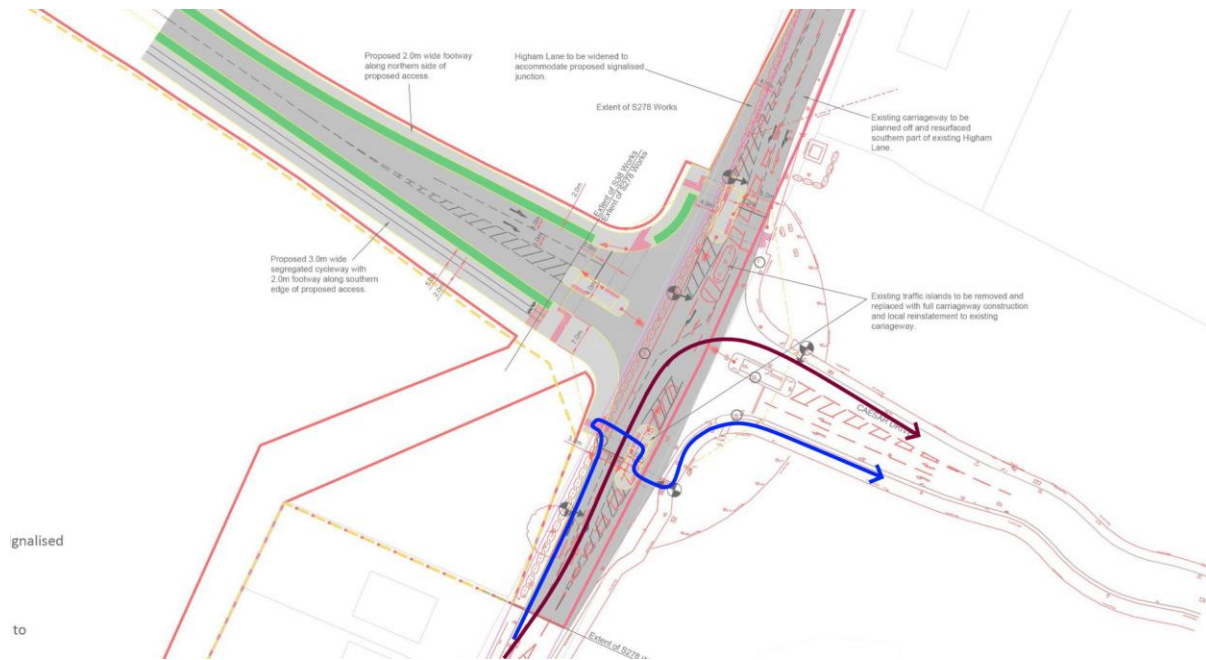


Figure 9 - Cycling Routes (Blue: Off-carriageway; Purple: On-carriageway)

There is no provision for cyclists to make a safe, accessible, and convenient right turn on to Caesar Drive.

Confident riders are likely to follow the main carriageway in the same manner as drivers, in which case they are unable to easily join the existing shared path on the south side of Caesar Drive. No provision to aid rider safety is given - not even advance stop lines.

Less confident riders either will not make such a journey at all, or they will need to join the shared use space on the south-east corner of the junction in order to make use of the two-stage crossing on the south arm to join the east side shared use provision. This will require a tight U-turn at the crossing which introduces accessibility issues in addition to the risk of conflict with other users.

The issues with travelling through the central refuge as part of the two-stage crossing exist as noted earlier.

Journey Example 6: Southbound on Higham Lane to Link Road westbound

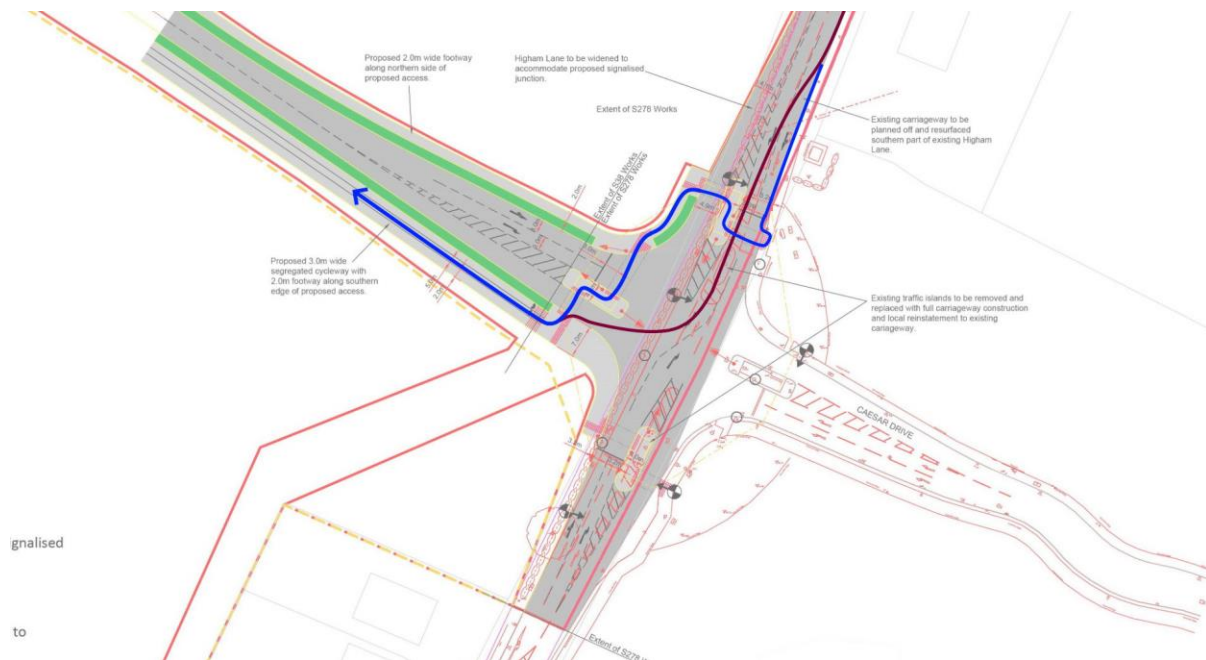


Figure 10 - Cycling Routes (Blue: Off-carriageway; Purple: On-carriageway)

There is no provision for cyclists to make a safe right turn from Higham Lane to the Link Road.

Confident riders will follow the main carriageway in the same manner as drivers but then will have limited means to join the separated infrastructure, except by moving through the shared use space that forms part of the two-stage crossing point over the western arm of the junction. This introduces conflict with pedestrians and cyclists and may be difficult or impossible if the crossing is occupied by people waiting to cross.

Less confident riders may choose to use the two-stage crossings on the northern and western arms of the junction. However, there is insufficient space given on the north-east corner of the junction to enable shared use provision. Space is extremely limited on the path on the opposite side (north-west corner) where only 2m appears to be provided and there is no indication that this is shared use space. In this case, riders must make four independent crossings which is slow, difficult, and uncomfortable.

Cyclists are not able to leave the main carriageway before the traffic signals and this leaves riders to mix with motor traffic before being able to leave the road. Again, no provision to aid rider safety is given - not even advance stop lines.

Journey Example 7: Caesar Drive westbound to Link Road

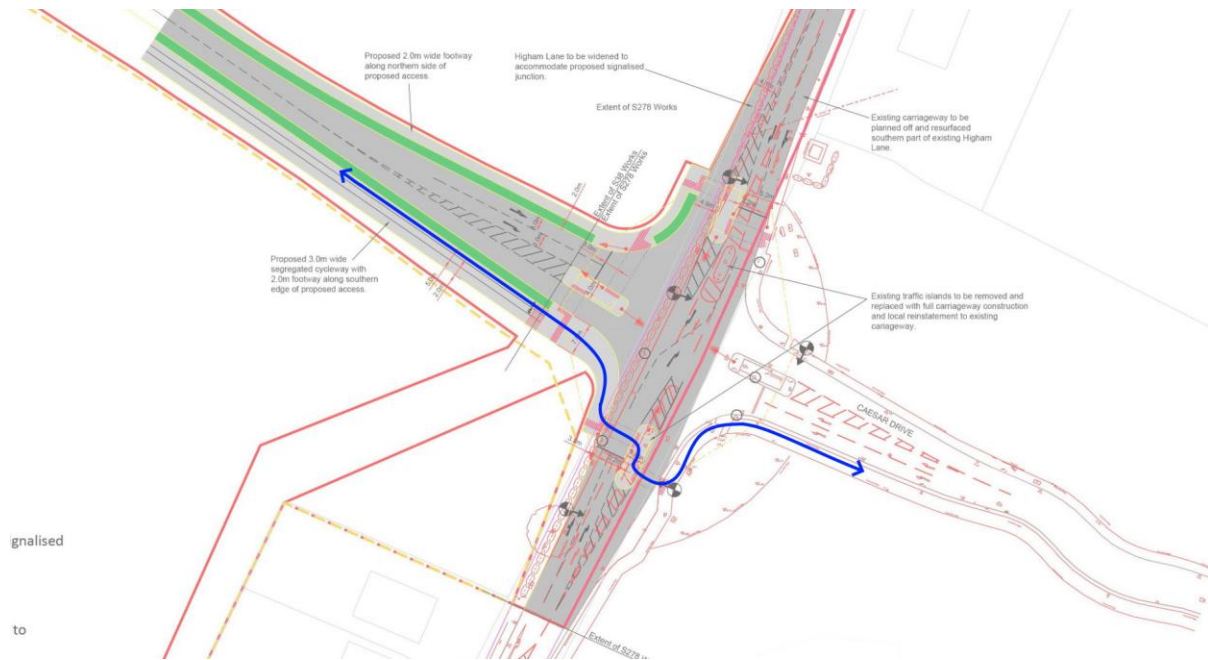


Figure 11 - Cycling Route

Issues in this journey are similar to those indicated in Example Journeys 2 and 3, above (though reversed).

Journey Example 8: Caesar Drive to Higham Lane northbound

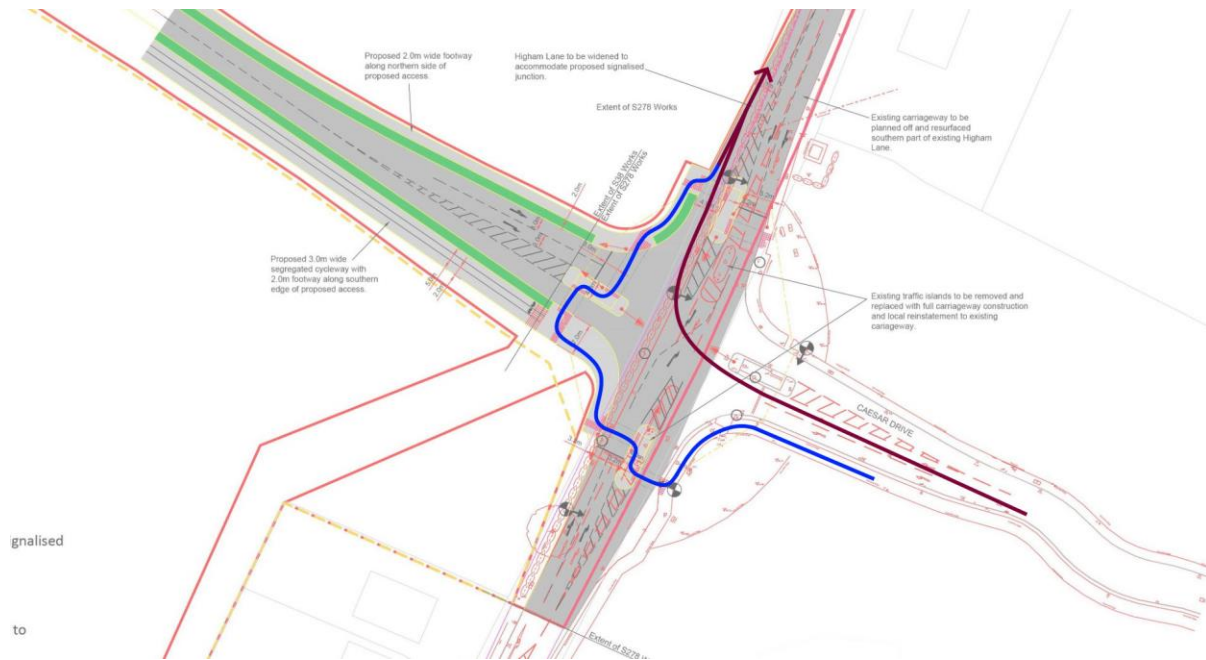


Figure 12 - Cycling Routes (Blue: Off-carriageway; Purple: On-carriageway)

Cyclists travelling on shared use provision will be required to make a significant detour involving a total of four crossing operations, travelling through some narrow space in order to make this connection. There is then no clear, comfortable, and easy connection on to Higham Lane itself to continue the journey.

In contrast, cyclists who choose to remain on the main carriageway have a far simpler, quicker route involving one signal, but this comes with the risk of close passes at the pinch point created by the central island and wide lane on the north side of the junction. No on-carriageway infrastructure is provided (such as advance stop lines) to aid rider safety.

Journey Example 9: Caesar Drive to Higham Lane southbound

The existing shared use provision enables cyclists to make the left turn, bypassing the junction and its traffic signals. However, the merge from the shared use space to the general carriageway where shared use provision ends is inadequate.

It is noted that on its own, this route would fall outside of the scope of the scheme. However, a fundamental junction redesign as would be appropriate to fix issues present with other journeys can also improve this connection.

Journey Example 10: Higham Lane continuing northbound

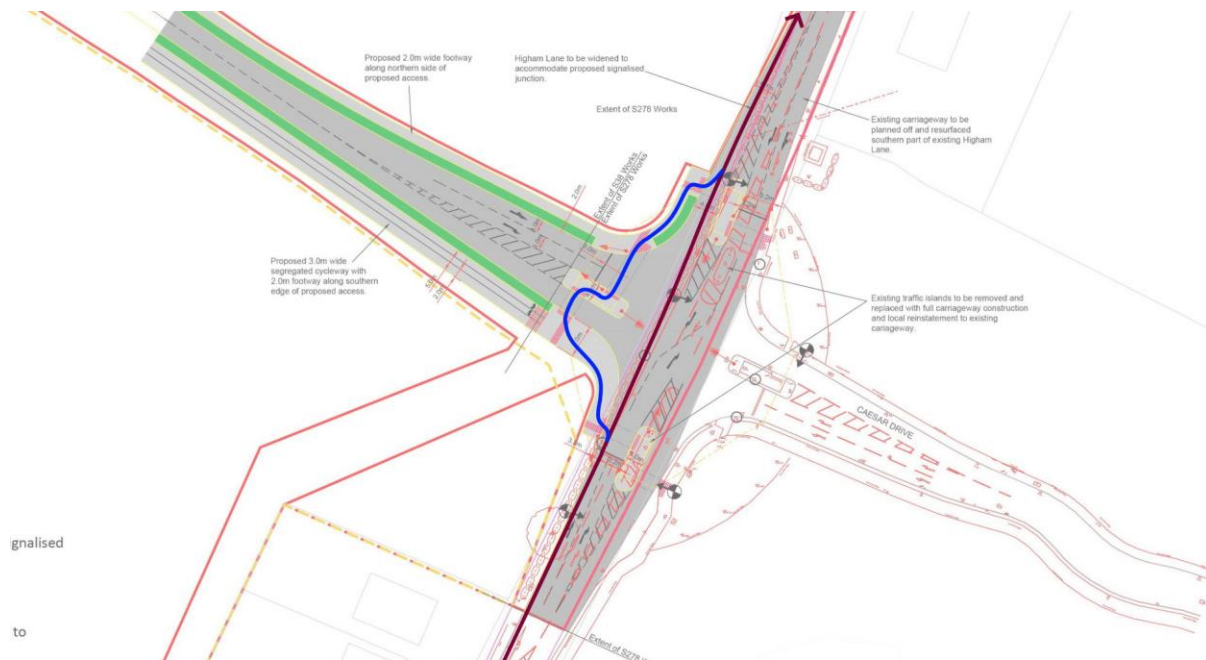


Figure 13 - Cycling Routes (Blue: Off-carriageway; Purple: On-carriageway)

Cyclists travelling northbound on Higham Lane and continuing up towards the A5 are offered no practical protection through the junction. Remaining on carriageway, riders are presented with a pinch point created by the north side refuge island and must take the lane to avoid close passes by drivers. This puts cyclists into direct conflict with drivers.

While riders could choose to leave the carriageway and use the various crossings to move through the junction, this is extremely unlikely where it would be slow and impractical, putting riders into conflict with pedestrians in some narrow spaces. There is also no clear, easy, and safe merge back onto Higham Lane after the junction.

Journey Example 11: Higham Lane continuing southbound

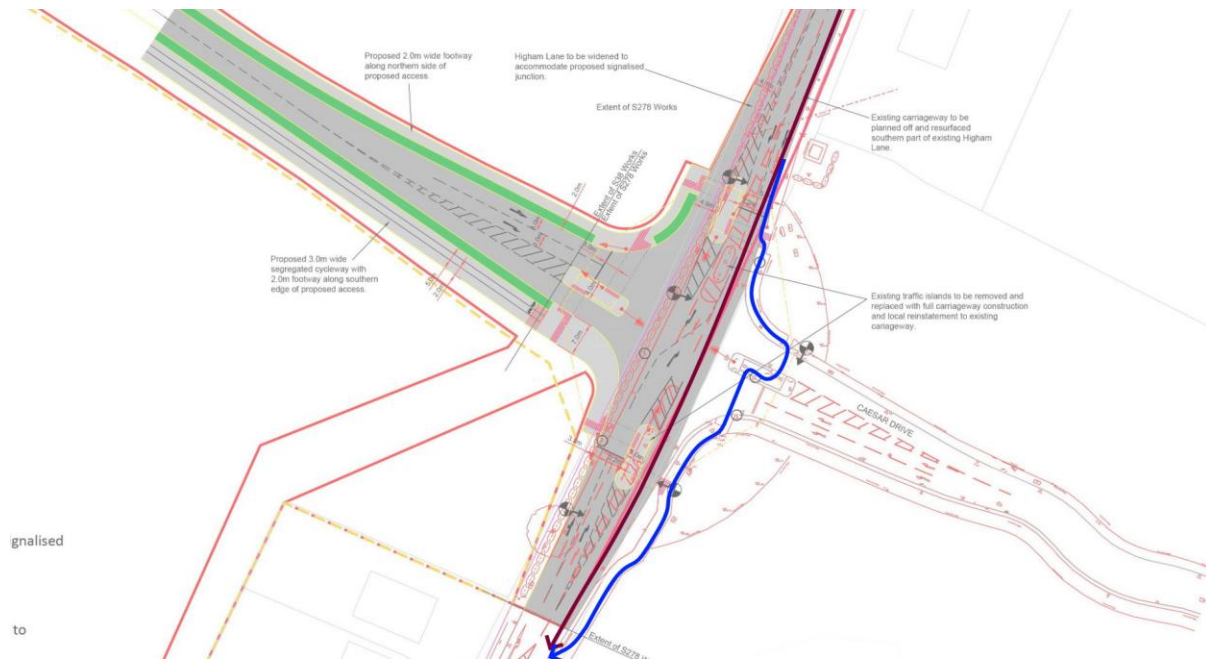


Figure 14 - Cycling Routes (Blue: Off-carriageway; Purple: On-carriageway)

Cyclists travelling southbound on Higham Lane towards Milby Drive are offered no practical protection through the junction. Remaining on carriageway, riders are presented with a pinch point created by the south side refuge island and must take the lane to avoid close passes by drivers. This puts cyclists into direct conflict with drivers.

While riders could choose to leave the carriageway and use the crossings over Caesar Drive to move through the junction, this is extremely unlikely where it would be slow and impractical, putting riders into conflict with pedestrians in some narrow spaces. In fact, there is no defined shared use space on the north-east corner of the junction between Higham Lane and Caesar Drive, and the signals are pedestrian only, not toucan crossings.

Referenced application documents:

- https://apps-nuneaton.s3.amazonaws.com/Planning_Documents/039578-General%20Arrangement.pdf
- https://apps-nuneaton.s3.amazonaws.com/Planning_Documents/039578-General%20Arrangement%20Sheet%201.pdf
- https://apps-nuneaton.s3.amazonaws.com/Planning_Documents/039578-General%20Arrangement%20Sheet%202.pdf
- https://apps-nuneaton.s3.amazonaws.com/Planning_Documents/039578-Typical%20Sections.pdf
- https://apps-nuneaton.s3.amazonaws.com/Planning_Documents/039578-Paving%20and%20Kerbing%20Sheet%202.pdf