Camcycle is a volunteer-led charity with over 1,600 members working for more, better and safer cycling for all ages and abilities in the Cambridge region. We focus on cycling as a mode of sustainable general transportation for everyday purposes. Many of our members transport themselves and their families using a wide variety of cycles, such as cargo cycles, tandem cycles, tricycles, recumbent cycles, disability-adapted cycles and cycles with trailers.

# ISH5 Action 8: points to be made in addition to previous submission

We have very little confidence that the applicants will comply with Gear Change and other policies regarding active travel unless they are compelled to do so. Our experience with the A14 project informs us. The applicants have at all stages failed to consult with active travel users in critical ways, and have refused for specious reasons to use modern design guidance, even from their own manual, the Design Manual for Roads and Bridges (DMRB).

For example:

- The county has documented, in their representation, a case in Histon and Impington where the A14 project team widened a roundabout for motorists and left behind a very poor situation for the numerous people who were walking and cycling at the crossings. This had to be remedied after the fact with a crude fix, costing time and money for the local highway authority.
- Another example is at the so-called landmark active travel bridges built at Bar Hill and Swavesey/Boxworth. A year ago, then-Highways England suddenly installed exclusionary barriers on both ends of both bridges, defying Gear Change, LTN 1/20, the Equality Act, and their own DMRB CD 195 guidance. Highways England did not perform an Equality Impact Assessment, nor did they ever respond to our enquiries asking what standards or guidance documents they had followed in creating these barriers. Instead, they made up some post hoc rationalisations that had no connection to the actual situation on the ground, implying that (in brief) cyclists would somehow exceed the laws of physics in ways that would cause problems for motorists. A longer rebuttal of their arguments can be viewed at REF 17. In any case, Highways England then promptly gave up responsibility for the site and handed the problem to the county. See REF 6 for the FOI request and outcome. Eventually, the situation required a significant investment in time and money by both the local highway authority and volunteers such as ourselves in order to rectify the matter after the bridges were adopted by the county.
- When building the expanded A14 overpass of the Cambridgeshire Guided Busway, they needed to close the busy and popular active travel route that runs alongside the Busway. The officers at then-Highways England provided no more notice than a small sign posted on a pole about five days before the closure (see REF 16). The diversion route was not ready in time for the closure and was poorly coordinated when it finally did arrive. Thousands of people use this active travel route every day, including many schoolchildren from outlying villages; they were all left stranded to find their own way on much more dangerous alternative roads during the closure of the Busway route. To have such a crucial route shut down in such amateur fashion with hardly any notice and no diversion ready to go in time shows how little respect that the applicant has for active travel.
- We have previously raised the issue of dangerous roundabouts, crossings and junctions on the A14 project. We are especially concerned about junctions and roundabouts where the curvature of the roadway is designed for very high speeds, but active travel users are somehow expected to cross the live carriageway at-grade. The response we received from Mr David Bray (via email) included this statement: '*Using tighter radii risks vehicle overrun and damage to the crossing facility, which would become a maintenance concern*' and similar statements have been found in other correspondence (see REFs 3, 4 & 11). From this response we gathered that Highways England was more worried about damage to the crossing facility and maintenance concerns than they were worried about injuries to human beings trying to cross the road.
- Prior to LTN 1/20, Highways England / National Highways had a section of the Design Manual for Roads and Bridges (DMRB) known as CD 195 (REF 14) that specified the design of infrastructure for cycle traffic. CD 195 is fairly well written and it would have saved a lot of trouble if it had been followed. It would seem logical that they should use CD 195 for any cycling infrastructure, in addition to any other relevant guidance for other non-motorised modes. Instead, the officers at then-Highways England took a very pedantic stance, claiming that their schemes '*incorporate shared use facilities [not cycleways], and therefore the design parameters in CD 195 are not directly applicable*' (similar

statements are found in REFs 2, 3 & 11). The officers threw out the modern guidance and used some very old and dated documents.
- We believe this above described pedantic stance was taken in bad faith. After all, those very same officers are more than happy to use motor-traffic-specific guidance to design ordinary public highways that are by law shared between motorised users and non-motorised users. They showed no inclination to throw out any other part of DMRB on the grounds that such highways are shared between many different types of road users. It is only CD 195 that receives this strange and illogical treatment. We believe that officers at Highways England deliberately had particular wording inserted into the introduction of CD 195 knowing that they could make this highly tendentious argument. Since cycle routes built by Highways England are always shared by other non-motorised users, they have effectively nullified the entire existence of CD 195 by inserting a single sentence into the introduction, and rendered the document completely useless despite all the care and effort that went into producing it.
- Later, Highways England added a section to DMRB called CD 143 'Designing for walking, cycling and horse-riding' (REF 15). CD 143 has a relatively small number of useful specifications in it, but it is a largely inadequate document with many, many important details missing, such as how to design safe junctions and crossings. It is not possible to design a sensible active travel route on the basis of CD 143 alone. It seemed obvious from the way it was written that CD 143 made sense when combined with other manuals such as CD 195 to fill in the details, but the officers at Highways England refused to use CD 195 (e.g. REFs 2, 3 & 11), and thus did not avail themselves of the latest design guidance of the time.
- In any case, Local Transport Note (LTN) 1/20 and the Gear Change Policy have been published in the interim and are explicitly applicable to all highway projects in England. Will the applicant, National Highways, apply these policies and specifications diligently and honestly? We shall see, but we do not have much reason to believe they will respect active travel policies and specifications unless they are compelled to do so.

**History of correspondence between Camcycle, Daniel Zeichner MP and parties at Highways England / National Highways**

- (July 2019) Letter from Camcycle to Mr Daniel Zeichner MP: an outline of the problems and asking for assistance. (REF 1)
- (Oct 2019) Mr Daniel Zeichner MP attends the Parliamentary Transport Committee (see transcript: 23 Oct, 11:40am) and asks Mr Jim O'Sullivan why Highways England was not following its own standards.
- (Nov 2019) Letter from Camcycle to Mr Jim O'Sullivan: a follow-up on the remarks made at the Parliamentary Transport Committee. (REF 2)
- (Dec 2019) Letter from Mr Jim O'Sullivan to Mr Daniel Zeichner MP: makes the claim that CD 195 is not applicable because they are only designing 'shared facilities'. Furthermore states that the existing A428 will become a local road 'safer and more attractive for cyclists'. (REF 3)
- (Dec 2019) Letter from Mr Chris Taylor to Camcycle: makes the claim that the A14 project was designed in compliance with CD 143, which was published the previous month. Also repeats the claim that '*Using tighter radii risks vehicle overrun and damage to the crossing facility*', without considering the safety risk from vehicles travelling at higher speeds facilitated by wider radii. (REF 4)
- (Jan 2020) Letter from Camcycle to Mr Jim O'Sullivan: we rebut the claims made by the two officers from Highways England and reiterate our questions. (REF 5)

# ISH5 Action 14: how and why LTN 1/20 should be embedded in the design principles document

**Sections 3 and 5 of the design principles document**

- Had the applicant applied LTN 1/20 then it would have been included in the list of documents specified in paragraph 3.2.2. The applicant should from this point be required to apply LTN 1/20 and therefore include the document in the paragraph 3.2.2 list. This is because LTN 1/20 is the government's design manual for all cycling infrastructure and this scheme includes active travel

provision that will be used for cycling. All subsequent design steps including detailed design must comply with LTN 1/20.

- In paragraph 3.3.23, a key design principle for the scheme should be: *Following the core and summary principles of LTN 1/20 in all aspects of design that touch upon infrastructure used by cyclists. Especially at junctions, structures and places where people must cross carriageways at-grade.* The reason is that LTN 1/20 must be used to guide the design of all infrastructure that is used for cycling, and the active travel provision in this application will be used for cycling. Especially because LTN 1/20 specifies how to design junctions, structures and crossings in a way that is fully inclusive, safe and accessible for people of all ages and abilities.
- In paragraph 3.3.23, a key design principle should be: *Providing a coherent, safe, direct, comfortable and fully accessible route for active travel between St Neots and Cambourne, in accordance with LTN 1/20 and other relevant guidance for active travel.* The reason is that the applicant must be serving the needs of all road users not merely those of motorised road users. Cyclists are road users who fall into the category of 'active travel' road users, and are among those road users who need coherent, safe, direct, comfortable and fully accessible routes between settlements. The government's design manual LTN 1/20 specifies how infrastructure should be designed in order to create and maintain active travel provision that is also suitable for cyclists of all ages and abilities, in addition to other active travel road users.
- In paragraph 3.3.33 subsection (f), the design principle should also state that permanent structures are designed in a way that meets all the necessary guidance for accessibility, safety, coherence and comfort as specified by guidance documents such as LTN 1/20. This is to ensure that the needs of active travel road users are not sacrificed for the sake of visual appearance.
- In paragraph 3.3.46 it specifies that the scheme has been designed in a way to minimise the frequency of future maintenance events using features that would reduce the number of repairs required. In our experience with prior schemes from the applicant (evidence submitted separately), these maintenance-reducing features often compromise the safety of active travel road users by making carriageways, junctions and crossings much wider and larger than they need be. Wide and large carriageways encourage motorists to travel at much higher speeds and therefore put active travel road users in danger. We ask that this paragraph explicitly state that the principles of LTN 1/20 and the safety of active travel road users will not be compromised by any maintenance-reducing or similar features. Appendix A should also be updated accordingly.
- In section 5, development of the detailed design, a step should be included in which the scheme will be audited from the standpoint of LTN 1/20 and other relevant guidance in order to identify and rectify all shortcomings for active travel users. The auditor must be an engineer with a specific qualification and training in the design of active travel infrastructure.

**Appendix A of the design principles document**

- In the table row pertaining to paragraph 4.31, the applicant mentions that there is poor non-motorised user provision along the corridor. However, the applicant does not propose to create coherent non-motorised user provision along the corridor. Therefore the applicant should be required to create non-motorised or active travel user provision along the corridor in a coherent fashion meeting the principles of LTN 1/20 and other relevant guidance for active travel.
- In the table row pertaining to paragraph 4.33, the applicant does not specify compliance with LTN 1/20. The government's cycling design manual, LTN 1/20, applies to all highway schemes. Therefore, the applicant should be applying LTN 1/20 to ensure that the scheme is fit for purpose.

**Appendix B of the design principles document**

- In row 1 ('*good road design makes roads safe and useful*'), the applicants have failed to apply LTN 1/20 and therefore they have failed to design roads that are safe and useful for road users such as cyclists. The core principles of LTN 1/20 are safety, coherency, directness, comfort and attractiveness. LTN 1/20 applies to all highway schemes. In order to ensure that this scheme is safe and useful for cyclists the applicant should be applying LTN 1/20.
- In row 2 ('*good road design is inclusive*'), the applicants have failed to apply LTN 1/20 and therefore they have failed to design roads that are inclusive. The overarching principle of LTN 1/20 is inclusivity. Infrastructure used for cycling must be fully accessible to people of all ages and abilities

who may be riding a diverse variety of cycles of various sizes and dimensions. Failure to apply LTN 1/20 means that the applicants have failed to comply with their public sector equality duty as required under the Equality Act 2010. See in particular paragraphs 1.5.4, 2.4.1, 4.5.11 and 6.5.5 of LTN 1/20.

- In row 6 ('*good road design is environmentally sustainable*'), the applicants try to make the case that their scheme will be environmentally sustainable. There are no grounds under which they can make this claim. Evidence from the SACTRA report (1994; REF 8) on trunk roads and the generation of traffic, and its recent update by WSP (2018; REF 9), show that increased road space leads to further induced motor traffic. This comes as more people switch away from sustainable transport modes to private motor cars, and new developments are planned in car-dependent locations that force people to make more motorised journeys. Therefore the opening of a new dual carriageway represents a massive increase in road space which will shortly thereafter be filled with a huge increase in the amount of motor traffic using it. For the next couple of decades, at least, that will imply an increase in the number of carbon-emitting internal combustion engines. As a result, this scheme will clearly exacerbate the climate emergency (see REF 7 for more details). Furthermore, the air pollution from the emissions of said vehicles will diminish air quality in the region. To make matters worse, the active travel provision of this scheme is piecemeal and does not comply with the latest design guidance such as LTN 1/20. If the applicant is being honest then they must include words to the following effect: '*The construction of this new dual carriageway will lead to an increase in motorised traffic and the production of more greenhouse gas and other emissions that will cause irreversible harm to the global and local environment. This scheme is not in compliance with NPPF policies 11, 153 and 154 because it will exacerbate climate change by inducing more motorised journeys on the road network.*' We note that the applicants have failed to consider alternative schemes that would be environmentally sustainable by reducing the number of motorised journeys in the region while increasing safety for all road users.
- In row 7 ('*good road design is thorough'*), the applicants have omitted consideration of active travel provision. Such infrastructure that is used for cycling must be in compliance with the government's cycling design manual, LTN 1/20. Therefore, the applicant's road design is not thorough.
- In row 8 ('*good road design is innovative*'), the applicants have failed to mention any innovation with regard to active travel provision. They claim they chose their route because it '*provided additional connectivity to St Neots*' and '*improved traffic and congestion*'. However, the scheme does not provide those connectivity benefits to active travel users. Furthermore, the increase in road space will lead to an increase in traffic and congestion, as documented by the SACTRA report (1994) on trunk roads and the generation of traffic, as well as its recent update by WSP (2018). Far from being innovative, the applicants are repeating the well-worn mistakes of the 20th century by expanding road space instead of trying to manage road demand. A truly innovative approach to road design would instead seek to reduce motor traffic levels while increasing safety for all road users, enable mode shift to sustainable modes such as public transport and active transport, and thereby reduce both greenhouse gas and local particulate emissions in the region.
- In row 9 ('*good road design is collaborative*') the applicants claim to have reviewed existing walking, cycling and horse-riding (WCH) movements to establish journey patterns on existing roads and public rights-of-way. However, given the poor existing non-motorised user provision they cite earlier in the document, it is unlikely that any kind of review of existing movements could provide a realistic view of what people would use if there was safe and LTN 1/20-compliant active travel infrastructure in place.

**Appendix C of the design principles document**

- **S2 Roxton Road Bridge**: according to drawing ending in DC-3501 the bridge is proposed to have an active travel route within an off-carriageway space measuring 5.0m in width from kerb to parapet. According to Table 5-3 of LTN 1/20, there must be at least 0.5m of buffer space between the cycle route and any vertical obstruction over 0.6m tall. According to Table 6-1 of LTN 1/20, there should be 2.5m of separation between 60mph motor traffic and a cycle route, or an absolute minimum of 2.0m separation. This means that the effective width of the active travel route is only 2.0m (or 2.5m if following absolute minimum standards for protection). This effective width falls below the minimum standard of 3.0m for a lightly-used shared-use pathway as specified in Table 6-3 of LTN 1/20. To bring the Roxton Road Bridge into compliance with LTN 1/20 there should be: (a) a 0.5m horizontal separation between the parapet and the active travel route, (b) a 3.0m or wider active travel route, and (c) a 2.5m protective buffer between the 60mph motor traffic and the active travel route (or 2.0m at an

absolute minimum). The protective buffer should be designed to prevent motor vehicles from mounting it and parking on it.

- **S3-S8 Black Cat Junction and associated structures**: we agree that active travel routes should be grade-separated from the Black Cat Junction. However, the scheme caters only for active travel movements between the northwest and the southwest of the junction, and does so via an indirect and circuitous route. The scheme simply does not offer a safe active travel crossing of the A1 and there are no other reasonably safe options within the vicinity of this area on the west side of the River Great Ouse. The combination of the A1, river and East Coast Main Line form a barrier to active travel between the Roxton and Gamlingay areas. An active travel bridge of the A1 near the New Black Cat Junction could form part of the missing link.
- **S9 River Great Ouse Viaduct**: this structure lacks active travel provision, and no alternative is provided, therefore the scheme provides no way for active travel users to cross the River Great Ouse. That leaves a large gap in the active travel network. There is no reasonable way to cross the river between Blunham and St Neots. One possible improvement for active travel users would be the inclusion of an active travel sidepath on the viaduct; this would also have the benefit of providing a safe egress route for motorists on the viaduct. Alternatively an entirely separate active travel only bridge over the river could be provided.
- **S13 East Coast Main Line Railway Bridge**: this structure lacks active travel provision and no alternative is provided. Currently, active travel users must use the level crossing at Station Road. If an active travel sidepath were to be provided then it would be possible to create an active travel route that is grade-separated from the East Coast Main Line in order to provide connectivity across the railway in lieu of the level crossing. This is a significant safety upgrade that is currently not being considered and it would also have the benefit of providing a safe egress route for motorists on the viaduct.
- **S19 New Hen Brook Culvert and Underpass**: this structure is proposed to be a narrow, dark and damp hole that combines a brook and a small shared-use pathway. The approach paths have sharp and blind bends. This will be a highly unattractive and uncomfortable place for people to be. LTN 1/20 paragraph 10.8.18 states that: '*Underbridges should be designed to maximise natural light and user perceptions of safety, for example by using increased headroom, keeping the approaches to the structure straight and at the same level as the natural ground and providing splayed wingwalls and openings in the structure above (see Figures 10.51 and 10.52)*'. Table 5-3 states that there should be 0.5m of clearance between vertical walls or obstructions taller than 0.6m and the cycle route. Therefore, to make this underpass more attractive and comfortable the shared path should be 4.0m wide and it should maximise natural light by having straight approaches and splayed wingwalls.
- **S25 Cambridge Road Bridge**: the structure provides a 3.5m wide space between parapet and kerb for an active travel route. This is an extremely narrow path on a very wide dual-carriageway bridge. Each carriageway measures 9.3m and the central reservation is 3.0m wide. We assume that motor traffic speeds could reach up to 70mph on such a structure. In that case, according to Table 6-1 of LTN 1/20, there should be 3.5m of separation between 70mph motor traffic and a cycle route, or an absolute minimum of 3.0m separation. According to Table 5-3 of LTN 1/20, there must be at least 0.5m of buffer space between the cycle route and any vertical obstruction over 0.6m tall (such as a bridge parapet). Therefore the effective width of the proposed active travel route on this bridge is nil, as opposed to the 3.0m width specified by Table 6-3 of LTN 1/20 for a lightly-used shared-use pathway. In order to bring this Cambridge Road Bridge structure into compliance with LTN 1/20 there should be: (a) 0.5m buffer between the parapet and the active travel route, (b) at least a 3.0m wide shared-use pathway, and (c) at least a 3.0m (preferably 3.5m) wide protective buffer between high speed motor traffic and the active travel route with measures to prevent motor vehicles from mounting or parking on it.
- **S31 Toseland Road Bridge**: the structure provides a 4.0m wide space between parapet and kerb for an active travel route. According to Table 5-3 of LTN 1/20, there must be at least 0.5m of buffer space between the cycle route and any vertical obstruction over 0.6m tall (such as a bridge parapet). According to Table 6-1 of LTN 1/20, there should be 2.5m of separation between 60mph motor traffic and a cycle route, or an absolute minimum of 2.0m separation. This means that the effective width of the active travel route is only 1.0m (or 1.5m if following absolute minimum standards for protection). This effective width falls below the minimum standard of 3.0m for a lightly-used shared-use pathway as specified in Table 6-3 of LTN 1/20. To bring the Toseland Road Bridge into compliance with LTN 1/20 there should be: (a) a 0.5m horizontal separation between the parapet and the active travel route, (b) a 3.0m or wider active travel route, and (c) a 2.5m protective buffer between the 60mph motor traffic and the active travel route (or 2.0m at an absolute minimum). The protective buffer should be

designed to prevent motor vehicles from mounting it and parking on it. In addition, at either end of the bridge there is a very wide junction. Although these junctions are only intended to be used for emergency purposes, they interrupt the active travel route and leave people adrift in the middle of a wide and dangerous carriageway where motor vehicles may be travelling at 60mph. This issue can be resolved by gently bending the active travel route away from the carriageway such that it crosses the emergency access roads at places where they are much narrower. See figure 10.18 of LTN 1/20 for more details about designing such crossings of priority junctions.

- **S38 St Ives Road Bridge**: the structure provides a 4.0m wide space between parapet and kerb for an active travel route. According to Table 5-3 of LTN 1/20, there must be at least 0.5m of buffer space between the cycle route and any vertical obstruction over 0.6m tall (such as a bridge parapet). According to Table 6-1 of LTN 1/20, there should be 2.5m of separation between 60mph motor traffic and a cycle route, or an absolute minimum of 2.0m separation. This means that the effective width of the active travel route is only 1.0m (or 1.5m if following absolute minimum standards for protection). This effective width falls below the minimum standard of 3.0m for a lightly-used shared-use pathway as specified in Table 6-3 of LTN 1/20. To bring the St Ives Road Bridge into compliance with LTN 1/20 there should be: (a) a 0.5m horizontal separation between the parapet and the active travel route, (b) a 3.0m or wider active travel route, and (c) a 2.5m protective buffer between the 60mph motor traffic and the active travel route (or 2.0m at an absolute minimum). The protective buffer should be designed to prevent motor vehicles from mounting it and parking on it.
- **S40 Caxton Gibbet Bridge**: the structure provides a 3.0m wide active travel route protected by a 2.5m buffer from the carriageway, a 0.5m buffer from support columns and 0.5m buffer from the edge of the structure. If we count the 2.5m buffer from the carriageway together with the 0.5m buffer from the support columns then that forms an effective 3.0m buffer from the carriageway. Therefore, this cross-section meets the absolute minimum requirement in LTN 1/20 for a lightly-used shared-use pathway alongside a 70 mph dual-carriageway. It shows that it is possible for the applicant to achieve LTN 1/20 compliance, when they choose to do so.

**Issues not mentioned in the design principle document**

While the document contains an evaluation of structures in Appendix C (critiqued above) there is no equivalent evaluation for ground-level infrastructure. However, there are numerous locations where the infrastructure falls short of the principles of LTN 1/20 and the needs of active travel users of all ages and abilities.

**Inadequate or no protection from high-speed motor traffic.** The following is an incomplete list of locations on the plans where the active travel route appears to have insufficient or zero protection from high-speed motor traffic travelling on an adjacent carriageway; or the active travel route appears to be substandard in width. According to Table 5-3 of LTN 1/20, there must be at least 0.5m of buffer space between the cycle route and any vertical obstruction over 0.6m tall (such as a bridge parapet). According to Table 6-1 of LTN 1/20, there should be 2.5m of protective buffer between 60mph motor traffic and a cycle route, or an absolute minimum of 2.0m separation. With 70mph motor traffic, the protective buffer should be increased by another metre. Table 6-3 specifies that shared-use pathways should be at least 3.0m wide, in addition to the protective buffers mentioned above, and busier shared-use pathways should be at least 4.5m. However, in places where there are significant flows of pedestrians and/or equestrians, care should be taken to design a cycleway that is separate from the facilities for pedestrians and/or equestrians, as specified in sections 6.2 and 8.2 of LTN 1/20.

Partial list of substandard locations:

- Sheet 1 Composite drawing ending with DR-DC-2671 (Black Cat Junction): none of the active travel routes north of the Kelpie Marina Access Road appear to have any separation from the carriageway, apart from locations in the vicinity of junctions where thankfully there is some separation.
- Sheet 2 drawing ending with DR-DC-2672 (Roxton Road link north): none of the active travel routes appear to have any separation from the carriageway, apart from locations in the vicinity of junctions where thankfully there is some separation.
- Sheet 9 drawing ending with DR-DC-2679 (New Cambridge Road Junction): none of the active travel routes appear to have any separation from the carriageway, apart from locations in the vicinity of slip road roundabout entries and exits, where thankfully there is some separation.

- Sheet 11 drawing ending with DR-DC-2681 (Toseland Road Bridge): none of the active travel routes appear to have any separation from the carriageway.
- Sheet 13 drawing ending with DR-DC-2683 (St Ives Road Junction): none of the active travel routes appear to have any separation from the carriageway, apart from locations in the vicinity of slip road roundabout entries and exits, where thankfully there is some separation.
- Sheet 14 drawing ending with DR-DC-2684 (New Caxton Gibbet Junction): none of the active travel routes appear to have any separation from the carriageway, apart from locations underneath the proposed A428 and in the vicinity of slip road roundabout entries and exits, where thankfully there is some separation.

**Difficult or potentially dangerous places where active travel users must cross high-speed motor traffic carriageways at-grade**. There are many places where active travel users are expected to cross carriageways at-grade and the design does not make clear how those crossings will be made safe, accessible and comfortable enough for people of all ages and abilities to reasonably use them. LTN 1/20 Chapter 10 deals with crossings, junctions and roundabouts. In particular, Table 10-2 specifies the criteria by which different types of crossings should be selected, whether that be 'uncontrolled', 'cycle priority', 'parallel zebra', 'signalised', or 'grade separated' entirely. Table 10-2 must guide the selection of type of crossing in order to ensure safety and inclusiveness.

List of crossings of concern:

- Sheet 1 Composite drawing ending with DR-DC-2671 (Black Cat Junction): Roxton Road roundabout has a crossing of one arm where drivers may be able to turn the corner at high speed and put active travel users in danger.
- Sheet 9 drawing ending with DR-DC-2679 (New Cambridge Road Junction): there are crossings of two different slip roads, both of which will require signalisation due to heavy volume and high speed of motor traffic.
- Sheet 11 drawing ending with DR-DC-2681 (Toseland Road Bridge): there are very wide junctions at either end of the bridge, and also for the private access. These wide junctions leave active travel users adrift in the middle of a wide expanse of carriageway while 60mph motor traffic zooms around them. Instead, the active travel route should bend gently away from the carriageway and the crossings should be designed in the uncontrolled style shown in Figure 10.18 and described in paragraphs 10.5.33 and 10.5.34.
- Sheet 13 drawing ending with DR-DC-2683 (St Ives Road Junction): there is a crossing of a very wide private access on the southern roundabout. It is unclear why this private access is so wide or is permitted to make such a big gap in the active travel route. This private access should be narrowed down to the minimum width by taking into account the design principle that the road design should force drivers to take the turn slowly and carefully using tighter turn radii.
- Sheet 14 drawing ending with DR-DC-2684 (New Caxton Gibbet Junction): every single carriageway crossing shown on this sheet is of major concern. In particular, the crossing of the A1198 at the northern roundabout forces active travel users to contend with a total of 5 lanes of busy and high-speed motor traffic. This crossing absolutely must be signalised, if it cannot be grade-separated entirely; the rest of the active travel infrastructure will be effectively inaccessible if this crossing is not safe to use. There are also crossings of two different slip roads, both of which must be signalised based on speed and likely heavy usage of these roads. Finally, there are the crossings at 14/8 and 14/12. Both of these lie on tangent sections of road where speeds will likely be at least 50mph. Therefore they should be signalised, according to Table 10-2, or alternative solutions considered. In particular, at 14/8, it does not make sense to force active travel users to cross the road to the west side, since most of them will be coming or going to the east. The active travel route should instead connect to Cambourne on the east side of the A1198.

**Missing segments that put together could provide active travel connectivity between St Neots and Cambourne**. A further 3.5 miles of well-designed provision would make a significant contribution to enabling active travel all the way between St Neots to Cambourne.

- Cambridge Road (St Neots) between the Stone Hill roundabout and the west side of the proposed New Cambridge Road Junction: needs improvements to less than half a mile of pathway to bring it up to current design requirements.

- The existing A428 between the east side of New Cambridge Road Junction (across from Wintringham Farm access) and Eltisley: needs an active travel route alongside 3 miles of carriageway. A much cheaper alternative may be obtained by installing a modal filter on the existing A428 somewhere between New Cambridge Road Junction and Eltisley. This would turn the existing A428 into a local access road; all through-traffic would need to join the new A428 at either New Cambridge Road Junction or Caxton Gibbet Junction. Then part of the carriageway of the old A428 can be repurposed for active travel use, the speed limit lowered and the design of active travel provision greatly simplified due to the significantly lower speeds and volumes of motor traffic. Exemptions to the modal filter may be made for buses and farm vehicles.

The remainder of the connecting infrastructure is already proposed, albeit in a form that is not yet compliant with LTN 1/20, as discussed in the sections above.

# References


- REF 1: 2019 July letter from Camcycle to Mr Daniel Zeichner MP (uploaded separately)
- REF 2: 2019 Nov letter from Camcycle to Highways England (uploaded separately)
- REF 3: 2019 Dec letter from Mr Jim O'Sullivan to Mr Daniel Zeichner MP (uploaded separately)
- REF 4: 2019 Dec letter from Mr Chris Taylor to Camcycle (uploaded separately)
- REF 5: 2020 Jan letter from Camcycle to Mr Jim O'Sullivan (uploaded separately)
- REF 6: FOI request [redacted]
- REF 7: Lynn Sloman and Lisa Hopkinson. July 2020. The carbon impact of the national roads programme. (uploaded separately)
- REF 8: D A Wood, QC. 1994. Trunk Roads and the Generation of Traffic (SACTRA). (uploaded separately)
- REF 9: WSP. May 2018. Latest Evidence on Induced Travel Demand: An Evidence Review. (uploaded separately)
- REF 10: 2019 June letter from Buckden Parish Council to Highways England. (uploaded separately)
- REF 11: 2019 July letter from Highways England to Buckden Parish Council. (uploaded separately)
- REF 12: photo of small sign providing sole notification of the upcoming closure of the major active travel route alongside the Cambridgeshire Guided Busway. (uploaded separately)
- REF 13: 23 Oct 11:40am Parliamentary Transport Committee: [redacted]
- REF 14: DMRB - CD 195, cycle infrastructure design.  (uploaded separately)
- REF 15: DMRB - CD 143, designing for walking, cycling and horse-riding. (uploaded separately)
- REF 16: Photograph of small sign posted five days in advance of the shutdown of the major active travel route alongside the Cambridgeshire Guided Busway. (uploaded separately)
- REF 17: Several blog posts outlining information about the A14 bridge barriers [redacted]