AGENDA

Kent County Council

REGULATION COMMITTEE MEMBER PANEL (RECONVENED MEETING OF 6 OCTOBER)

Thursday, 4th December, 2025, at 2.00 pm
Medway Room, Sessions House, County Hall, Maidstone

Ask for: **Hayley Savage**
Telephone **03000 414286**

Membership

Mrs B Porter, Mr A Ricketts and Mr T L Shonk

UNRESTRICTED ITEMS

(During these items the meeting is likely to be open to the public)

1. Declarations of Interest in items on the agenda for this meeting

2. Application to divert part of Public Footpaths AU22 and AU17 from the foot crossings known as Cradle Brdge (AU22) and Bolleaux (AU17) at Kennington in the Borough of Ashford (Pages 1 - 144)

EXEMPT ITEMS

(At the time of preparing the agenda there were no exempt items. During any such items which may arise the meeting is likely NOT to be open to the public)

Benjamin Watts
Deputy Chief Executive
03000 416814

Wednesday, 26 November 2025

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Application to divert part of Public Footpaths AU22 and AU17 from the foot crossings known as Cradle Bridge (AU22) and Bolleaux (AU17), at Kennington in the Borough of Ashford

An addendum to the report by the Head of Public Rights of Way and Access Service considered by Kent County Council's Regulation Committee Member Panel on 6 October 2025.

Recommendation: The applicant to be informed that an Order to divert part of Public Footpaths AU22 and AU17 from the foot crossings known as Cradle Bridge (AU22) and Bolleaux (AU17), at Kennington in the Borough of Ashford, will be made.

Local Member: Brian Collins Unrestricted item

Introduction

1. This report is an addendum to the Kent County Council's Regulation Committee Member Panel report which was considered at a meeting on 6 October 2025 (see **Appendix A**). The recommendation was that the applicant be informed an Order should be made to divert part of Public Footpaths AU22 and AU17 from the foot crossings known as Cradle Bridge (AU22) and Bolleaux (AU17) at Kennington in the Borough of Ashford, as shown on the plan at **Appendix B** to this Addendum.

2. This addendum should be read in conjunction with the Regulation Committee Member Panel report at **Appendix A**, the contents of which remain relevant.

3. As a point of correction, where the Regulation Committee Member Panel report referred to Network Rail's *Disability* Impact Assessment, this should be amended to *Diversity* Impact Assessment, as correctly pointed out by Mr Morley at the meeting on 6 October.

Main point of contention

4. There was broad agreement that the footpaths would become unsafe due to the expected increase in use of the at grade rail crossings once the development had been completed. The main point of contention related to the proposed diversion of part of Public Footpath AU22 over a stepped bridge. Connected to that, the Member Panel considered that there was insufficient information in relation to the costs of providing a stepped or ramped bridge, to be able to make a fully informed decision. Therefore, it was agreed to adjourn the meeting and reconvene once Network Rail had produced clear costings for the two types of bridge.

Costings

5. Network Rail has produced a financial breakdown of costs relating to each type of bridge. These can be found at **Appendix C**.

Conclusion

6. With reference to the conclusion in the Regulation Committee Member Panel report at **Appendix A**, the legal test that is required to be considered when making an Order to divert a Public Right of Way under section 119A of the Highways Act 1980, from where it crosses a railway, is that of safety of the public using, or likely to use, the crossings. With reference to paragraph 3 above, the Public Rights of Way and Access Service is still satisfied that this legal test is met.

7. Further, it is considered that the best way of removing the risk of the public coming into contact with the trains is by means of a bridge. Although there is a preference for this to be of a ramped construction, it is recognised that this is not possible in this particular case as the required funding for such a structure is not available.

Recommendation

8. Therefore, it is recommended that the County Council exercises its discretion, under the powers conferred in Section 119A of the Highways Act 1980, and informs the applicant that an Order to divert part of Public Footpaths AU22 and AU17 from the foot crossings, known as Cradle Bridge (AU22) and Bolleaux (AU17), at Kennington in the Borough of Ashford, as shown on the plan at **Appendix B** to this report, will be made on the grounds that it is expedient to divert the path on the grounds of safety of the public.

Accountable Officer:
Mr Graham Rusling (Head of Public Rights of Way and Access Service) – Tel: 03000 41 34 49 or Email: graham.rusling@kent.gov.uk
Case Officer:
Mrs Maria McLauchlan – Tel: 03000 41 34 20
or Email: maria.mclauchlan@kent.gov.uk

List of appendices:

APPENDIX A – 6 October 2025 Regulation Committee Member Panel report
- Annex A - Plan of proposals
- Annex B - Extract from the network copy of the Definitive Map, sheet 127 (TR04SW)
- Annex C - Network Rail's Diversity Impact Assessment
- Annex D - Flow Bridge Feasibility Report
- Annex E - Bridge Prior Approval Report
- Annex F1 – AU22 EqIA
- Annex F2 – AU17 EqIA

APPENDIX B – Plan of proposals
APPENDIX C – Financial breakdown of costs relating to each type of bridge

Case file references - **PROW/AU22/14/NR**
PROW/AU17/15/NR

Application to divert part of Public Footpaths AU22 and AU17 from the foot crossings known as Cradle Bridge (AU22) and Bolleaux (AU17), at Kennington in the Borough of Ashford

A report by the Head of Public Rights of Way and Access Service to Kent County Council's Regulation Committee Member Panel on 6 October 2025.

Recommendation: The applicant to be informed that an Order to divert part of Public Footpaths AU22 and AU17 from the foot crossings known as Cradle Bridge (AU22) and Bolleaux (AU17), at Kennington in the Borough of Ashford, will be made.

Local Member: Brian Collins Unrestricted item

Introduction and background

1. The County Council has received two applications to divert parts of Public Footpaths AU22 and AU17 where they pass over the at grade rail crossings known as Cradle Bridge (AU22) and Bolleaux (AU17) at Kennington. The applications to remove the at grade foot crossings from the railway line have been made by Network Rail, in the interests of safety of members of the public.

2. Both footpaths currently have stiles at either side of the railway line (see images of the stiles at AU22 below). In addition, there are 2 steps on the north side of the crossing and 2 gates on the south approach to the crossing over which Public Footpath AU22 runs.

3. A number of risk assessments on these crossings have been undertaken by Network Rail, the most recent in June 2022, in which both crossings were deemed to have a high to medium level of risk according to their risk model (see paragraph 24 below for more detail). The crossing over which Public Footpath AU22 passes is currently ranked 35th highest in Kent in terms of risk, and the crossing over which Public Footpath AU17 passes is currently ranked 45th highest in terms of risk. This is out of the 166 footpath/bridleway crossings in Kent. However, the proposed residential developments (up to 750 dwellings to the west of the railway, including a new school and recreational facilities, and 300 dwellings to the east, including Conningbrook Lakes Country Park and the Julie Rose Stadium), will drive demand from each side of the railway for access. This is expected to lead to a significant increase in use, which will, in turn, significantly increase the risk at the crossings.

4. The length of Public Footpath AU22 to be diverted is shown by a solid black line between the points A-B on the plan at **Appendix A**. The proposal is to divert the path over a stepped Flow bridge (for which prior approval has been granted by Ashford Borough Council) where it passes over the railway, and then to a more direct alignment on the south-eastern side of the railway, as shown by a bold broken line between the points A-C-B.

5. The length of Public Footpath AU17 to be diverted is shown by a solid black line between the points D-E. The proposal is to divert the path along the east side of the railway, as shown by a bold broken line between points E-C.

6. An extract from the network copy of the Definitive Map can be found at **Appendix B** to show the paths in context with the rest of the public rights of way network.

Policy

7. The Countryside Access Improvement Plan, Operational Management document (2013) sets out the County Council's priorities for keeping the Definitive Map and Statement up to date. The main priorities in respect of Public Path Change Orders are:

   Public Path Change Orders will normally be processed in the order in which applications are received, except in any of the following circumstances where an Order maybe processed sooner:

   - Where it will satisfy one or more of the relevant key principles set out in paragraphs 4.14 – 4.25 of the CAIP Operational Management document,
   - Where an application has been made to the County Council in its capacity as Planning Authority
   - Where the processing of an Order could save significant costs incurred in other Rights of Way functions
   - Where a Public Path Change Order is made concurrently with Orders made under Section 53 of the Wildlife and Countryside Act.

7. The County Council will take into account whether the following criteria are satisfied before promoting a Public Path Change Order. Irrespective of the following, the statutory tests (as set out within the Legal Tests section) for changing public rights of way must apply.

   I. The status of the route must not be in dispute at the time of the application, unless the Public Path Order is being implemented concurrently with an application under Section 53 of the Wildlife and Countryside Act 1981.
   II. The applicant must agree to meet the County Council's costs of promoting the Order and bringing the new path into a fit condition for public use.
   III. The applicant must also agree to defray any compensation which may become payable as a result of the proposal.
   IV. The definitive line should, where it is considered by the County Council to be reasonably practicable, be open clear and safe to use.

8. However, nothing in this policy is intended to prevent the County Council promoting a Public Path Change Order in any case where it considers it appropriate in all the circumstances to do so.

Legal Tests – Rail Crossing Diversion or Extinguishment Order

9. Legislation relating to the extinguishment or diversion of a public path which crosses a railway, otherwise than by tunnel or bridge, is contained within Sections 118A (extinguishments) and 119A (diversions) of the Highways Act 1980: The Procedure is in Schedule 6 of the same Act.

   (i) The Council may make an Order to extinguish or divert a public path if it is satisfied that it is in the interests of the safety of users or likely users of at-grade crossings.

   (ii) Particular consideration has to be given to whether or not it is reasonably practicable to make the existing crossing safe for the public and what arrangements will be made to erect and maintain barriers and signs at the closed crossing.

Government Guidance

10. Rights of way circular (1/09) Guidance for local Authorities states:

    "*Rail crossing diversion orders (section 119A of the 1980 Act) Para 5.51.*
    While other criteria are not specified in section 119A, the new way should be reasonably convenient to the public and authorities should have regard to the effect that the proposal will have on the land served by the existing path or way and on the land over which the new path or way is to be created. Consideration should also be given to the effect that the diverted way will have on the rights of way network as a whole and the safety of the diversion, particularly where it passes along or across a vehicular highway."

Consultations:

11. Consultations have been carried out as required by the Act.

County Member and Borough Councillors

12. County Member Brian Collins and Ashford Borough Councillors Katy Pauley and Nathan Iliffe were consulted but no responses were received.

Ashford Borough Council

13. Ashford Borough Council did not object to the proposals.

Kennington Community Council

14. Kennington Community Council agreed that the proposed diversions were in the interest of public safety, but considered that the diversions would be substantially less convenient to the public. They stated that Network Rail's Disability Impact Assessment was only based on the accessibility of the existing crossing, whereas it should take into consideration future use based on the planned development. Wheelchair users and those with pushchairs would not be able to use the bridge and would need to make a long detour to reach some of the local amenities.

User Groups

15. The Open Spaces Society, the Ramblers and the British Horse Society were consulted but no responses were received.

East Kent Area Public Rights of Way Team

16. The East Kent Area Public Rights Officer did not object to the proposals.

Kent Highways

17. Kent County Council's Highways Improvements Team did not object to the proposals but asked if there would be some sort of sign at the beginning of the footpath to inform users that the bridge is not accessible to all.

Statutory Undertakers

18. No objections were received from any Statutory Undertakers who responded to the consultation.

Other interested parties

19. A member of the public, who is a wheelchair user and regular user of public rights of way, had seen Ashford Borough Council's report to approve the stepped bridge and contacted the Public Rights of Way and Access Service independent of the consultation process. They expressed frustration that a ramped bridge had originally been planned and approved but then rejected due to rising costs. They object to the proposal on grounds of accessibility and stated that they considered that the County Council would be in breach of its public sector equality duty if it approved the proposal. They urged the County Council to resist any application that seeks to divert public rights of way over a stepped bridge, stating: "*Should the Council decide to not object to the diversion of the path over an inaccessible footbridge, I shall immediately institute the pre-action protocol with the intent of judicial review of the Council's decision*."

20. A local resident contacted the County Member with concerns that, although they understood that a footbridge would be needed on safety grounds, a stepped bridge would not allow wheelchair users to cross at that point, requiring them to make a substantial detour, and which would disadvantage a large section of the community.

21. Comments on consultees' responses are set out in relevant paragraphs below.

The Case - the proposed diversion of part of Public Footpaths AU22 and AU17 at Kennington where they pass over the at grade rail crossings

22. In dealing with the application to divert a public right of way, consideration must be given to the following criteria of Section 119A of the Highways Act 1980:

    a) Whether it is in the interests of the safety of users or likely users of at grade crossings.

    b) Whether it is reasonably practicable to make the crossing safe for use by the public, and what arrangements have been made for ensuring that, if the order is confirmed, any appropriate barriers and signs are erected and maintained.

    c) Whether the diversion order alters a point of termination of the path or way, if that point is not on a highway over which there subsists a like right of way or, otherwise than to another point which is on the same highway, or another such highway connected with it.

    d) Whether the order should make provision requiring the operator of the railway to maintain all or part of the right of way created by the order.

23. To be taken into account but not listed as criteria under Section 119A of the Act but in Rights of Way Circular (1/09):

i) Whether the right of way will be reasonably convenient to the public.

ii) The effect the proposal will have on the land served by the existing path or way and on land over which the new path or way is to be created.

iii) The effect that the diverted way will have on the rights of way network as a whole.

iv) The safety of the diversion, particularly where it passes along or across a vehicular highway.

24. Those criteria are considered individually, and conclusions drawn below:

a) Whether it is expedient in the interests of the safety of users or likely users of the crossing.

i) It is Network Rail's position that Level Crossings are risk assessed on a regular basis or when risk is known to have changed, such as if a new housing development is being built or if the train timetable changes. The risk assessment process includes quantitative as well as qualitative risk assessment. In quantifying risk, Network Rail uses a risk model called the All Level Crossings Risk Model ("ALCRM") which was developed collaboratively by the Rail Safety & Standards Board, Network Rail and others. This model provides a consistent method for assessing risk to crossing users, train passengers and rail staff. The model incorporates over 200 inputs relating to types of trains, number of trains, train speed, public usage, the crossing environment (location etc.), environmental factors (prone to fog, sun glare, etc.), layout, sighting distance for approaching trains, incident history, user behaviour and the effectiveness of mitigations in place. The ALCRM reports two measures of risk: collective risk and individual risk of fatality. Collective risk includes total harm in terms of Fatalities and Weighted Injuries (FWI), and the individual risk to a single typical user. Coupled with this, Network Rail incorporates qualitative assessment based on the structured expert judgement of the Level Crossing Manager.

ii) The rail crossing diversion applications have been made due to the proposed residential developments, comprising up to 725 dwellings to the west of the railway, including a new primary school and recreational facilities, and 300 dwellings to the east, including Conningbrook Lakes Country Park and the Julie Rose Stadium, which will encourage people from each side of the railway to want to access the other side. Although each crossing is currently only ranked 35th (Public Footpath AU22) and 45th (Public Footpath AU17) highest in terms of risk in Kent, the expected increase in use of the crossings would be significant, leading to a substantial rise in the risk profile of the crossings.

iii) All respondents to the informal consultation agreed that the crossings would be unsafe for the public to use in light of the proposed development which would likely increase use. For the reasons given above, the Public Rights of Way and Access Service considers that it is expedient to divert the footpaths in the interests of the safety of the users or likely users of the crossing.

b) Whether it is reasonably practicable to make the crossing safe for use by the public, and what arrangements have been made for ensuring that, if the order is confirmed, any appropriate barriers and signs are erected and maintained.

i) The risks associated with each crossing are the same, and the same options have been considered by Network Rail as to whether the crossings can be made safe for use by the public. Total closure of the crossings by way of an extinguishment was not an option that could be pursued. Both footpaths provide connectivity between Ashford and Wye, leading to the Kent Downs National Landscape (formerly Area of Outstanding Natural Beauty). An extinguishment would break that connectivity and have a detrimental effect on the public rights of way network. In addition, the likely increase in use reflects the greater importance of the crossings in light of the development.

ii) Train warning systems such as Miniature Stop Lights ("MSLs") have been considered as a possible alternative to diversion but discounted for both feasibility and effectiveness reasons. MSLs are lights that display red or green as crossing signals depending on whether a train is approaching. However, due to the cost of implementation against the overall risk reduction and future risk profile, Network Rail state this is not a cost-effective option when measured against the cost-risk reduction ratio through the provision of a footbridge.

iii) The construction of a footbridge across the railway to replace the at grade crossing on Public Footpath AU22 is considered to be the best option. The bridge completely removes the risk of users coming into contact with trains.

iv) It is not considered necessary to construct another bridge where Public Footpath AU17 crosses the railway. As well as cost, there would be a negative environmental impact. Therefore, it is considered that the best option for Public Footpath AU17 is a diversion that will link up to the new bridge approach on Public Footpath AU22 along the eastern side of the railway.

v) Network Rail has not identified any other works that could be undertaken to improve safety of the crossings.

vi) If an Order is made and confirmed, the existing level crossings will be securely and permanently fenced off in order to prevent unauthorised access to the railway. Any signage required by the Council at the crossing (and any other points) will also be provided.

c) Whether the diversion order alters a point of termination of the path or way, if that point is not on a highway over which there subsists a like right of way or, otherwise than to another point which is on the same highway, or another such highway connected with it.

i) The termination points for Public Footpath AU22 are not altered.

ii) The termination point for Public Footpath AU17 that currently connects with footpath AU21 on the west side of the railway will be altered to connect to the bridge approach on footpath AU22 on the east side of the railway, which then connects to footpath AU21, i.e., "another such highway connected to it." This ensures that connectivity is maintained.

d) Whether the order should make provision requiring the operator of the railway to maintain all or part of the right of way created by the order.

i) The Public Rights of Way and Access Service will be responsible for the on-going maintenance of the surfaces of the footpaths where they do not form part of the bridge. The Order will specify that Network Rail will maintain the bridge and bridge approaches.

Tests to be considered under Circular (1/09)

25. Although not part of the legislation, consideration should also be given to the following:

a) Whether the right of way will be reasonably convenient to the public.

i) Permission was initially granted in September 2023 by Ashford Borough Council (as Local Planning Authority) for a ramped and stepped bridge under application reference 22/01041/AS. The requirement to provide a bridge to enable the replacement of the two at grade rail crossings was identified and supported by local plan policies. Through the planning process a developer contribution was secured to meet the costs of providing a footbridge. The contribution was capped at a level (£4 million) considered to be sufficient to meet the delivery of a bridge, whilst affordable when considering the viability of the development proposals. Following a review of the funding allocated to the project, it was established that the approved footbridge was not deliverable due to the increase in costs which had risen significantly. As a result, Network Rail undertook a feasibility study for the provision of a stepped-only bridge.

ii) A Disability Impact Assessment ("DIA"), was completed in October 2024 and can be found at **Appendix C.** This was used to inform the bridge feasibility report, dated November 2024 (see **Appendix D**). Network Rail's DIA is the method used by Network Rail to clearly demonstrate that they have paid due regard to their duties within the Equality Act 2010 ("the 2010 Act"). The DIA concluded that a stepped-only footbridge, of a flow bridge design would be suitable for this site based on a number of factors:

a. the existing crossings are not currently accessible to all, as they include stiles and steps;
b. the paths leading to the crossings can get overgrown and have uneven surfaces, which can be challenging for some people to use;
c. the bridge would provide a significant level of safety improvement for users.

iii) However, Network Rail also noted that, taking into consideration the new school that is part of the planned development, the user requirements and frequency are likely to change, making an accessible bridge desirable and more appropriate for the future. Not having an accessible crossing significantly lengthens the journey between the southern housing estate and the new northern school, placing those who cannot use the bridge at a disadvantage.

iv) Three objections have been received to the provision of a stepped-only bridge, directly through the informal consultation process, and indirectly to the Public Rights of Way and Access East Kent Area Team and to the County Member. It is further noted that the Ashford Borough Council Bridge Prior Approval Report records additional negative comments from residents at page 4 (see **Appendix E**). The main issue, which is covered in paragraphs 19 and 20 above, relates to the provision of the stepped bridge which, it is argued, will disadvantage a section of the community who would be unable to use it and therefore, has a detrimental impact on convenience for them.

v) For those currently able to negotiate the stiles and stepped approach to the crossings, the proposed footbridge would provide a reasonably convenient alternative, albeit that there may be an increase in both journey time and distance as a result of negotiating the bridge. This would be minimal for those using Public Footpath AU22, but could be much greater for those using Public Footpath AU17 depending on the location of the onward journey.

vi) The County Council is subject to the public sector equality duty regarding socio-economic inequalities set out in section 1 of the 2010 Act, which states: "*An authority to which this section applies must, when making decisions of a strategic nature about how to exercise its functions, have due regard to the desirability of exercising them in a way that is designed to reduce the inequalities of outcome which result from socio-economic disadvantage*." Section 149 of the 2010 Act further adds: "*(1)A public authority must, in the exercise of its functions, have due regard to the need to—*
(a)eliminate discrimination, harassment, victimisation and any other conduct that is prohibited by or under this Act;
(b)advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it;
(c)foster good relations between persons who share a relevant protected characteristic and persons who do not share it."

vii) One of the objectors stated that they considered that the County Council would be in breach of its public sector equality duty if it approved the proposal. The Public Rights of Way and Access Service has given due regard to the matters in the 2010 Act. As well as taking account of Network Rail's DIA, the Public Rights of Way and Access Service has undertaken its own Equality Impact Assessment ("EqIA") to fully consider the matters stipulated in the 2010 Act. The EqIAs relating to both footpaths can be found at **Appendix F**.

viii) The EqIAs recognise that the provision of a stepped bridge could have an impact upon those sharing the protected characteristics of age, disability, pregnancy or maternity, and potentially those who have carers responsibility. It also notes that the existing approaches to the crossings are likely to pose challenges for these groups currently. However, where change is taking place on the public rights of way network, the aim is to try and improve accessibility where possible.

ix) As noted in the conclusion of the EqIA, the stepped bridge is likely to result in a reduction of access to the public rights of way network for a limited number of users, and this needs to be balanced against the safety of the public. A bridge is required to remove the danger to the public of crossing the railway line at grade. Ideally, a ramped bridge would provide the best solution. However, a ramped bridge is not feasible, due to the cost.

b) The effect the proposal will have on the land served by the existing path or way and on land over which the new path or way is to be created.

i) The effect the proposals will have on land served by the existing paths will be to enable Network Rail to remove the rail crossings and thereby the risk of danger to the public.

ii) The effect of the new public rights of way is to preclude the use of the land by the landowners for any purpose which is incompatible with the public's rights. This impact is acceptable to the landowners.

c) The effect that the diverted way will have on the rights of way network as a whole.

i) The diverted ways will have the effect of providing continuous connections with the public rights of way network as a whole, despite a greater distance to be walked in the case of Public Footpath AU17.

d) The safety of the diversion, particularly where it passes along or across a vehicular highway.

i) The proposed diversions are considered to be safe for the public, and in particular safer for the public than the level crossings. Public Footpath AU17 will be diverted onto a route that the public are currently using with permission and which has no safety concerns. The proposed new route for Public Footpath AU22 is to run over a stepped bridge. A stepped bridge brings with it potential safety issues around users climbing up and down the steps. To reduce the risk, there will be 2 landing stages and handrails on both sets of steps. In addition, the flow bridge design eliminates other safety factors that might be associated with traditional rail bridges such as visibility constraints with regard to corners of the bridge and views from the bridge. The staircases measure 16.86m long, broken with 2 landings and the width of the walkway is 2.99m wide between the centre of the stairs (as specified in the Bridge Prior Approval Report at **Appendix E**).

Further considerations

26. In addition to the tests set out in section 119A of the Highways Act 1980, the County Council must also have regard to the following issues when considering an application to divert a public right of way:

27. There is a relevant provision within the County Council's Rights of Way Improvement Plan at EN03 SAFE TRAVEL at 2.12 "Look to improve safety of railway and road crossings where possible".

28. Under section 29 of the Highways Act 1980, the County Council has a duty to have regard to the needs of agriculture (including the breeding and keeping of horses), forestry and the desirability of conserving flora, fauna and geological and physiographical features. In this case, there is no adverse effect caused by the diversions of the paths.

29. Section 40 of the Natural Environment and Rural Communities Act 2006 requires that every public authority must have regard "*so far as is consistent with the proper exercise of [its] functions, to the purpose of conserving biodiversity*". The diversion of these paths has been considered in respect of the planned development at Conningbrook, and any mitigation implemented when constructing the stepped bridge, and it has been concluded that there is no adverse effect.

30. Where the affected land forms part of a National Landscape (formerly an Area of Outstanding Natural Beauty), section 85 of the Countryside and Rights of Way Act 2000 requires that the County Council must "seek to further the purpose of conserving and enhancing the natural beauty of the National Landscape" and shall have regard to "the purpose of conserving and enhancing the natural beauty" of the National Landscape. In this case the land does not form part of the Kent Downs National Landscape, falling a little outside its boundary.

31. Under section 17 of the Crime and Disorder Act 1998, the County Council has a duty to exercise its functions *"with due regard to the likely effect of the exercise of those functions on, and the need to do all that it reasonably can to prevent, crime and disorder in its area*". In this case, there is no adverse effect caused by the diversions of the paths.

32. The County Council is subject to the public sector equality duty regarding socio-economic inequalities set out in section 1 of the Equality Act 2010. Network Rail has undertaken a DIA (see **Appendix C**). The Public Rights of Way and Access Service has also undertaken its own EqIAs which are discussed fully at paragraph 25a above.

33. Finally, in signing the application form the applicant has agreed to defray any compensation which may become payable following a successful claim made under section 28 of the Highways Act 1980.

Conclusion

34. The County Council must primarily consider the legal test required to be met under section 119A of the 1980 Act. In this case, the Public Rights of Way and Access Service considers that Network Rail has put forward an acceptable safety case with regard to the expected increase in use of both crossings as a result of the planned development, which in turn will increase the risk of danger to the public at the crossings. The provision of a footbridge and the diversion of Public Footpath AU22 over that footbridge, and the diversion of Public Footpath AU17, will provide the public with a means of crossing the railway which does not expose them to unacceptable risk and danger.

35. The Public Rights of Way and Access Service is therefore satisfied that the legal test of safety is met.

36. Although not a test within the legislation, guidance within Defra's Circular 1/09 suggests the County Council must also consider the convenience of the new route. This is discussed fully in paragraph 25a above and concludes, that although there is a preference for a ramped bridge, it is not possible in this particular case. A stepped bridge will inconvenience some people and will mean that some will not be able to use the route at all, potentially taking instead a much longer route to reach a given destination.

37. If a bridge was not to be constructed, it is likely that the crossings would, at some point, be deemed to be too unsafe by Network Rail to remain open due to the increased use, and they would apply for a temporary Traffic Regulation Order closing the crossings – this has occurred in other parts of the county. If this happened, it would result in significant inconvenience for everyone and would still need to be resolved by means of the making and confirmation of an Order (and the provision of a bridge in all likelihood).

38. One of the objectors indicated they may seek judicial review of the County Council's decision if it did not object to the diversion (see paragraph 19 above). Judicial review is a "remedy of last resort" and should only be used where no adequate alternative remedy is available, such as a public authority's internal complaints procedure or a statutory right of appeal. This is also reflected in paragraph 4.1(2) of the Court's judicial review practice direction 54A, which requires a claimant to refer to any alternative appeal mechanism that exists or that could have been used:
"A claimant should refer to any statutory provision which excludes the jurisdiction of the court to entertain the application, or to grant the relief sought, and <u>should also refer to any alternative appeal mechanism that exists, or could have been used prior to seeking judicial review.</u>"

39. In diverting a public right of way under the 1980 Act, if the decision is to make an Order, that Order is made and advertised for not less than 28 days, during which time objections to the Order can be made in writing to the County Council. If objections are received and not withdrawn, the County Council is unable to confirm the Order itself, and may submit the Order, objections, and all other relevant documents to the Secretary of State, who will appoint an Inspector from the Planning Inspectorate to determine the matter. This would be the alternative and correct means in which to challenge the County Council's decision.

Recommendation

40. Therefore, taking everything above into account, it is recommended that the applicant be informed that an Order to divert part of Public Footpaths AU22 and AU17 from the foot crossings, known as Cradle Bridge (AU22) and Bolleaux (AU17), at Kennington in the Borough of Ashford, as shown on the plan at **Appendix A** to this report, will be made on the grounds that it is expedient to divert the path on the grounds of safety of the public.

Accountable Officer:
Mr Graham Rusling (Head of Public Rights of Way and Access Service) – Tel: 03000 41 34 49 or Email: graham.rusling@kent.gov.uk
Case Officer:
Mrs Maria McLauchlan – Tel: 03000 41 34 20
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The documents on the case file are available for viewing on request at the PROW & Access Service, Sessions House, County Hall, Maidstone, Kent, ME14 1XQ. Please contact the Case Officer for further details.

List of appendices

Appendix A - Plan of proposals
Appendix B - Extract from the network copy of the Definitive Map, sheet 127 (TR04SW)
Appendix C - Network Rail's Disability Impact Assessment
Appendix D - Flow Bridge Feasibility Report
Appendix E - Bridge Prior Approval Report
Appendix F - Kent County Council's Equality Impact Assessments

Case file references - PROW/AU22/14/NR
PROW/AU17/15/NR

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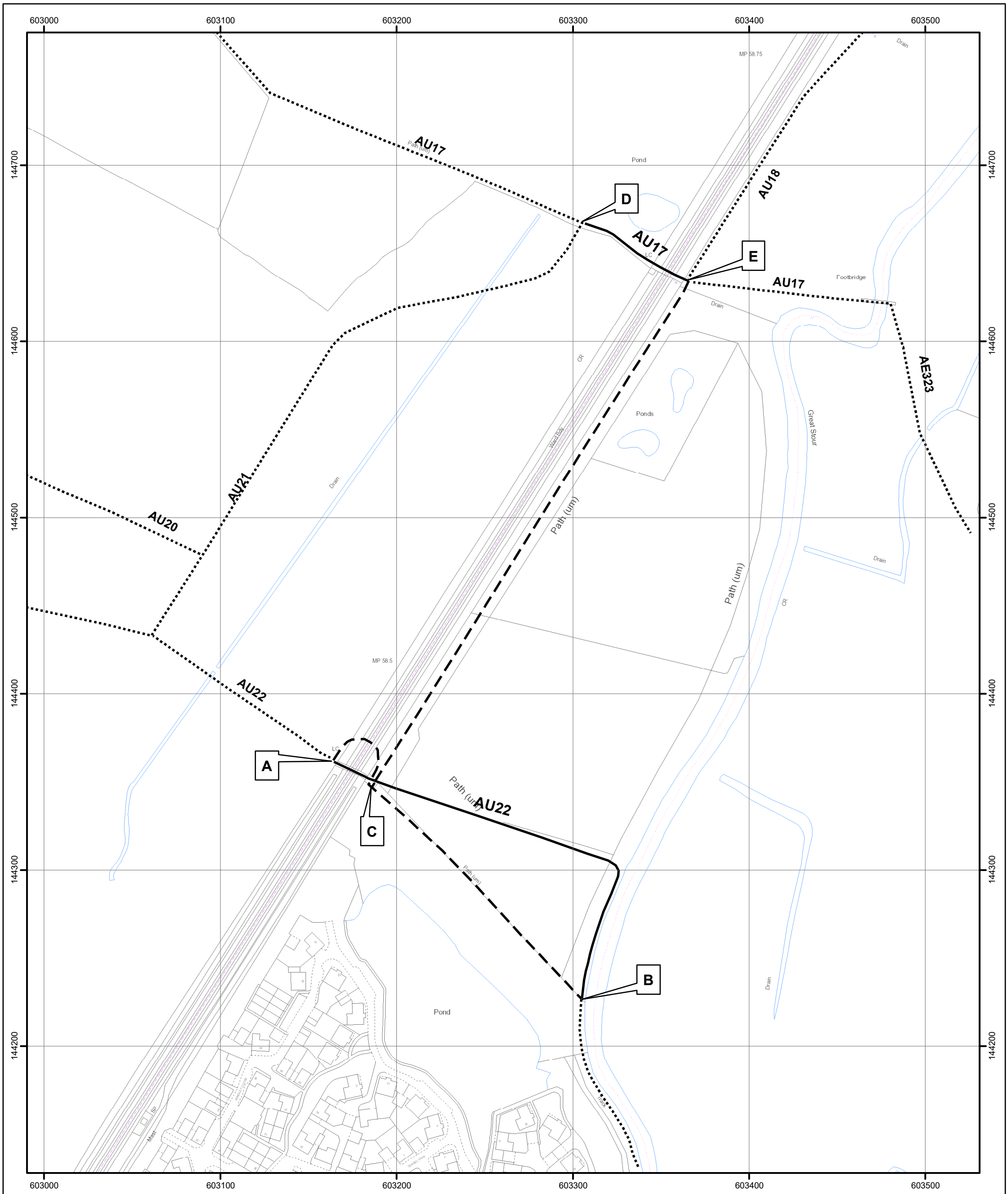

Key

Routes to be diverted

New Length of routes

Unaffected Routes

Highways Act 1980
Wildlife and Countryside Act 1981
The Kent County Council
Proposed diversions of public footpaths AU22 (part) and AU17 (part) at Kennington - July 2025

Produced by the KCC Public Rights of Way and Access Service

Created by:	MMcL
Checked by:	DJ
Reference:	PROW/AU22/14/NR PROW/AU17/15/NR

N W E S

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at A3 size

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Kilometres

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Miles

Public Rights of Way and Access Service

Kent County Council kent.gov.uk

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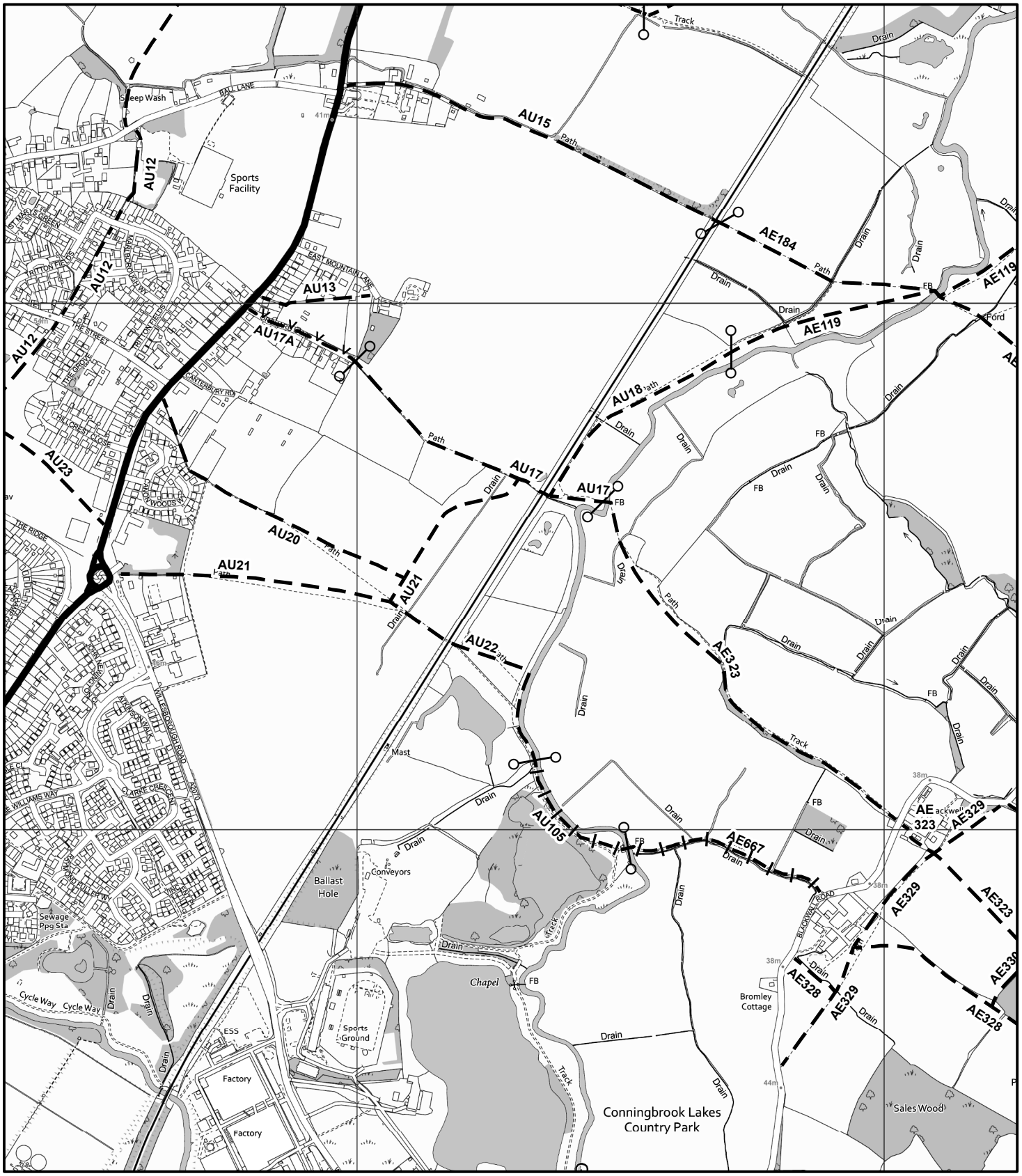

- Footpath
- Bridleway
- Restricted Byway
- Byway Open to All Traffic
- Point path number or status changes
- Boundary of area covered by 1:2500 scale Network Map
- Area covered by 1:2500 scale Network Map

EXTRACT OF THE NETWORK COPY OF THE DEFINITIVE MAP OF PUBLIC RIGHTS OF WAY FOR THE COUNTY OF KENT

FOR REFERENCE ONLY – NO FURTHER COPIES MAY BE MADE

Produced by the KCC Public Rights of Way and Access Service

Created by:	MMcL
Map Sheet:	127 (TR04SW)
Issue Date:	24/10/2023
Reference:	PROW/AU22/14/NR
	PROW/AU17/15/NR

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Diversity Impact Assessment (DIA)

Project: Conningbrook Flow Bridge

Document No.	186814-NRD-1700-ACR-REP-EHF-000001
Region/Function	Southern Enhancements
Issue Date	30/10/2024
Suitability Code (Capital Delivery Only)	S3 – Suitable for review and comment
Security Classification	Internal

Document History

Version No.	Date	Reason for Issue
01	30/10/2024	1st Issue

Document Approval and Sign-off

	Name and position	Signed	Date
Prepared by	Luke Taylor Assistant Design Engineer ES Design Delivery		30/10/2024
DIA Accountable Owner	Benjamin Longman Project Manager Southern Enhancements Delivery		
Superuser	James Ollerhead Senior Design Engineer ES Design Delivery		30/10/2024
Senior Manager			

Project-related Documents

Document No.	Document Title	Relevant Section(s)
PROW/AU17/15 /NR	The Kent County Council Proposed diversion of public footpath AU17 (part) at Kennington	All
PROW/AU22/14 /NR	The Kent County Council Proposed diversion of public footpath AU22 (part) at Kennington - from the level crossing to a ramped and stepped bridge	All

Overview: what's in this document

Diversity Impact Assessment (DIA) Types

Select the type of DIA from the following list.

☒ **1 The Built Environment**, or the procurement of works e.g. crossings & bridges, including maintenance, stations, offices/depots and other workplaces or buildings.

It is a requirement that Diversity Impact Assessments are completed for **temporary works, temporary conditions and permanent works**. This includes any work carried out by Network Rail, including managed stations or at franchised stations (e.g., lift replacements).

☐ **2 ~~Events & communications~~**~~, including conferences, virtual conferences, training courses and public consultations~~

☐ **3 ~~Policies & Standards~~**~~, development, revision and withdrawal of standards, policies and associated guidance including for design.~~

☐ **4 ~~Information Technology (IT)~~**~~, IT design, development and enhancement projects~~

☐ **5 ~~Change Programmes~~** ~~– Programmes such as Putting Passengers First, reorganisations and transformation programmes~~

☐ **6 ~~Procurement of goods and/or services~~**

Step 1: Clarifying Aims

Q1. What are the aims of this project/piece of work?

Project Aim

Cradle Bridge Crossing and Bolleaux Crossing are crossings located in Ashford on the line between Ashford and Canterbury – Engineers Line Reference (ELR): *ACR*. The aim of this project is to improve public safety by removing the conflict between moving trains and users of this public footpath by providing a safe means of crossing the railway.

The proposed works are to replace the footpath crossings – providing crossing points for AU17 and AU22 footpaths – with another means of crossing the tracks. The client has identified that an overline footbridge is the best means of achieving this goal. The new bridge would be situated where AU22 crosses the railway (Cradle Bridge Crossing). A map showing the crossings is provided in Figure 2.

Diversity Impact Assessments (DIAs) are the method used by Network Rail (NR) to clearly demonstrate that we have paid due regard to our duties within the Equality Act 2010. The DIA is a tool that helps NR confirm that our policies and the way we design, build and operate will work for everyone.

This DIA will explore the impact that the proposed works will have on the users of the structure, with particular consideration to those with protected characteristics. This includes any permanent negative impact the proposed works will have, as well as the temporary impact that may arise during the implementation of the works. Additionally, positive impacts that may be accomplished by the implementation of the project will be outlined.

On the 18th September 2024 a team from Engineering Services Design Delivery (ESDD) undertook a site visit to the structure to obtain information for this DIA and to gain a better perspective of the specific constraints at its location.

Location

The crossings are located on the ELR: *ACR* line at chainage 58 miles and 805 yards (Cradle Bridge Crossing) and 58m 1167 yards (Bolleaux Crossing). The surrounding area is fields; however development appears imminent for a housing estate to the north of the crossing based on the presence of temporary fencing at the site. The location of the crossings can be seen in Figure 1 and Figure 2 overleaf.

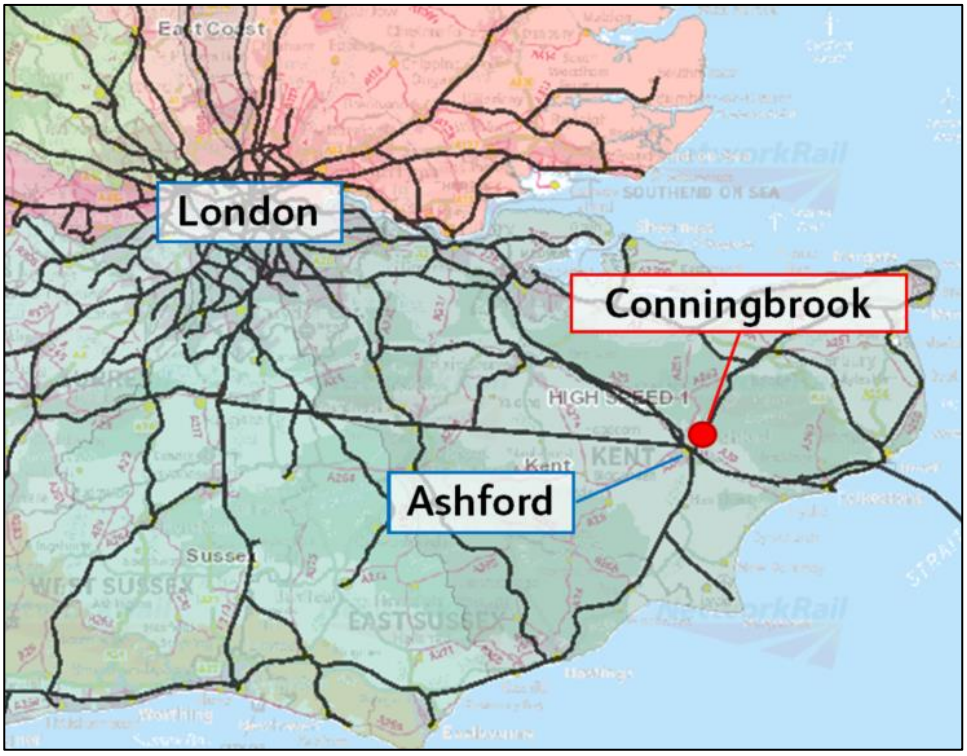

Figure 1 - Conningbrook site relative to the South East of England (Geo-RINM Viewer).

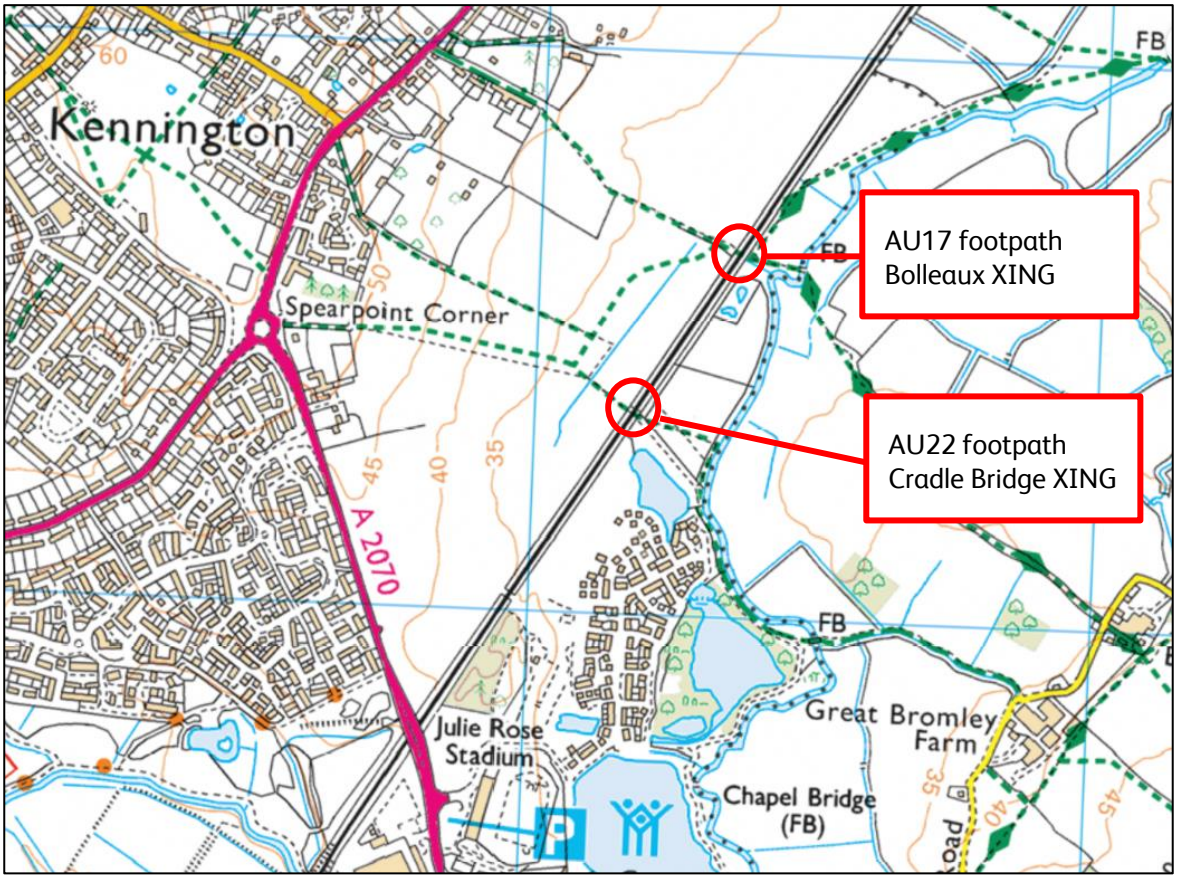

*Figure 2 – Ordinance Survey map showing the 2 No. crossings to be replaced – highlighted in **red** (Bing Maps, 2024).*

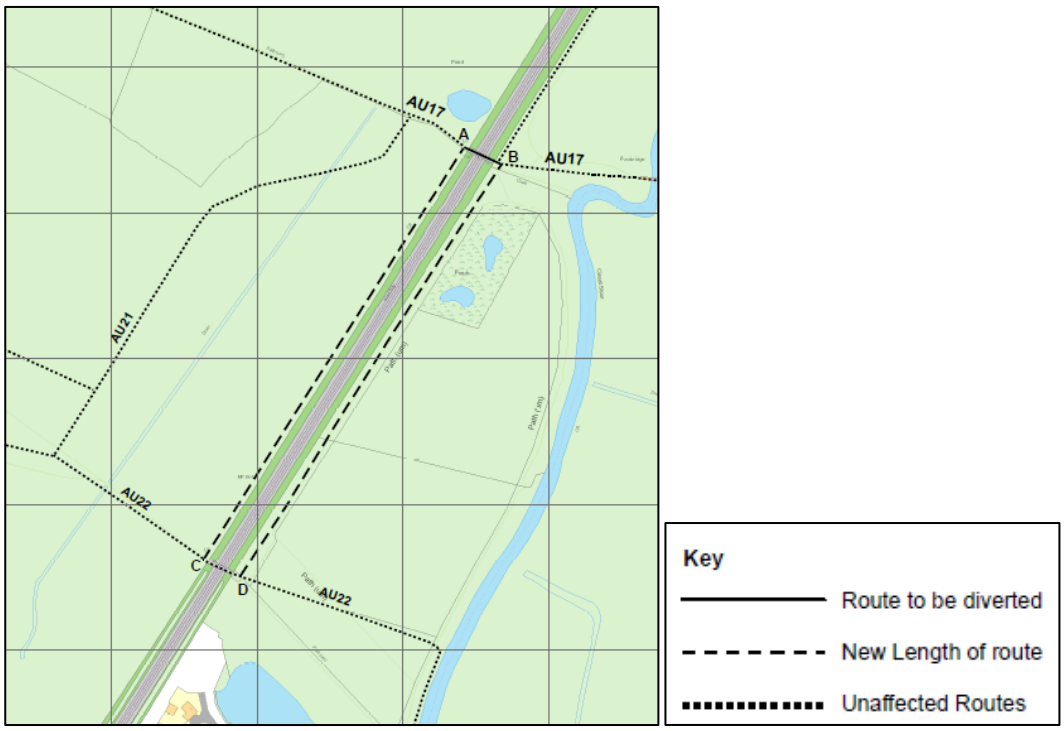

Figure 3 – Consultation plan showing the proposed replacement of Bolleaux Crossing (AU17) with diversion over AU22 (via a new footbridge).

Figure 4 – Aerial view of Cradle Bridge Crossing looking west (from Routeview, taken 18/10/2016).

Figure 5 – Aerial view of Bolleaux Crossing looking west (from Routeview, taken 18/10/2016).

Crossings Overview

Approaches to the crossings

To the south of Cradle Bridge crossing, there is a grassed, uneven pedestrian path which leads from the recently constructed housing development – Conningbrook Lakes Housing Development. Prior to reaching the crossing are 2 No. gates – approx. 1.20m wide. There is an incline towards the railway due to the railway being situated on a small embankment here.

Figure 6 - Left: Shows the entrance to the level crossing from the south side; Right: Shows the approach path looking west from the gate towards Conningbrook Lakes Housing Development.

To the north of Cradle Bridge crossing, there is a grassed, uneven path. Currently, there are temporary fences in place to demark where the path is situated and where land to be developed is. There is also a stepped section in close proximity to the railway where there are 2 No. steps. These steps are in poor condition with one side missing.

Figure 7 - Left: 2 No. steps in advance of the railway; Right: approach path to the crossing from the north.

To the south of Bolleaux crossing, there is a footpath within a wooded area. To the west of the path is a pipe over a stream. The consultation diagram as shown in Figure 3 shows a new footpath over this location. The only approach path currently for Bolleaux crossing is through AU17 over a footbridge over the Great Stour river or via AU18 to the east. To the north there is a grassed approach to the edge of a field.

Figure 8 - Pipe over stream next to AU17 footpath at Bolleaux crossing.

In between the 2 No. footpaths there is no obvious connecting path to the south.

There is however a path connecting the crossings to the north. This comprises a grassed, uneven path – narrow in sections to a width of approx. 0.25m due to vegetation on both sides.

All approach paths to the crossing can be considered to be difficult for persons with reduced mobility due to surface conditions not being firm, smooth and non-slip. Furthermore, the width of the paths is in some cases very narrow due to vegetation. There are also steps present on the north side of Cradle Bridge crossing.

Cradle Bridge Crossing

On both sides of the crossing styles are present which must be traversed to gain access to the crossings. The crossing surface is provided by timber boards with a non-slip surfacing. Either side of the timber boards is a ballasted area. There is a step from this ballasted area to the boards. The railway is situated on a small embankment through the site however the elevation change primarily takes place outside the railway boundary and thus the crossing area is largely flat.

In terms of safety, the crossing had 'Stop, Look and Listen' boards, but no further protection, for example no whistle boards or miniature stop lights.

Figure 9 - Left: Shows the style entrance to the crossing from the south; Right: Shows the crossing itself from the north.

Bolleaux Crossing

On both sides of the crossing styles are present which must be traversed to gain access to the crossings. The crossing surface is provided by timber boards with a non-slip surfacing. Either side of the timber boards is a ballasted area. There is a step from this ballasted area to the boards. The railway is situated on a small embankment through the site and thus the approaches to the crossing feature a steep concrete ramp on both sides (approx. 9º to the north side and 12º to the south).

Figure 10 - Left: style on approach to the crossing; Right: approach footpath through grassed field.

Q2. Could this work impact on people?

- Does the final aim or outcome of the work have potential impacts on people?

- Will staging or temporary works during delivery have potential impacts on people?

☐ **No (Please go to Q3)**

☒ **Yes**

If yes, briefly explain how this work could affect people (considering our duty to promote equality, tackle discrimination and foster good relations between groups)

The closure of the crossings can be assumed to have an impact on persons in the local area. This is due to the removal of existing public rights of way thus forcing people to use a diversionary route.

A diversion of around 0.7km shall be provided for users of AU17 (Bolleaux Crossing) via a new footbridge (as shown in Figure 3).

Users would be required to use a footbridge as opposed to the crossing when using AU22 footpath to cross the railway. Should users be unable to use footbridge, or if there was no means of crossing the railway here, a diversionary route as outlined in Figure 11 would be utilised. A path through the proposed housing development is shown indicatively. This route – based on current pedestrian path arrangements – features drop kerbs to allow persons with reduced mobility to use this route.

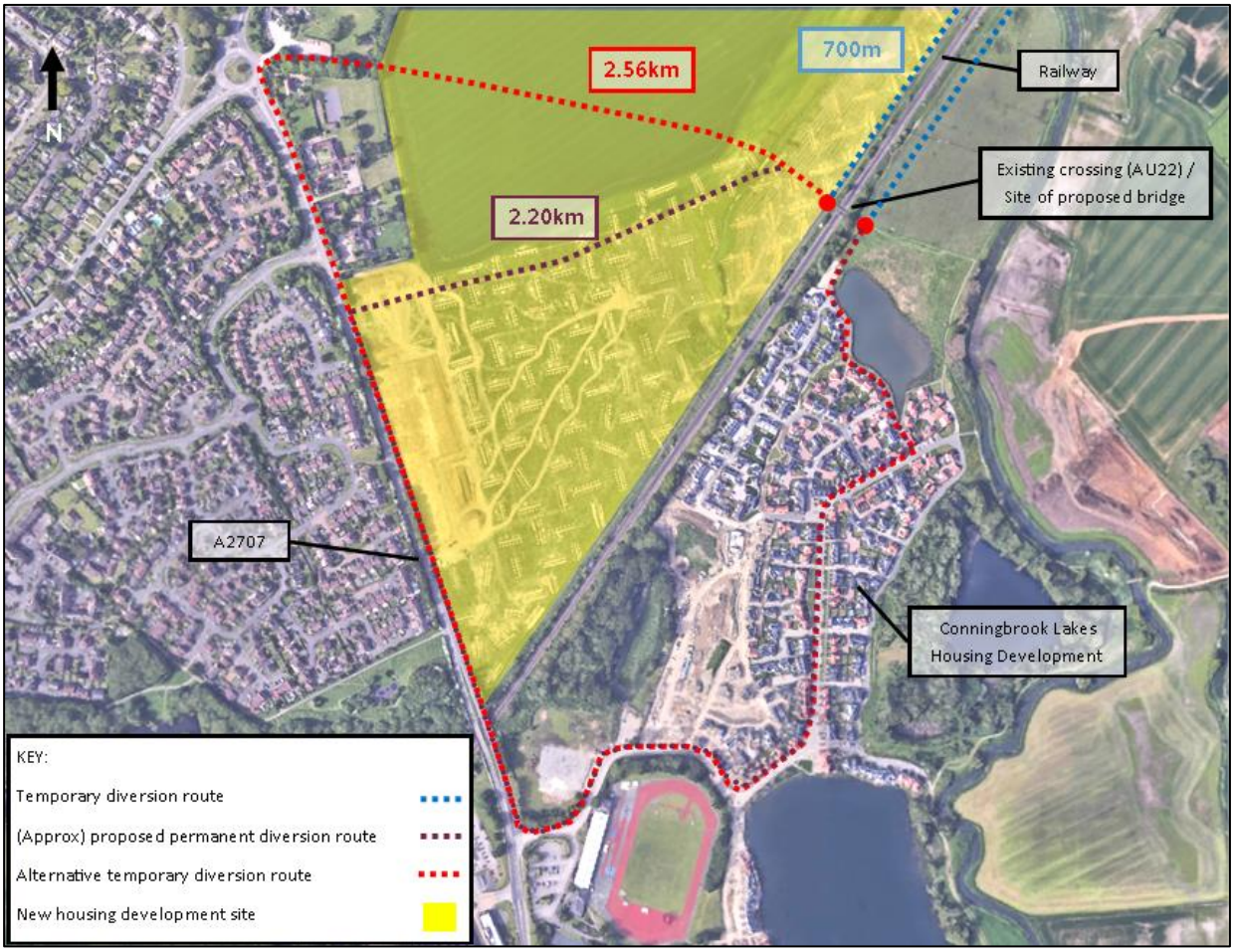

Figure 11 - Alternative route across the railway from the existing Cradle Bridge Crossing. Note: purple line is indicative based on site plans.

Q3. Decide if a DIA is required.

After completing questions Q1 and Q2, decide if you need to complete the rest of this DIA.

If there are no impacts on people (employees, contractors, lineside neighbours or passengers) the remainder of the DIA is not required.

Decision	Author	Superuser	Date
☐ ~~**No, DIA not required (End here)**~~ ~~N.B. Retain in Project file~~			
☒ **Yes, DIA required.** Proceed to	Luke Taylor Assistant Design Engineer	James Ollerhead Senior Design Engineer	30/10/2024

Step 2: The Evidence Base

Q4. Record the data you have gathered about the diversity of the people potentially impacted by this work.
e.g., from the national census, Office for National Statistics or from HR Shared Services.

You should also include any research on the issues affecting inclusion in relation to your work.

Consider the following protected characteristics:

- **Age**
- **Disability** (people with physical, mental and non-visible impairments, include **carers** who provide unpaid care for a friend or family member who is disabled)
- **Gender reassignment**
- **Marriage/Civil Partnership**
- **Pregnancy/maternity**
- **Race**
- **Religion or belief**
- **Sex**
- **Sexual orientation**

Diversity Impact Assessments shall include data illustrating the proportion of people with certain characteristics surrounding geographic / electoral limits. This data may express the distribution of people with protected characteristics (as defined by the Equality Act 2010) within the overall population impacted by the proposed works and correlate it to aspects of the works that can affect the diversity and inclusion of these offers.

Additionally, it is important to discuss specific features nearby the crossing that may help to determine the degree of impact that any proposed works may have on people with certain protected characteristics. This includes the presence of specific buildings that may be predominately used by people with certain protected characteristics. These services / facilities in close proximity of the structure have been identified.

Q4. Data you have gathered about the diversity of the people potentially impacted by this work.

UK Census data regarding protected characteristics that would be impacted by the proposed work.

A review of the available Census data for the area closest to the crossings was undertaken to better understand the composition of the local demographic. The data has been obtained from the most recent 2021 Census.

The structure is located Conningbrook & Little Burton Farm ward, part of Kent local authority, in the south west of England. Hence, for the purpose of this assessment the 2021 Census available data for the Conningbrook & Little Burton Farm ward is compared to the data for Kent and the south east as a whole.

Population

Table 1 presents a general overview of the population within the considered locations. The data shows that Conningbrook & Little Burton Farm ward has a significantly higher population density when compared with the Kent and the South East.

Table 1 - Population and density of population within the compared areas (Census, 2021)

	Conningbrook & Little Burton Farm	**Kent**	**South East**
Population	2,104	1,576,069	9,278,065
Density (People/km^2)	1,622.0	444.7	486.5

Age

Table 2 presents information regarding the age profile of the population within the compared areas. The age profile of the population within the Conningbrook & Little Burton Farm ward presents a slightly higher percentage of children aged 9 years old or below (11.6%) when compared to Kent (11.5%) and the wider South East of England region (11.3%). Regarding the other end of the age profile, Conningbrook & Little Burton Farm ward has a significantly lower percentage of people with 65 years old or above (10.7%) when compared with the Kent region (20.3%) and South East (19.4%).

Table 2 - Age profile of the population within the compared areas (Dataset TS007, Census 2021)

Age Group	Conningbrook & Little Burton Farm		Kent		South East	
0 to 4	131	(6.2%)	87,286	(5.5%)	495,302	(5.3%)
5 to 9	114	(5.4%)	95,262	(6.0%)	552,246	(6.0%)
10 to 15	185	(8.8%)	116,958	(7.4%)	675,937	(7.3%)
16 to 19	128	(6.1%)	69,562	(4.4%)	417,102	(4.5%)
20 to 24	125	(5.9%)	83,403	(5.3%)	516,468	(5.6%)
25 to 34	314	(14.9%)	191,291	(12.1%)	1,149,570	(12.4%)
35 to 49	449	(21.3%)	298,364	(18.9%)	1,826,830	(19.7%)
50 to 64	436	(20.7%)	314,616	(20.0%)	1,840,349	(19.8%)
65 to 74	123	(5.8%)	169,272	(10.7%)	943,822	(10.2%)
75 to 84	84	(4.0%)	108,029	(6.9%)	607,059	(6.5%)
85 and over	18	(0.9%)	42,026	(2.7%)	253,378	(2.7%)
Total	2,107	(100.0%)	1,576,069	(100.0%)	9,278,063	(100.0%)

Disability, Health and Care

Table 3 presents information regarding the health profile of the compared areas as per the information in dataset 'TS037 – General Health' of the 2021 Census.

Table 3 - General health profile of the population within the compared areas (Dataset TS037, Census 2021)

General health	Conningbrook & Little Burton Farm		Kent		South East	
Very good health	1,154	(54.8%)	757,967	(48.1%)	4,636,748	(50.0%)
Good health	690	(32.8%)	536,891	(34.1%)	3,155,834	(34.0%)
Fair health	198	(9.4%)	202,451	(12.8%)	1,092,213	(11.8%)
Bad health	52	(2.5%)	61,162	(3.9%)	307,131	(3.3%)
Very bad health	10	(0.5%)	17,598	(1.1%)	86,139	(0.9%)
Total	2,104	(100.0%)	1,576,069	(100.0%)	9,278,065	(100.0%)

According to the available data regarding general health, the percentage of the population within Conningbrook & Little Burton Farm ward that reports to have 'bad health', or 'very bad health' (3.0%) is lower than in the Kent region (9.1%) and South East of England (6.2%).

The dataset 'TS038 – Disability' presented in Table 4 shows information regarding the percentage of the population having a disability as defined under the Equality Act 2010. The Equality Act 2010 defines someone who has a disability as someone who has "a physical or mental impairment that has a 'substantial' and 'long-term' negative effect on your ability to do normal daily activities".

Table 4 - Distribution of people with disabilities as defined under the Equality Act 2010 of the population within the compared areas (Dataset TS038, Census 2021)

Disability (Under the Equality Act)		Conningbrook & Little Burton Farm		Kent		South East	
Disabled	Day-to-day activities limited a lot	92	(4.4%)	116,043	(7.4%)	581,048	(6.3%)
	Day-to-day activities limited a little	191	(9.1%)	165,380	(10.5%)	915,292	(9.9%)
Not disabled	Has long term physical or mental health condition but day-to-day activities are not limited	159	(7.5%)	*116*,477	(7.4%)	698,690	(7.5%)
	No long term physical or mental health conditions	1,665	(79.0%)	1,178,169	(74.8%)	7,083,035	(76.3%)
Total		2,107	(100%)	1,576,069	(100%)	9,278,065	(100%)

The percentage of people that have a disability as defined under the Equality Act 2010 within the Conningbrook & Little Burton Farm ward (13.5%) is lower when compared with the Kent region (17.9%) as well as the southeast as a whole (16.4%).

In addition,

Table 5 presents information regarding the provision of unpaid care within the compared areas as per the information in dataset 'TS039 – Care' (the information shown only considers the population of usual residents aged 5 and over).

Table 5 - Distribution of people that provide unpaid care in the population within the compared areas (Dataset TS039, Census 2021)

Provision of unpaid care		Conningbrook & Little Burton Farm		Kent		South East	
Provides no unpaid care		1,814	(91.9%)	1,352,888	(90.9%)	8,049,399	(91.6%)
Provides unpaid care	19 hours or less	78	(4.0%)	66,462	(4.5%)	388,622	(4.4%)
	20 to 49 hours	30	(1.5%)	26,121	(1.8%)	134,879	(1.5%)
	50 or more hours	51	(2.6%)	43.312	(2.9%)	209,863	(2.4%)
Total		1,973	(100.0%)	1,488,783	(100.0%)	8,782,763	(100.0%)

It can be observed that, according to the available data, the percentage of people that provide unpaid care within the Conningbrook & Little Burton Farm ward (8.1%) is in line with the percentage within the Kent region (9.1%) and higher than in the south west of England (8.4%).

Religion or belief

Table 6 - Distribution of religious beliefs within the compared areas (Dataset TS030, Census 2021)

Religion	Conningbrook & Little Burton Farm		Kent		South east	
No religion	834	(39.7%)	644,190	(40.9%)	3,733,094	(40.2%)
Christian	941	(44.7%)	763,716	(48.5%)	4,313,319	(46.5%)
Buddhist	24	(1.1%)	8,749	(0.6%)	54,433	(0.6%)
Hindu	66	(3.1%)	19,242	(1.2%)	154,748	(1.7%)
Jewish	7	(0.3%)	2,050	(0.1%)	18,682	(0.2%)
Muslim	72	(3.4%)	25,614	(1.6%)	309,067	(3.3%)
Sikh	5	(0.2%)	12,307	(0.8%)	74,348	(0.8%)
Other religion	6	(0.3%)	9,572	(0.6%)	54,098	(0.6%)
Not answered	148	(7.0%)	90,629	(5.8%)	566,279	(6.1%)
Total	2,103	(100%)	1,576,069	(100%)	9,278,068	(100%)

Table 6 presents the distribution of the population per religious belief stated within the 2021 Census. The data shows that the majority of the population within Conningbrook & Little Burton Farm ward identify as Christian (44.7%), which is lower than Kent (48.5%) and the south east region (46.5%). The percentage of people that do not affiliate with any religion is lower in the ward (39.7%) when compared to Kent (40.9%) and the south east as a whole (40.2%).

Surrounding Area Information

A review of the surrounding area has been carried out. Places of interest that could be affected from the proposed works have been identified. Figure 12 shows the GP surgeries and dental practices surrounding the station. The Grange Ashford is 800m from the site and is the closest. It is unlikely the crossing and associated bridge would be used to provide a more direct access to these services.

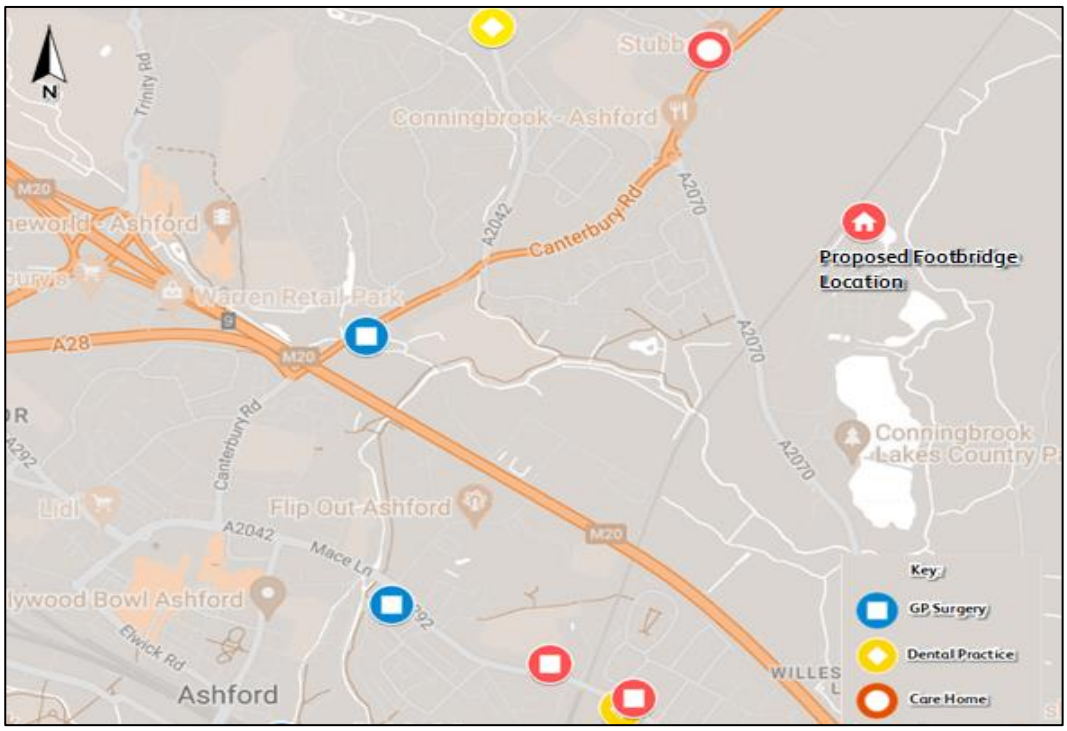

Figure 12 - Map showing the GP surgeries, dental practises and care homes in the local area.

Figure 13 shows the nurseries and schools in the nearby area that may be affected by the proposed works. Towers school and sixth form centre is the closest school to Conningbrook level crossing being 2km away. Due to the nearest schools being either north of the alternative crossing of the railway (on A586 Garstang Road East) or to the west of the railway – where the residential properties are located – it can be assumed that the crossing does not provide a benefit for those looking to access schools or nurseries. It should be noted that the new housing development to the north of the railway proposes the construction of a new Primary School and nursery. This is discussed further in the 'New Housing Development' section of this document.

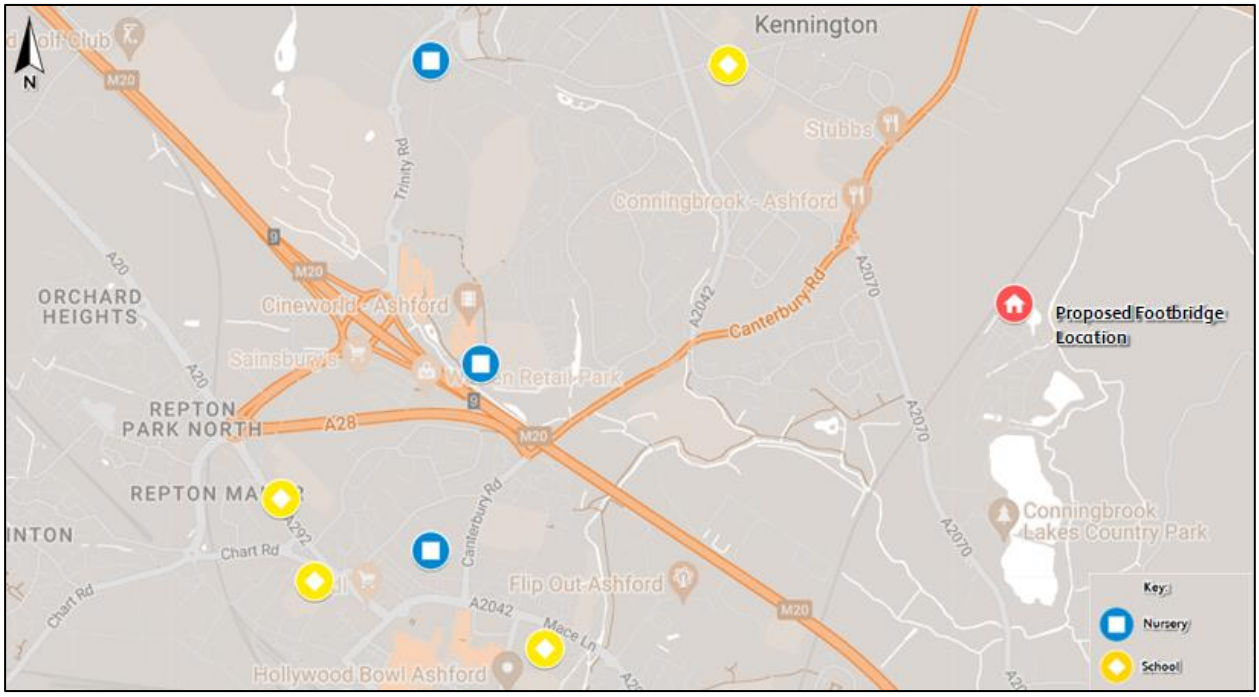

Figure 13 - Map showing Nurseries and Schools in local area.

Figure 14 shows the places of worship in the local area. The nearest place of worship is St Mary's Church 1.3km to the north. It can be assumed that the crossing does not provide a benefit for those looking to access places of worship due to the alternative route to this and other places of worship being only marginally longer and utilising pedestrian pavements.

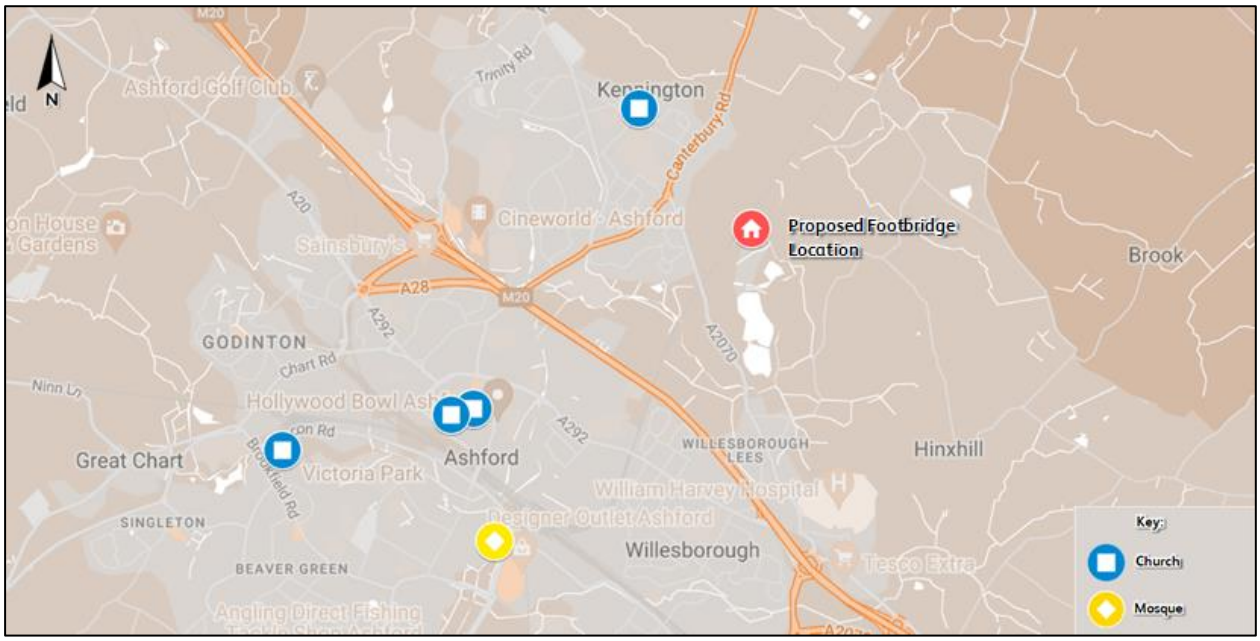

Figure 14 - Map showing local places of worship.

New Housing Development

As part of the development plans for the new housing to the north west of the site, a new school, community centre and is proposed to be constructed. This is not shown on existing maps.

- 735 houses are to be built in that area ranging from 2 to 4 bedrooms,
- The new school shall be a Primary School (Reception to Year 6) with 420 students when full,
- A nursery school shall also be provided attached to the school with room for 30 children.

To the south of east of the site – in the Conningbrook Lakes development, there are 300 houses ranging from 3 to 4 bedrooms. This development is complete.

At this stage, no information on the demographics of the existing and anticipated occupants of these new properties is available.

9-day census information

At this stage of the project, no 9-day census has been undertaken. Due to the existing adjacent land use anticipated to change, it would not be considered an accurate reflection of future usage of the crossing at this stage.

Step 3: Impact

Q5. Given the evidence listed at 'Step 2: The Evidence Base', what potentially negative impacts could this work have on people, both on completion of the project and **during the works** for built environment projects?

Q5a. The protected characteristics your work could potentially have a negative impact on

- ☐ **Age**
- ☒ **Disability, including carers**
- ☐ **Gender reassignment**
- ☐ **Marriage/civil partnership**
- ☐ **Pregnancy/maternity**
- ☐ **Race**
- ☐ **Religion or belief**
- ☐ **Sex**
- ☐ **Sexual orientation**

Q5b. Explain the potential negative impact, and record potential mitigating actions

The primary aim of the works is to remove a level crossing and replace it with a footbridge to provide a safer passage over the railway. The potential negative impact the works will have on users of the structure in the permanent and temporary case will be explored. In particular, with special consideration of individuals with certain protected characteristics as outline by Equality Act 2010.

Temporary Works Impact

During temporary work the Cradle Bridge crossing will be closed, therefore pedestrians are required to use the Bolleaux crossing to the north as shown in Figure 11. This walking route is up to 0.7km in length. Currently, this route doesn't exist as demarked footpaths and is currently a grassed field. Furthermore, the stream as shown in Figure 8 would prevent this route from being functional. It should be noted that due to the original conditions of the walking route to the existing crossing it is unlikely that people with reduced mobility have been able to use this crossing at all due to the previously discussed limitations of the approach paths, as well as the steps on approach to the crossing and styles. It can therefore be assumed that the temporary route, as well as the existing paths on approach to both crossings are likely inaccessible for some persons with reduced mobility.

Permanent Works Impact

In a permanent case, a footbridge shall provide a safety benefit to users compared to the existing case of a level crossing.

Stepped Bridge

A stepped bridge would provide a quicker and more direct route across the railway for persons who are able to use steps compared to the diversionary route as shown in Figure 11. This would however prevent users with reduced mobility who are unable to use stairs from using the crossing and thus forcing them to use the diversionary route. It should be noted that as mentioned in the temporary case, persons with reduced mobility are already unlikely to be able to use the existing crossing.

As part of the proposed housing development we can assume the approaches to the north side of the crossing shall be improved to allow persons with reduced mobility to access the railway

boundary. Should the crossing remain however, there are still limitations which would prevent persons with reduced mobility from using the crossing – the presence of 2 No. styles and a small step on either side of the crossing from the ballast to the crossing boards. Furthermore, it can be assumed no firm, smooth, slip-resistant pedestrian path is to be installed to the crossing on the south side of the crossing. Therefore, it can be assumed that the installation of a stepped footbridge shall not have a negative impact on users compared to if the existing crossing was to remain.

Currently, without the north side housing development in position it is unclear as to what demand there may be for the use of the footbridge. By installing a stepped footbridge this may preclude users with reduced mobility therefore forcing some users to use the diversionary route.

Possible Mitigation:

- Provide a footbridge with future provision to install a step-free method of accessing the footbridge deck level if future demand renders this reasonably practicable to do so.

Ramped Bridge

A ramped bridge would provide a quicker and more direct route across the railway for persons compared to a diversionary route. Ramps are however typically very long, with a previous design for this site incorporating ramps shown to have approx. 240m length of ramps. These ramps also featured no intermediate landings at 0.5m height increments as per national guidance and thus it can be reasonably assumed a fully compliant ramped bridge would include longer ramps than this. Due to the length of these ramps it can be assumed that it would be difficult for users, with the fact that the site is on a small embankment further adding to the level change required. Furthermore, at time of writing, national guidance recommends ramps not be used where a level change is greater than 2.0m in height.

Lift Bridge

A lift bridge would provide a quicker and more direct route across the railway for persons compared to a diversionary route. Lifts would provide step free access across the railway however due to the remote location of the bridge (not within a station environment); the lifts could become open to misuse and in the event of breakdown there would be no staff in the immediate vicinity which could lead to stress for persons using the lifts.

Q6. What could you do to ensure your work has a **positive impact** on diversity and inclusion including supporting delivery of the Diversity and Inclusion strategy?

This is an essential element of demonstrating our duties under Public Sector Equality Duty (PSED).

The following has been identified to have a positive impact on users of the bridge:

- Provide future provision for a step-free method of crossing the railway such as a design that could have lifts / ramps retrofitted in the future should they be considered practicable at the site.
- Implement artificial lighting over the bridge and on the approaches would help to ensure persons using the bridge feel safe. A risk assessment could be undertaken to assist with any decision making as to whether lighting is provided. Should this not be provided initially, future provision for lighting could be included.
- Transparent parapets where possible would allow for people to see users of the bridge. This is particularly important to persons who may feel vulnerable.
- CCTV where possible on the bridge would help persons using the bridge feel safe. This is particularly important to persons who may feel vulnerable.

Step 4: Consultation

Q7. How has consultation with those with a protected characteristic informed your work?

(This could include our employee networks, the Built Environment Access Panel, local disabled persons organisations or other groups affected by the changes)

Groups consulted	What issues or impacts were raised in relation to one or many of the protected characteristics (Q5)?
NRAC 069 – Ian Parker (from similar scheme incorporating the installation of a stepped footbridge)	The construction of ramps to this footbridge was considered, but through a review of past consultation for similar schemes at NR's Chaired / Independent users Built Environment Accessibility panel (BEAP), review of compliance to National Standards and reference drawn from NR's supporting NRAC Consultant, it was considered that such use would offer limited enhanced accessibility whilst imposing increased liabilities to potential users. In this the proposed ramps would not comply with the provisions given in National guidance on the use of ramping solutions for access, being long and liable to impart stress on users, and would be open to misuse imposing a threat to the general public if misused (e.g., skateboarding, cyclist) if not assured of onward management supported by a risk assessment. These concerns been supported by NR's Chaired BEAP panel through similar past advice to other projects, which have been recorded for any later reference.

Q8. Record any consultation you have had with Network Rail teams who are delivering work that might overlap with yours.

This will ensure that our solutions are joined up.

No further consultation with other NR teams has taken place at this design stage.

Step 5: Informed Decision-Making

Q9. After completing Steps 1–4, what is your decision?

Please select one of the following (for most DIAs this will be option 1) and provide a rationale.

- ☐ **1 Change the work** to mitigate against potential negative impacts found
- ☐ **2 Continue the work** because no potential negative impacts found
- ☒ **3 Justify and continue the work** despite negative impacts (please provide justification)
- ☐ **4 Stop the work** because discrimination is unjustifiable and there are no obvious ways to mitigate

Q9b. Rationale for decision

In 'Step 3: Impact', the impacts for the proposed works are discussed. Although negative impacts have been identified within Q5b associated with the temporary case and with the use of steps as opposed to ramps, it is believed that when compared with the existing arrangement, the proposed works would provide a significant level of safety improvement. It is considered that whilst ramps would provide a step-free route, the length of these in conjunction with the required level change would make these undesirable. Furthermore, a review of the local area suggests that there are minimal local amenities where the bridge would provide a significant benefit to users to access. It should be noted this may change upon the construction of the school.

Overall, this design allows a required public right of way to be retained for pedestrians that is considerably safer than the operational crossing access. Therefore, this will provide significant positive safety impact on the location.

The rationale for this decision is based on currently available information. Should further changes be made to the proposed works or further information becomes available, then this document shall be updated to ensure its conclusions are accurate.

Given the available information at the time of writing this document, it is deemed justifiable to continue with the works.

Step 6: Action Planning

Q10. What specific actions will be taken to deliver positive impacts and address any potentially negative impacts identified at 'Step 3: Impact' or through consultation?

Action	By when?	By whom?
Update this DIA to reflect proposed designs.	During next Design Stage	Designer or Sponsor

Step 7: Publication (Superuser Upload Instructions)

Appendix: continuation sheets

Question number:

Additional/continued response

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Flowbridge

Flow Bridge - Feasibility Technical Memo

Project Name:	Conningbrook Flow Bridge
PACE Stage:	ES2
Document Reference:	186814-NRD-1700-ACR-REP-ECV-000001
Issue:	P01
Date:	22/11/2024

Contents

Related Project Documents

Document Reference	Document Title
-	Cradle Bridge FPS Passive Level Crossing Risk Assessment
-	Bolleaux FPS Passive Level Crossing Risk Assessment
PROW/AU17/15/NR	Proposed diversion of public footpath AU17 (part) at Kennington
PROW/AU22/14/NR	Proposed diversion of public footpath AU22 (part) at Kennington – from the level crossing to a ramped and stepped bridge
186814-NRD-1700-ACR-REP-EHF-000001	Diversity Impact Assessment
Notes	

Document Control

Project Details			
Name:	Conningbrook Flow Bridge	Project Number:	186814
Section:	-		
Project Manager:	Lanying Zhang	Designated Project Engineer:	-
Sponsor:	Paul Donald	PACCE Stage:	ES2

Document Details					
Version	Date	Designer	Checker	Approver	Comments
P01	22/11/2024	L Taylor	J Ollerhead	S Gomez	-

Signatures

Signature Table		
Designer:	Name: Luke Taylor Title: Assistant Design Engineer – Network Rail Engineering Services Design Delivery Date: 22/11/2024	Signed: 
Checker:	Name: James Ollerhead Job Title: Senior Design Engineer – Network Rail Engineering Services Design Delivery Date: 22/11/2024	Signed: 
Approver:	Name: Serge Gomez Job Title: Senior Engineering Manager – Story Contracting Ltd Date: 22/11/2024	Signed: 

Executive Summary

The installation of a Flow Bridge is deemed feasible at this site with a C-shape layout to the north east of the existing crossing. It should be noted however there are several constraints at the site, which would impact the cost and duration of the overall programme, which are:

- Existing third party 11kV power cables (UK Power Network) along the Down side of the railway shall require removal to facilitate the installation of the bridge.
- Existing buried water main (South East water) along the Up side of the railway shall require local diversion to facilitate the installation of the bridge.
- Potential additional land purchase may be required for the footprint of the footbridge

The above constraints shall require validation at the AiP design stage upon the completion of surveys. Furthermore, there is scope to reduce these interfaces through the reduction of the overall span length (currently shown to be 20m) at the next design stage subject to further assessments.

After due consideration, the Flow Bridge design, fabrication and installation cost is anticipated to be in the region of £1.3M.

Existing Site

The site is situated in Conningbrook, to the east of Ashford in Kent and along the *ELR:* ACR (Ashford East Junction – Ramsgate via Canterbury West) line between Ashford International Station to the south west and Wye Station to the north east.

Specifically, this Flow bridge looks to replace 2 No. pedestrian crossings:

- Cradle Bridge Crossing at 058m 0804yds on the *ELR:* ACR line.
- Bolleaux Crossing at 058m 1170yds on the *ELR:* ACR line.

Cradle Bridge FPS Crossing

Cradle Bridge Crossing is a footpath crossing situated on the AU22 public footpath. The crossing features a boarded surface over the railway with styles at the railway boundary on both sides of the railway. On the north side of the crossing there are 2 No. steps down to footpath level, on the south side there are 2 No. gates on approach to the crossing. Both sides feature grassed footpaths on approach.

The crossing has signage reading 'Stop, Look, Listen' however there are no additional safety features at the crossing for pedestrians.

The Passive Level Crossing Risk Assessment undertaken in 2022 for this crossing recommends the replacement of the crossing with a bridge.

Bolleaux FPS Crossing

Bolleaux Crossing is a footpath crossing situated on the AU17 public footpath. The crossing features a boarded surface over the railway with styles at the railway boundary on both sides of the railway. On approach within the railway boundary are steep concrete ramps from footpath level up to track level. Both sides feature grassed footpaths with a copse on both sides on approach.

The crossing has signage reading 'Stop, Look, Listen' however there are no additional safety features at the crossing for pedestrians.

The Passive Level Crossing Risk Assessment undertaken in 2022 for this crossing recommends the diversion over Cradle Bridge Crossing.

Surroundings

The site for the proposed footbridge is at Cradle Bridge Crossing, the southern of two at-level railway crossings which are part of a rural footpath network across mainly fields at the outskirts of Ashford, Kent. To the south of the site is a recently completed residential housing estate, and a few leisure attraction programmes such as the Conningbrook Lakes and nature reserve, which generate some use for the crossing. The northern side is currently a large field; however, a new housing development is planned in the near future. The footpaths connecting the two railway crossings are partially very narrow and mostly covered by grass, with some dense shrubs and trees on both sides of the crossings, especially to the south. The landscape is predominantly flat, with the railway line sitting on a slightly raised embankment with steps on one side leading up to and stiles to cross over on both sides to reach the existing crossing. An overhead powerline runs parallel to the tracks along the northern embankment.

Future Development

Currently, both crossings are not used very often. The new development, which includes a new school and park adjacent to the site, is likely to increase the footfall across, meaning that a new footbridge is vital in order to maintain the connection across and increase the safety of users.

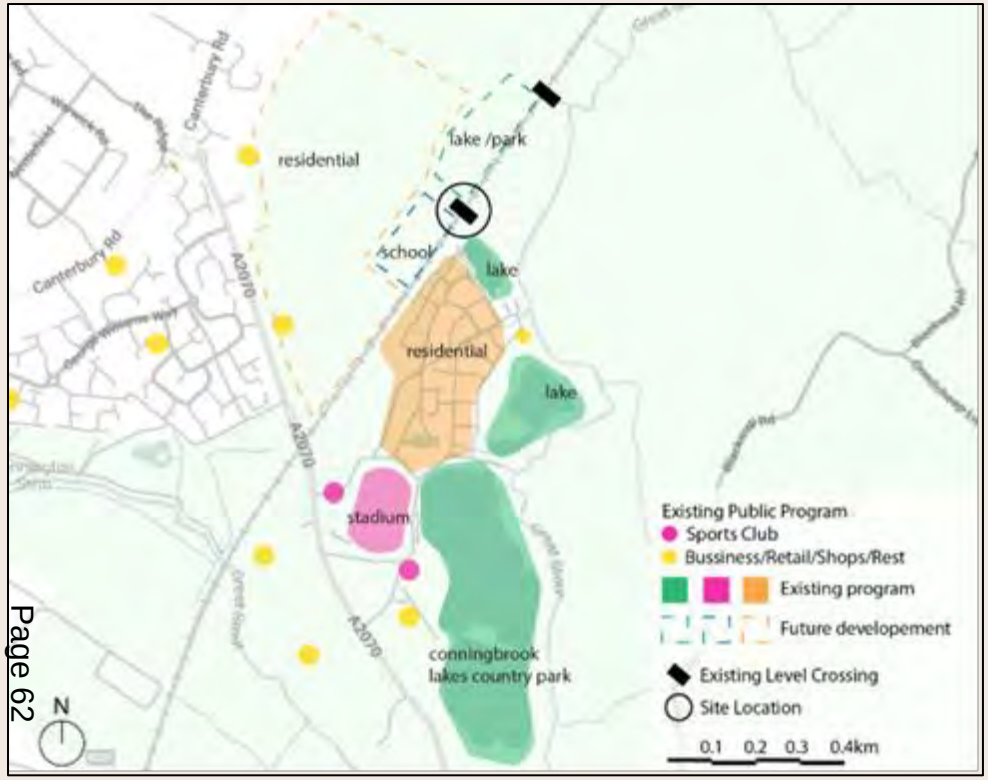


Figure 1 - Overview of site

Flow Bridge Overview

The Flow Bridge system is part of Network Rail's Level Crossing Replacement Safety Programme. It is primarily intended to improve the safety of pedestrian crossings across the railway network. Its modular design offers a range of layout configurations and span lengths. While the current Flow Mk2 is stepped only, the modularity allows it to offer ramped and lift configurations in the future to suit a wider variety of locations.

The project challenged the design team to deliver a user-focused bridge that was cheaper and quicker to produce than a steel equivalent, and created a safe, enjoyable and attractive user experience.

The unique properties of modern composites allow a lightweight, strong, and cost-effective solution. This in turn allows the use of concrete free foundations (ground conditions dependent).

The modular design was developed using parametric modelling tools, which allowed for a highly collaborative process and real-time design evolution. The result is a standardised product which accurately reflects the concept, whilst offering a variety of configurations to respond to different site characteristics.

Figure 2 - Flow Mk1 Prototype in Wistanstow

Flow Bridge Principle

The corner and user experience

On traditional footbridges across railways, ramps and stairs are positioned at 90 degrees to the main span and use opaque high-containment parapets up to 1.8m height.

Those parapets lead to visually heavy designs that are more difficult to integrate within their surroundings. They also carry safety problems, as they can create ‘blind corners’ that block the view and make users unable to see other people using the bridge.

Smoothing this corner out helps create a much safer and more welcoming user experience. However, doing so can lengthen the bridge, pushing the stairs / ramps away from the rail fence line and clearance envelope. This increases the cost, material use, and the land required for crossings.

The Spine

The bridge resolves this with the addition of a structural ‘spine’. Whilst the deck turns smoothly around the corner, the supporting spine remains orthogonally aligned to the railway. This ‘disconnect’ between spine and deck allows the deck to ‘flow’ around the corner, whilst maintaining a minimalistic structural footprint. The addition of a spine also unlocks other benefits.

The spine acts as two arch-like structures, supporting the main span and the stair units. The supports are very much an integrated part of the design.

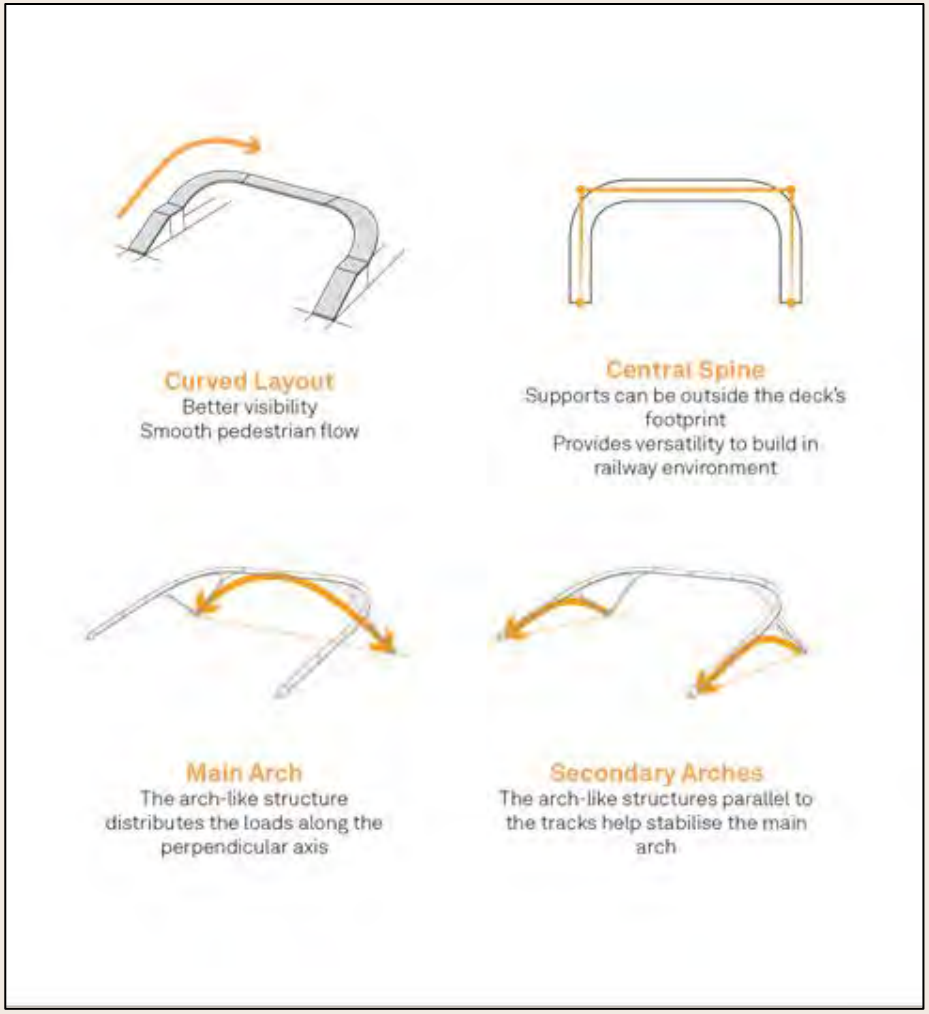


Figure 3 - Flow Bridge principles

The Parapet

The containment requirements of the railway often lead to solid, tall parapets, which create an oppressive, tunnel-like experience. The view from the structure is restricted, and the resulting enclosed space being poorly overlooked can even feel unsafe. In response to this, the team wanted to return bridges to being enjoyable ‘moments’ within a walk and provide opportunities to take in a new view of the surrounding environment.

Opening the view up also increases safety, as it provides more visibility of who is on the bridge and people can see their entire route before they embark upon it. Knowing that they can be seen will make people feel safer when using the bridge. For this, a toughened glass laminate is used for the upper part of the parapet. This provides transparency and sufficient robustness against vandalism in remote areas, which maintains its function as parapet even if damaged until the panel can be replaced.

The deck

The deck has been designed to allow for the deck modules to be lifted in incrementally, allowing for smaller, more manageable components to be transported and installed, or even replaced if necessary. The modules are lifted into place and fixed to the spine using shear connections.

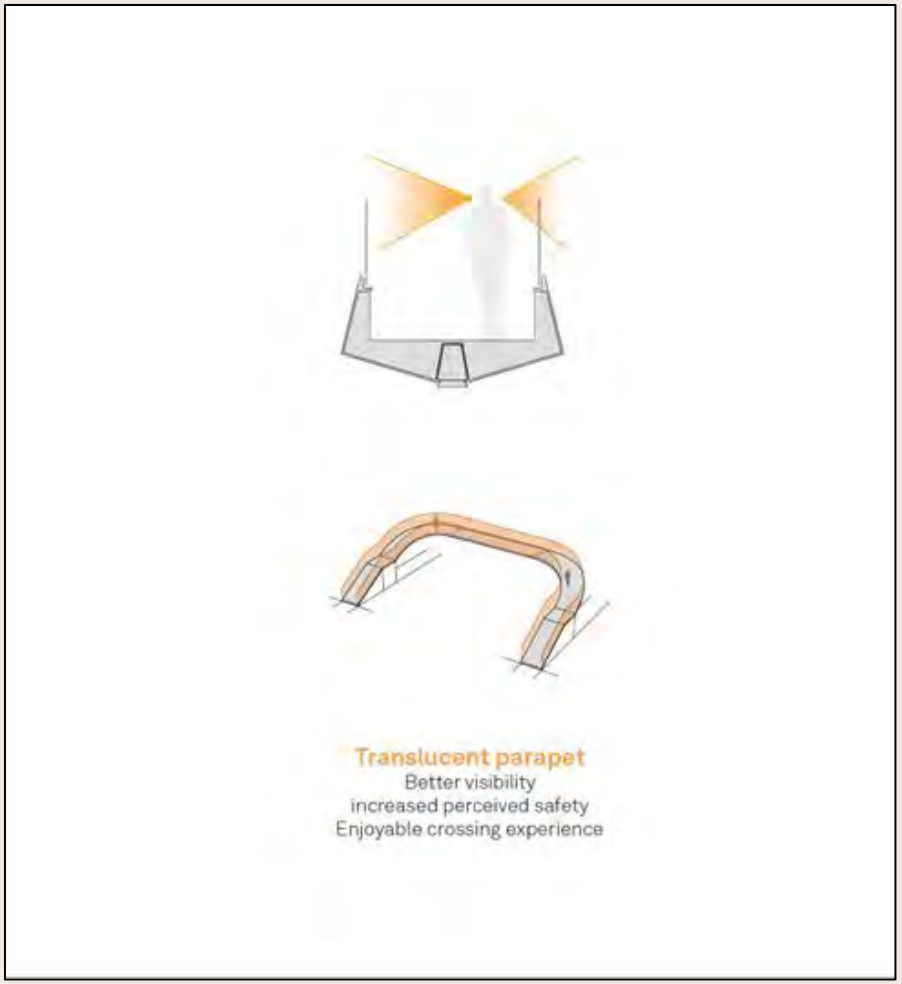


Figure 4 - Flow Bridge principles

Flow Bridge Sustainability

The Flow bridge is made from Fibre-Reinforced Polymer (FRP) – a lightweight material that is widely used in other industries, including the manufacture of aircraft and cars.

FRP is a combination of strong fibres set in resin, effectively like a man-made wood. This bridge mainly uses glass fibres, with carbon fibres for high-stress components. The mix of resin and fibres offers great design and fabrication advantages, yet they are often thought of as carbon heavy materials and as such the infrastructure industry is weary of their use. However, upon closer inspection the team found the lightness and material efficiency of the FRP outweighs the carbon footprint of the production process and the bridge was estimated to have 10 to 15 tons less embedded carbon than the conventional steel option: approximately a 10% reduction.

The lightweight nature of the bridge is its key attribute; all components weigh under 2 tonnes, making it easier to transport, requiring smaller plant equipment for installation, and it can be installed in under 3 weeks - all of which results in cost savings and a lower carbon footprint.

It also allows the use of concrete-free foundations like the rapid root system, which greatly reduces the carbon footprint of the scheme, is cost-saving, and reduces the amount of site works required.

Figure 5 - Flow Bridge pier

Flow Bridge System

It is essential that any modular solution carefully considers the identity of the railway and the specifics of the sites in which the bridges will sit. Local stakeholders often view standardised solutions as insufficient, utilitarian and inward-looking – focusing only on the requirements of the rail, often at the expense of local objectives.

The Flow Bridges are designed to be an asset within their communities, with each design taken as an opportunity to provide a beneficial, tangible link between the railway and the people surrounding it.

One of the key challenges for any 'standard' bridge solution is how one design can 'fit' a variety of sites. Standardisation is driven by consistency and repetition, yet good design is traditionally seen as a site-specific response. The Flow Bridge addresses this with contemporary, refined forms paired with careful detailing and a 'human-scale', to enhance the user experience.

To respond to the specific characteristics of a site, the system offers a wide variety of configurations. These extend from geometric adaptability such as altering the span or width of the deck, through to texture, pattern and colour modifications all of which are readily achievable with composites.

Figure 6 - Overview of shapes and span limits

Whilst the current prototype has been built as a stair-only version, the system will be capable of offering an accessible crossing with the addition of ramps and lifts as necessary. The Flow Bridges will demonstrate that by embedding variability into the system, and focusing on user experience, modular design can be good design.

The choice between the configurations will be based on the following questions:

- The site context and its constraints (such as land boundaries or services).
- The current and future desire lines and key views.
- Who the users are and how do they currently use the level crossing.
- The accessibility of the current and future level crossing and site, and whether or not the level crossing will be maintained.
- Train frequency at the location.
- The current and future capacity for the crossing.
- Is the line currently electrified? Will it be in the future?

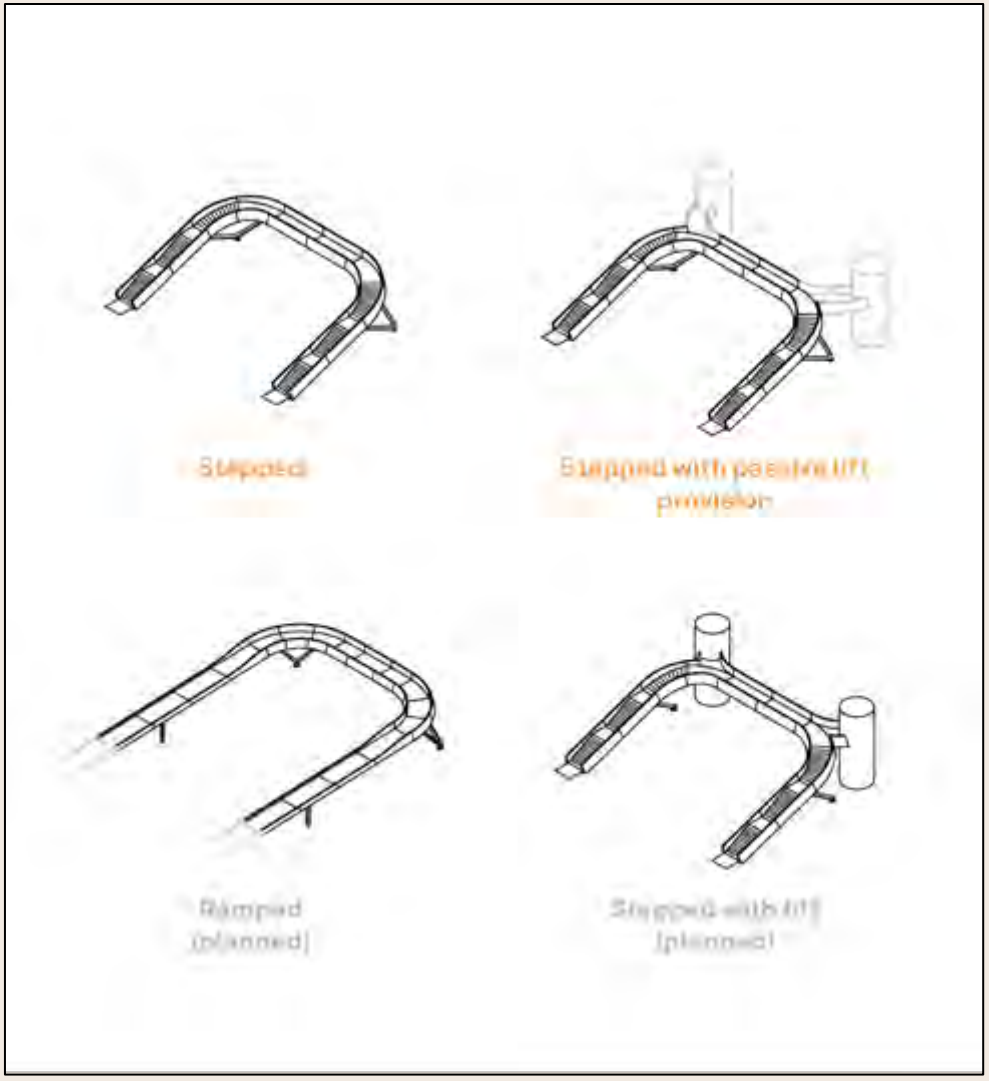


Figure 7 - Flow Bridge stepped / step-free options

General Considerations and Risks

The following considerations and risks relate to the site at the existing Cradle Bridge crossing where the proposed bridge is to be situated.

Land Boundaries

The land owned by Network Rail around the crossing consists of a strip of land along the railway, which varies in width. Approximate widths of this strip of land are shown below in Figure 8. There are physical demarcations on site such as vegetation as well as timber and chain link fences to safeguard access from members of the public to the track.

Figure 8 – Network Rail's land boundaries around the footbridge (in green)

It is understood the land adjacent to the railway is privately owned farmland.

Topography

No topographical survey has been undertaken for the railway at this site and thus levels and site topography are based off AIS data.

Whilst the site does not feature an earthwork and is considered 'at grade', the track is at a higher level than the adjacent land. The track level of the railway corridor is approx. 1.35m high along the Down

side of the railway and 0.8m high on the Up side. The slopes are generally gentle throughout.

Along the paths on approach to the existing crossing the level change is achieved by a slope on the Up side and 2 No. stairs and a slope on the Down side.

Services

A services search (reference KEN67981) was undertaken in September 2024. A list of the services that services that are in close proximity to the site can be found below:

- 11kV Overhead line power cable owned by UK Power Networks running parallel to the Down side of the track.
- South East Water distribution main running parallel to the Up side of the track.
- A drainage ditch is found along the Down side of the railway – commencing south west of the crossing in the direction of Ashford away from the crossing.
- Cable troughing routes are found on both sides of the railway with 33kV High Voltage (HV) traction power distribution and pilot cables found in the Down side trough route, with Signalling and Telecoms cables in the Up side trough route. A LOC box is also noted as being in close proximity to the Down side of the crossing.
- 750V DC electrification system for providing traction power to electric trains through conductor rails (third rails) are found in the 6ft between the Up and Down lines.
- A land drain in the site on the Down (north west) side of the railway is currently present. This land is due to be developed and thus. The Great Stour river is also in close proximity to the railway on the Up (south east) side of the railway.

Environment and Ecology

At this stage, no environmental or ecological appraisals have been undertaken and thus it is recommended this is undertaken at the next design stage. This section highlights ecological constraints based off a Geo-RINM desk study.

Any tree felling / vegetation clearance activities that need to be undertaken should be done outside bird nesting season.

Designated sites and habitats

Geo-RINM has identified a number of environmental and ecological hazards and considerations that should be taken into account during at this stage. Figure 9 shows a map identifying these hazards.

To the north there are 2 No. areas of Coenonympha Pamphilus butterflies commonly known as Small Heath.

The area highlighted in orange identifies as a local wildlife site, Great Stour, Ashford to Fordwich.

Finally, the leaf shows the presence of an invasive species plant close to the crossing. This has been identified to be Himalayan Balsam.

To the south of the map, away from the crossing but close to the railway around where Conningbrook Lakes housing development is found, are Great Crested Newts.

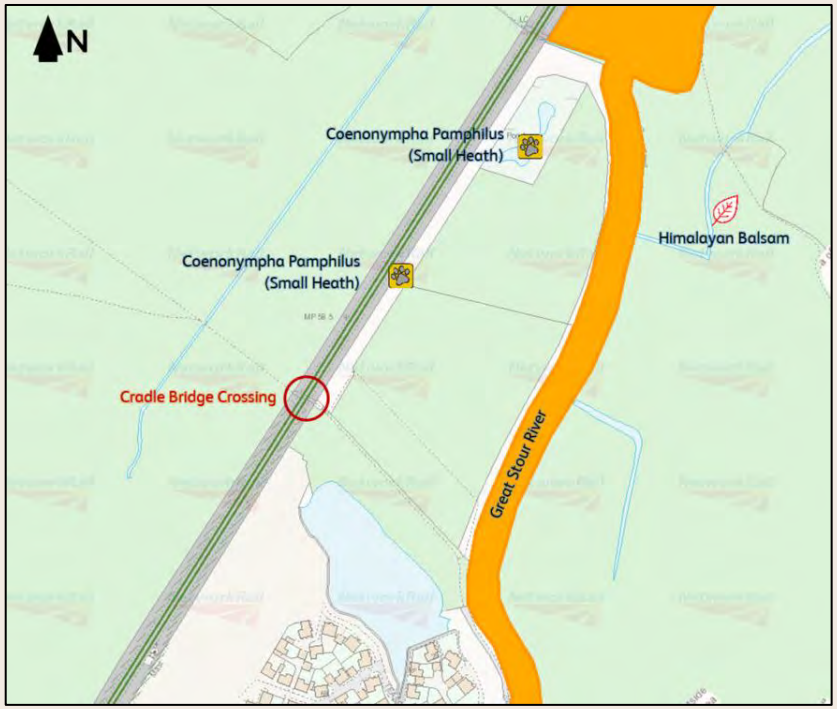


Figure 9 – Designated sites and Habitats in close proximity of the crossing.

Flooding risk

Geo-RINM identifies the area just towards east of the level crossings location as having a high risk of flooding, as shown below in Figure 10.

The bridge lies in Flood zone 1 for planning, the area to the southeast associated with the Great Stour River lies in Flood zone 2 (**orange**) and 3 (**red**) for planning.

Figure 10 – Flood risk map from Geo-RINM.

Around the housing development sites there are ponds noted. Land drainage, ponds and ditches from adjacent land which generate water run-off and have flooding potential should be addressed by the housing development on each side of the railway.

Site History

The history of the site and the surrounding area is as follows. In 1896, the area to the northwest of the railway line was largely farmland and the area to the south-east was a mixture of woodland and farmland, with 1 No. at-grade foot crossing at the current location and another at the high mileage. The Great Stour River was noted as lying to the east of the railway line. In 1926, additional smaller brooks / channels were noted on the map and were indicated as passing under the railway line to the northeast of the proposed bridge location. In 1958,

a small works opened to the northwest of the railway line. By 1990, the works had closed, and a small aggregate quarry was operating adjacent to the railway line to the south-east. By 2003, this quarry had closed and by 2018 work was taking place to construct the current Conningbrook Lakes housing development that is on the former quarry site today.

Geology and Mining

According to BGS data, the proposed site is underlain by head deposits (CLAY and SILT) underlaid by the Folkstone formation (SANDSTONE). A previous ground investigation was undertaken in January 2012 for the first phase of the new housing development, Conningbrook Lakes (500m to the south of the proposed bridge).

This ground investigation encountered the Folkstone formation at adepth of 4 to 6m and overlain by a mixture of alluvium and river terrace gravels to the north and head to the south of the Conningbrook Lakes site.

A surface level quarry for aggregates was located to the southeast of the proposed footbridge site. The specific dates of operation of the quarry are unknown. The site is in a landfill referral area but is not in a mining referral area. This stretch of railway has been identified as being at risk of migration of landfill gases.

Track Gauging Requirements

Gauging is to be compliant with the RSSB standard GIRT7073 where the minimum clearance between vehicle and any asset is stated as 100mm. Horizontal offsets from running edge to assets are stated within Network Rail standard NR/L3/TRK/2049/MOD07 where an offset of 1.625m is desirable.

Electrification & Plant Requirements

There are a number of Network Rail operational critical Electrification & Plant (E&P) assets in the area concerned (non-exhaustive):

- 33kV High Voltage traction power distribution and pilot cables connecting with the nearby HV grid supply and other NR traction power substations in the area.
- E&P optical fibre cables linking the traction power locations and the electrical control rooms – part of traction power equipment protection and control systems.
- Signalling power distribution cables for supplying with the lineside signalling equipment.
- 750V DC electrification system for providing traction power to electric trains – including conductor rails (third rails) and DC traction cables.

Signalling Requirements

The Cradle Bridge Footpath crossing, which is the proposed site for the new bridge, is located on the Up / Down Canterbury (ACR) at approximately 58m 37ch. The ALCRM report states that the preferred option is for the crossing to be replaced, which is being undertaken by this project, and as such will be subject to closure prior to the bridge installation works. The closure should follow the process set out in NR/L2/SIG/30019 – Process for Closing or Downgrading Public Level Crossings in consultation with the local level crossing manager. Cognisance should be given to the staging of the works to ensure that crossing users are fully aware of the alternative crossing routes until such time as the bridge construction is completed.

Connectivity

Desire Lines

The orientation of the new footbridge should best compliment the desire lines of users crossing the bridge for their onward journey. While on the north the only existing direction is perpendicularly away from the railway, routes on the south offer three directions, including a parallel route along the tracks both ways. The northern route leads toward the to-be-closed Bolleaux Crossing and will form part of the new approx. 700m long diversion route. With the Housing Estate and lakes to the south, it is, however, assumed that most people will connect towards this direction, especially with the new development on the northern side of the tracks coming soon.

With the predominately flat surroundings, the bridge will be visible from far views across fields in the current context, aiding in wayfinding and locating the crossing point. With a more built-up environment and new trees on the north, the crossing will be less visible and may need signposting.

Accessibility

Network Rail has undertaken a separate Diversity Impact Assessment (DIA) which has concluded that a stepped-only footbridge is suitable for this site. Network Rail's rationale for this is that the current crossing is not accessible, as it includes stiles and steps up the railway embankment to be reached. The path leading to the crossing from the southern housing estate has not been upgraded so can be challenging to navigate by lesser-able bodied people or with pushchairs. A stepped-only footbridge would therefore be an appropriate upgrade to the crossing to increase safety for users at this time.

Figure 11 - Footpath / Cycle Lane network

Figure 12 - Cradle Bridge Crossing

However, taking into consideration the new school that is part of the planned development, the user requirements and frequency is likely to change, making an accessible bridge desirable and more appropriate for the future.

A ramped bridge will require very long access ramps to reach the required clearance height of the bridge above the tracks, which in turn entails a lot of space to ensure the ramps are compliant with standards. They can also be very strenuous to use when used to achieve a significant height difference, such as here, resulting in a limited enhancement to accessibility. This may therefore not be a suitable option for this location, as also outlined in the accompanying DIA report.

The modular design of the stepped Flow bridge allows for a passive provision for lifts, which can be added at a later point by replacing one of the deck modules and adding a lift on either side. Though the remote location and limited access for maintenance or in emergency cases may not outweigh the accessibility improvements, it is important to include the option should the necessity to enhance the crossing arise with the new development. Not having an accessible crossing significantly lengthens the journey between the southern housing estate and the new northern school, placing those who cannot use the bridge at a disadvantage. Further work to the paths leading to the crossing would also be required in this case.

Alignment Options – Approach

Span

The modular design of the flow bridge offers a limited number of Layout options, S- or C- shape, with an adjustable span in 0.5m increments. Considering the required clearance envelope a 20m span stepped-only Flow bridge is suggested as best fit for the location. This will place the bridge stairs at the top edge of the railway embankment. Additional steps will be required on the north side, where a ramp or groundwork adjustments would suffice on the southern approach to meet the bottom of the bridge stairs.

The proposed alignments have been assessed primarily on their continuity of existing and new routes, their adaptability for the new development and their integration into the landscape. A ☑ is valued as positive, whereas ! marks an aspect for caution, as the proposal either creates a negative impact or requires special consideration during the next design stage to ensure a positive effect of the footbridge.

The powerline adjacent to the railway will be too close to any structure built over the tracks and will need to be diverted or put underground in sections, independent of which alignment is chosen.

Alignment 1

S-Shape Alignment

An S-shape alignment would enhance the connectivity between the two developments on either side, bringing the southern end of the stairs close to the housing estate. The natural continuation of the route on the northern side directs people toward the footpath and new park, thereby discouraging unofficial footpaths being created between the tracks and the planned school.

However, the southern approach puts the users along the diverted route from the to-be-closed crossing at a disadvantage and requires a great amount of clearing, as the alignment coincides with existing trees and densely overgrown areas.

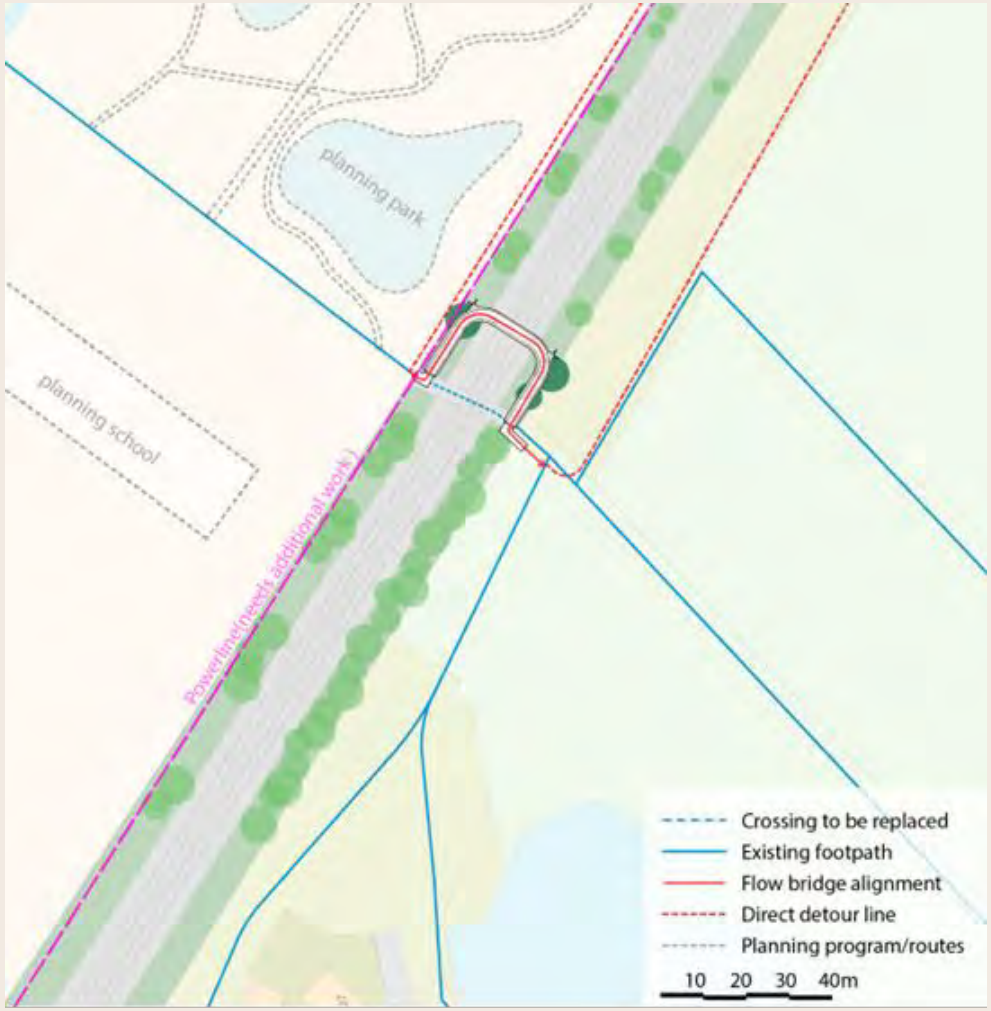
- Directness of the route ✓
- Impact on the existing trees and vegetation !
- Utilisation and continuation of existing paths !
- Adaptability to future developments !

Alignment 2

C-Shape Alignment

A C-shape alignment will maximise the continuation and use of the existing footpaths, it will also accommodate the future development on the northern area whilst providing a more evened detour distance between the two sides from the to-be-closed crossing.

The C-shaped form also echoes the axial and linear form of the site and will have less impact on existing trees and vegetation.



Directness of the route	☑
Impact on the existing trees and vegetation	☐
Utilisation and continuation of existing paths	☑
Adaptability to future developments	☐

Recommended Alignment

C-Shape Alignment

A C-shape alignment will be of the most benefit in the currently existing context, as it has less impact on surrounding vegetation and future route diversions.

Lifts could be added to either alignment at a later stage, though they should be taken into consideration during the early stages of design, as they may affect the precise location and span arrangement to allow appropriate access to the lifts. Great care must be taken to ensure they are visible and safe to use.

Additional surveys for underground utilities may require adjustments to the proposed alignment as well.

While it is feasible to construct a stepped-only Flow bridge at this location, and suitable for the current environment, we consider a stepped-only crossing will become unsuitable once the sites are developed. We encourage the consideration of the impact of the bridge on the future development and suggest further investigation of the implementation of an accessible crossing / allowance for adding lifts in the future.

It should be noted that the DIA for this site notes that lifts may not be practicable at this site and thus this may not be deemed an appropriate solution to create a step-free structure in the future.

Option Description

The proposed option from this feasibility is shown in Drawing 186814-NRD-1706-ACR-DRG-ECV-000002. This option has been determined following a design workshop on 23rd October 2024 involving Knight Architects and Network Rail Engineering Services Design Delivery personnel.

Civils and Structures Commentary

It should be noted that all geometry stated in this section is based off point cloud and AIS data. A full topographical survey shall be required to validate the site levels and layout.

The proposed option shows a 'C' shape layout for the bridge. The superstructure is shown to be 20m in span (from / to the centre of the staircase spine on both sides). This span has been considered to ensure the bridge sits outside the 'hazard zone' (defined as per GCGN5612 and UK NA for BS EN 1991-1-7 as an area within 4,500mm of the nearest running edge) and is in line with the outlined span constraints for the Flow bridge which stipulate the span is in multiples of 500mm. Due to the length of the bridge, the existing boundary fence shall require locally repositioning, and land purchases shall be required on both sides of the railway to facilitate the new bridge, thus potentially adding additional cost to the overall scheme. It should be noted there is scope to reduce the overall span of the footbridge by allowing structural elements to sit within the 'hazard zone'. The position of any vertical supporting elements in relation to the track will need to be taken in consideration, to understand the risk from derailed trains impact. If a vertical support is located within a denominated 'hazard zone', the risk of impact from derailed trains shall be assessed in accordance with Appendix F of UIC 777-2R, which gives guidance on the risk assessment for Class B structures. This should be considered by designers at future design stages should there be a desire to shorten the overall span.

The bridge is shown to have a vertical clearance of 5,500mm from rail to soffit in line with the clearances stipulated in the Form A design for the proposed Mk2 Flow bridge.

The Superstructure is shown to be a stepped only footbridge to replace the existing stepped crossing at Cradle Bridge Crossing. The structure is not considered to be suitable to accommodate the future installation of ramps. Whilst lifts are potentially able to be installed in the future, the DIA for this site 186814-NRD-1700-ACR-REP-EHF-000001 states that lifts are not a reasonable solution at this site given the remote nature of the lifts in the event of breakdown and the potential for these to be misused. Consequently, it may not be considered that this Flow Bridge solution would be suitable for the future installation of a step-free bridge should this be deemed required.

The proposed footbridge will interface with the existing 11kV overhead power cables (UK Power Network) which run parallel to the Down side of the railway. As part of the works, these would require repositioning to allow the bridge to be installed. The proposed footbridge will also interface with the 21-inch diameter cast iron buried water main (South East water) at the Up side pier. To facilitate the installation of the bridge, the water main will

require local diversion and / or protection during construction activities as agreed with South East water. There may be scope to avoid this by reducing the clearance from the running edge as described above. It is not envisaged there will be any interface with existing drainage systems on the railway infrastructure.

On approach to the bridge minor changes shall be required to the approach footpaths to allow access to staircase level. On the Down side of the bridge, steps shall be required at 90° to the main bridge staircase due to the level difference from footpath level to bridge level. On the Up side minor changes shall be required to the approach path.

Environmental and Ecological Commentary

Coenonympha Pamphilus butterflies commonly known as Small Heath is found in the vicinity of the bridge as well as the proposed new walking routes from Bolleaux crossing to the new bridge. Trees around the crossing to the north east where the bridge will be situated shall require removal. Any tree felling / vegetation clearance activities that need to be undertaken should be done outside bird nesting season.

Geotechnical Commentary

The proposed footbridge site is 'at grade', as such there are no earthwork assets on either side of the railway. The track level is up to approximately 1.4m higher than adjacent land. It is not anticipated that any railway earthwork slopes will be affected by the bridge construction.

Ground investigation has not been undertaken at the bridge location. The superficial Head deposits were recorded as being up to 5m thick in the BGS soil thickness model and the 2012 housing development ground investigation. Head deposits have the potential to include localized compressible organic lenses, giving rise to compressibility and uneven settlement hazards. Superficial deposits around the current artificial lakes at the Conningbrook Lakes development, east of the site, were likely excavated to extract the gravels beneath. However, the 2012 ground investigation indicates that an offset of 15m from the railway line was applied during the operation of the quarry by Bretts Aggregates, thus un-dug / unworked material is likely present here. The underlying bedrock of the Folkstone formation (Sandstone) was recorded in local BGS boreholes as medium dense sand at 2mbgl, to very dense at up to 10mbgl depth. The depth to groundwater ranged from 0.9mbgl to 4.8mbgl.

Ground investigation is required to investigate the ground and groundwater conditions to determine whether shallow or deep foundations are required. Rapid Root ™ foundations founded within the head deposits or within the underlying bedrock where weathered to a sand may be appropriate, depending on loading and ground conditions. To determine the foundation solution, the following geotechnical hazards need to be investigated by the ground investigation: Thickness and composition of superficial soils; depth to and strength of bedrock; groundwater conditions; infilled ground associated with former quarry; plasticity of clay deposits (shrink/swell); buried services as well as groundwater and ground gas monitoring. At this

stage it is suggested that ground investigation comprises two cable percussive boreholes on each side of the railway. Rotary coring of the bedrock may be required, depending on ground conditions encountered.

Track Commentary

The existing track along the *ELR:* ACR line comprises of two tracks, the Down and Up Branch line. Within the area of the proposed footbridge the existing track alignment horizontally is straight and vertically falls at an approximate gradient of 1:260 from Ashford Station. No works to the track alignment or componentry is required.

The proposed horizontal offset from running rail to the nearest point of the proposed footbridge is 4,500mm, a direct result of the considerations given regarding derailment risk. This offset is greater than the minimum desirable offset as defined within NR/L3/TRK/2049/MOD07 at 1,625mm, therefore the proposed clearance is greater the desirable structure gauge offset and can be defined as providing sufficient horizontal structural gauge clearance.

Third rail is located within this area therefore the proposed soffit height of the footbridge could be set lower than would be required for an OLE system. If passive provision for OLE is not required, it may be possible to reduce the soffit height of the footbridge to 4,640mm as defined within NR/L3/TRK/2049/MOD07. NR/L3/TRK/2049/MOD07 defines the desired soffit height of 5.100m for new construction with OLE. The proposed height is set at 5,500mm and should be reviewed at the next design stage as part of the value engineering exercise to ensure the correct soffit height for the footbridge is chosen. All soffit heights stated above would provide sufficient vertical structural gauge clearance. Any increases that are required to soffit heights at future design stages can be accommodated by the use of steel stools positioned at the cruciform support of the Flow Bridge.

Signalling Commentary

The nearest Signalling asset to the proposed bridge location is around 400m away and as such is not affected in any way by the new structure. Any cable route which runs through the worksite will need to be identified to ensure it is not disturbed by any works to deliver the bridge or by the subsequent final position. It is not expected that further Signalling input will be required however this cannot be ruled out at this stage, should any further interfaces to the Signalling system be identified. Should any signal sighting be required this shall be required through a Signal Sighting Chairman who would be procured separately through the project and thus would add further cost to the project. The local signalling asset owner should be consulted to determine their acceptance of the new bridge in relation to any signalling assets before any additional work is remitted at added cost to the project.

Electrification & Plant Commentary

Highlighted interfaces between E&P assets and the proposed Flow bridge works are as follow (non-exhaustive):

a) According to records, NR 33kV HV Feeder F1095 and pilot cables – between Willesborough and Wye substations – are buried under Cradle Bridge Crossing and on a surface cable route along the Down cess.
b) According to records, the E&P optical fibre cable – between Wye Substation and Kennington GSM-R Site – is located in the existing S&T route along the Up cess.
c) The signalling power cables are likely to be in the existing S&T route along the Up cess. However, this could not be confirmed at this stage.
d) Based on desktop observation, 750V DC conductor rails are located along the 6-foot area. At Cradle Bridge Crossing, a gap of the conductor rails was created, and the DC traction cables (continuity cables) are likely to be buried under the crossing decking and the 6-foot area electrically linking the two sections of conductor rails across the gap.
e) All E&P assets and their positions / alignments are subject to verification on site. The proposed Flow bridge is unlikely to directly affect these assets, however it may be necessary to protect these assets during the construction stage.
f) Any works affecting the existing NR 33kV HV feeder and 750V DC electrification system may require electrical isolations / switch-outs during construction stage. It will be subject to approval by NR HV Office or isolation planning.
g) Kennington Track Paralleling (TP) Hut – *ELR:* ACR, Mileage: 58m 13ch on the Down cess – is an existing traction power location nearby. Its main maintenance access (including the Local Control Panel (LCP) for isolation purposes of the DC electrification system) is at the existing access point off Willesborough / Kennington Road Bridge (Structure No. 1864). Although Cradle Bridge Crossing is not the main access for the TP hut, track access provisions to the Down cess should be considered at the crossing as the alternative access point for this traction power location.
h) Electromagnetic Compatibility (EMC) and Earthing & Bonding (E&B) requirements shall be considered as part of the next design stage.
i) Note that the interface with the existing third party's overhead electricity distribution lines (assumed to be part of UK Power Networks) outside the Down side boundary fence is not part of the scope of this E&P commentary. However, any changes / diversions of the DNO distribution lines will need to be assessed at the next design stage in order to determine the interfaces with the NR E&P assets.
j) Impacts to existing non-traction and non-operational critical LV power supplies have not been assessed and will need to be reviewed at the next design stage. In addition, any new/modified LV power supply (including lighting) for the proposed Flow bridge will need to be assessed as part of the next design stage. Note that the commentary on E&P assets will be subject to review if there is a change to the parameters of the proposed Flow bridge.

Constructability Commentary

The Flow bridge design has been developed in the thinking to provide a modular construction solution, which would give greater benefits to the construction phase and drive the cost installation down. Due to the light FRP material nature, the spine and bridge deck components let itself for an easier installation, with the utilization of smaller cranes at the site. For the Conningbrook site, we envisaged the following programme activities:

Site survey

Prior to undertake any site construction activities, topographical, service identification and ground investigation survey, gas monitoring will be carried out to inform the permanent and temporary works design. Environmental surveys (PEA) will confirm any potential ecology constraints at the site (invasive species, birds and other) to be catered and planned for.

Permanent & Temporary works Designs / Planning

Once the design will have reach full maturity, it is envisaged that a prior approval planning application will be required to the Local Authority, due to the permitted development category of the railway corridor. Once granted and conditions accepted, the implementation works will be able to start.

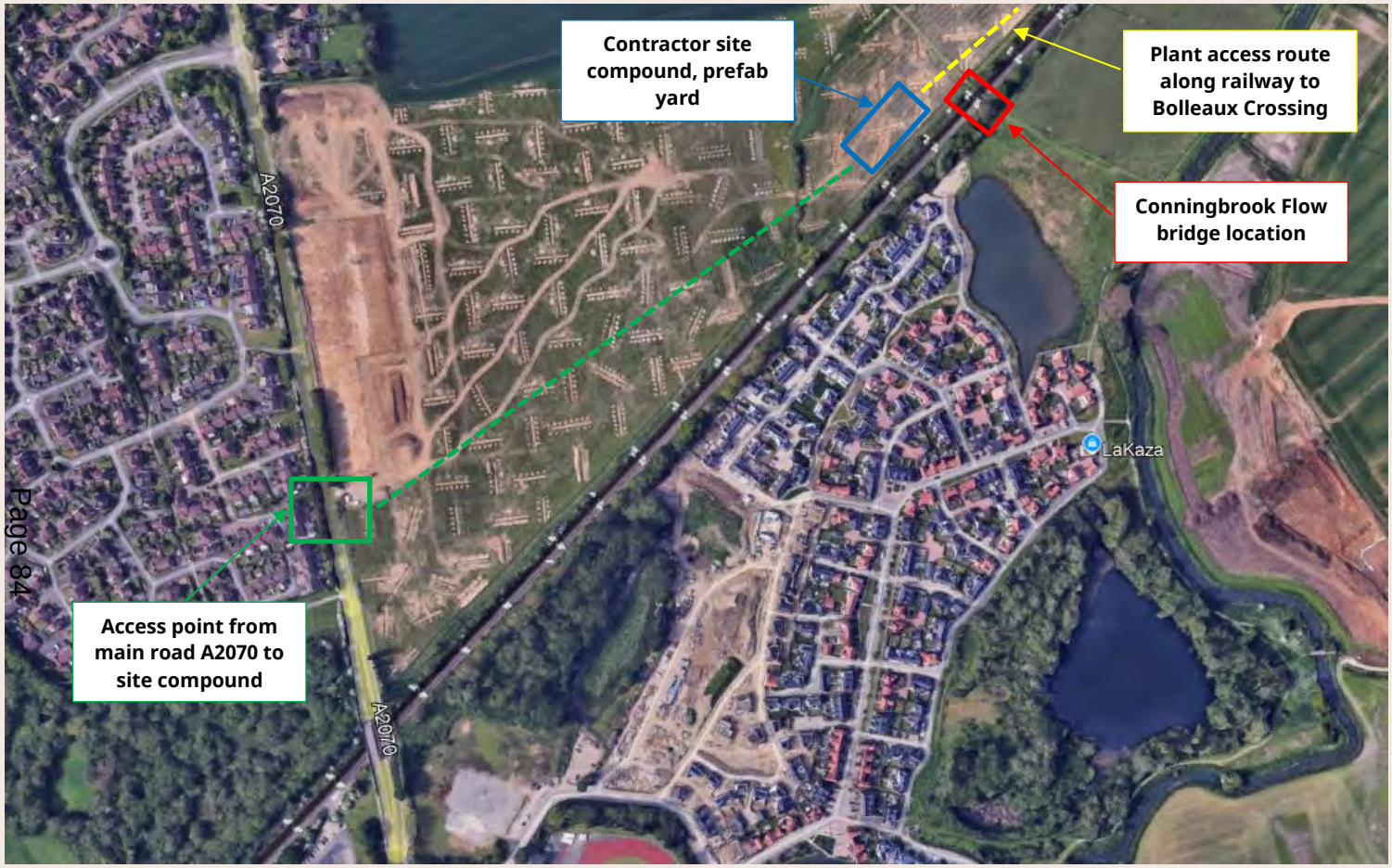
The detailed design will be developed to minimize the need for land purchase and diversion of the 21" water main owned by South-East water on the east side of the railway corridor, which will require to rationalize the main bridge span length required.

Service protection and diversion works

Early engagement with South-East water will be required, due to the close proximity of their assets to the bridge foundation and to establish control measures / protection to their assets, due to the interface with the site activities (additional loading applied onto the water main from excavator, crane…).
A temporary works design will be compiled and submitted to South-East water for their review and approval, prior to start any site activities.
For the The 11Kv Overhead Line, a service diversion will be required. UK Power Networks will be approached, to obtain a C3/C4 quotation to ascertain cost and timescale required to undertake the service diversion.

Enabling works / Site Establishment

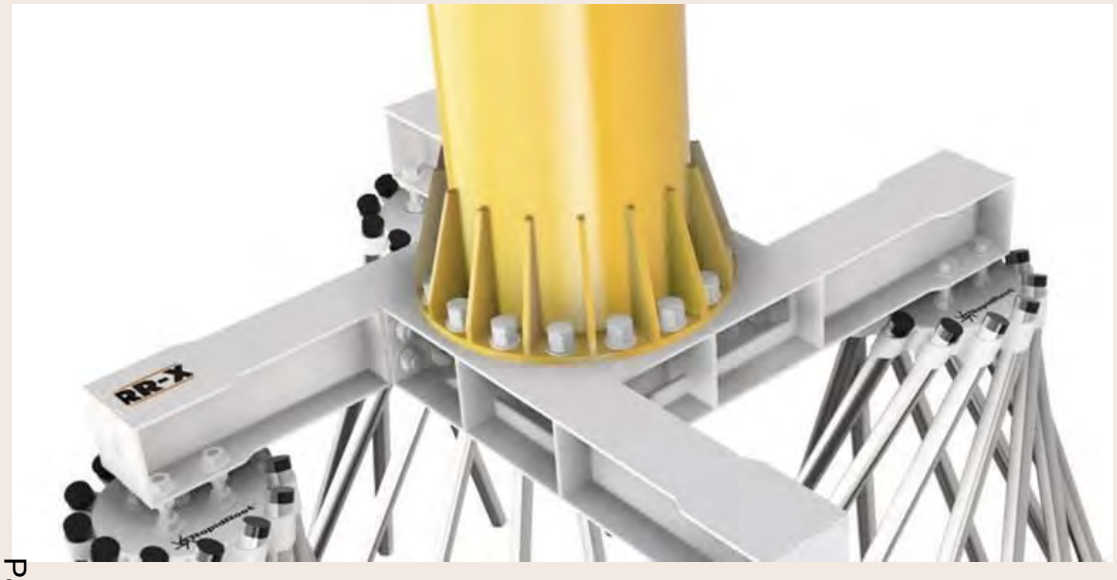
Once planning and service diversion dates confirmed, the enabling works will start, which will include to establish temporary access route to the crossings from the A2070, site compound and prefabrication yard, Conningbrook track crossing closure, temporary diversion route in place to Bolleaux crossing and de-vegetation works (refer to map next page).



Indicative site establishment and access route for the construction phase

Substructure works

It is assumed at this stage that the proposed Rapidroot foundation system will be able to be installed for the Conningbrook site, which will depend on the ground conditions and product performance. It will be de-risk at detailed design, as ground investigation report will be available to confirm ground suitability (refer to next page).



Rapidroot system

Rapidroot system installation photo

Earthwork

The foundation installed; the ground level will be re-shaped locally due to the level difference.

Superstructure works

For the bridge installation, the railway line will be taken under possession and the third rail isolated, so operatives and plant can be operated safely. We have planned the bridge construction to be undertaken as follow:

- 1st Saturday nightshift – install bridge piers and spine,
- Mid-week dayshift – install stair deck units and glazing panels onto pier sections (ALO working),
- Mid-week dayshift – prefabricate main bridge span lineside into yard,
- 2nd Saturday nightshift – install main bridge span and glazing panels onto the spine,
- Mid-week dayshift – install handrail system,

Lifting operation will be undertaken with a mobile crane and road rail vehicle, with associated alloy tower for working at height.

Flow Bridge Mark 1 installation photo – Spine

Flow Bridge Mark 1 installation photo – Stair FRP units

Ancillary Civil & Accommodation works

At the bridge landing, additional steps and handrail system will be installed. Lineside railway fence and permanent path diversion will then be put in place.

Finishing works / Hand-back

Finishing works, as topsoil spread, grass seeding and close out any defects will be undertaken. Once the Conningbrook Flow bridge will be open to public, the Bolleaux track crossing will be fully decommissioned and fencing / vegetation clearance completed.

Demobilisation

It will bring the project to completion, which will allow removal of the site compound and ground reinstatement. We envisage that the total construction period will be setting between 6-8 weeks duration.

Option Drawings

Page 187

186814-NRD-1706-ACR-DRG-ECV-000001
186814-NRD-1706-ACR-DRG-ECV-000002

ELR : ACR
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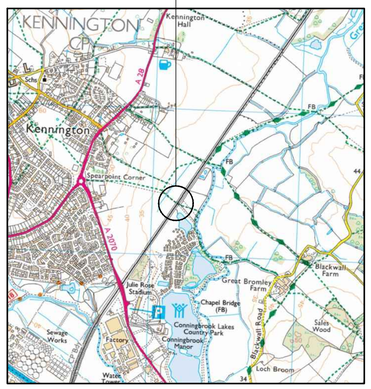

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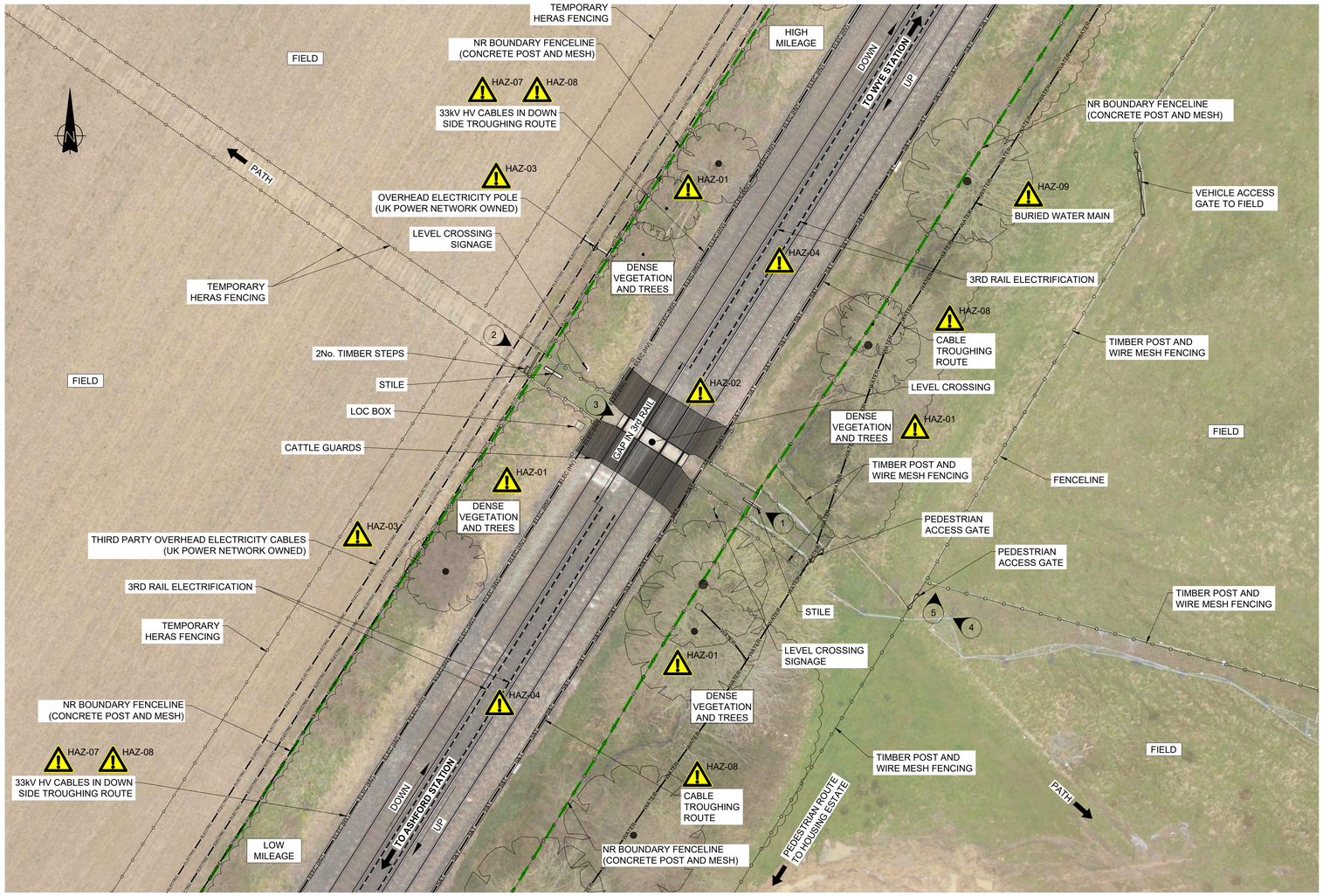
LOCATION PLAN

BIRDS EYE VIEW LOOKING NORTH EAST TOWARDS HIGH MILEAGE



PLAN
SCALE 1:200

PHOTO 1:
PEDESTRIAN STILE TO UPSIDE

PHOTO 2:
PEDESTRIAN STILE TO DOWNSIDE SHOWING STEPPED ACCESS

PHOTO 3:
LEVEL CROSSING FROM DOWNSIDE

PHOTO 4:
PEDESTRIAN ACCESS GATES TO UPSIDE

PHOTO 5:
LAND TO UPSIDE LOOKING FROM PEDESTRIAN ACCESS GATE

Legend/Notes

1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS STATED OTHERWISE.
2. DO NOT SCALE FROM THIS DRAWING.
3. THIS DRAWING IS TO BE PRINTED IN COLOUR.
4. THIS DRAWING IS BASED ON AVAILABLE NETWORK RAIL RECORD INFORMATION, INCLUDING POINT CLOUD INFORMATION, AIS DATA, AERIAL IMAGERY AND TOPOGRAPHICAL SURVEYS FOR ADJACENT PROPOSED HOUSING DEVELOPMENTS.

SCOPE OF WORK:

- INSTALLATION OF NEW FRP FLOW BRIDGE

DRAWING LIST:

186814-NRD-1706-ACR-DRG-ECV-

000001 - EXISTING GENERAL ARRANGEMENT
000002 - PROPOSED GENERAL ARRANGEMENT

KEY:

- NETWORK RAIL OWNERSHIP BOUNDARY
- DC (3rd RAIL) ELECTRIFICATION
- OVERHEAD ELECTRIC CABLE
- CABLE TROUGHING ROUTE
- 33kV HV CABLES
- BURIED WATER MAIN
- FENCING
- TEMPORARY FENCING (HERAS)
- PHOTO MARKER

IMPORTANT CDM / H&S NOTE

THE DESIGNERS WOULD DRAW THE READER'S ATTENTION TO THE KEY RESIDUAL HEALTH AND SAFETY RISKS THAT HAVE NOT BEEN ELIMINATED FROM THE DESIGN, SHOWN ON THIS DRAWING, BY THE DESIGN PROCESS.

DRA REF:	SIGNIFICANT DESIGNERS IDENTIFIED HAZARDS
HAZ-01	DENSE VEGETATION AND TREES
HAZ-02	LACK OF FULL TOPOGRAPHICAL SURVEY
HAZ-03	OVERHEAD ELECTRICITY CABLE
HAZ-04	DC (THIRD RAIL) ELECTRIFICATION
HAZ-07	HV CABLE
HAZ-08	CABLE TROUGHING ROUTES
HAZ-09	BURIED WATER MAIN

FOR MORE DETAILS ON THE HIGHLIGHTED HAZARDS REFER TO THE DESIGN RISK ASSESSMENT FOR THIS PROJECT
"EVERYDAY" LOW RISK HAZARDS AND THOSE HAZARDS WHICH SHOULD BE OBVIOUS TO A COMPETENT CONTRACTOR HAVE NOT BEEN INDICATED ON THIS DRAWING. SHOULD ANY ADDITIONAL HAZARDS BE IDENTIFIED DURING THE COURSE OF THE WORKS THE CONTRACTOR SHALL NOTIFY ALL RELEVANT MEMBERS OF THE PROJECT TEAM.

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REV	DATE	DESCRIPTION OF REVISIONS	DRAWN	CHK'D	APPR'D
P03	22/11/2024	ISSUE TO CLIENT	RD	JO	SG
P02	07/11/2024	DRAFT ISSUE	RD	MM	JO
P01	31/10/2024	DRAFT ISSUE FOR COMMENTS	LE	JO	JO

STATUS: FEASIBILITY

DESIGNERS

Network Rail Engineering Services
Part of Route Services
Manchester Square One, 4 Travis Street, Manchester, M1 2NY
Tel: 0161 880 3936 Web: www.networkrail.co.uk

PROJECT:
FLOWBRIDGE FEASIBILITY - CONNINGBROOK PARK

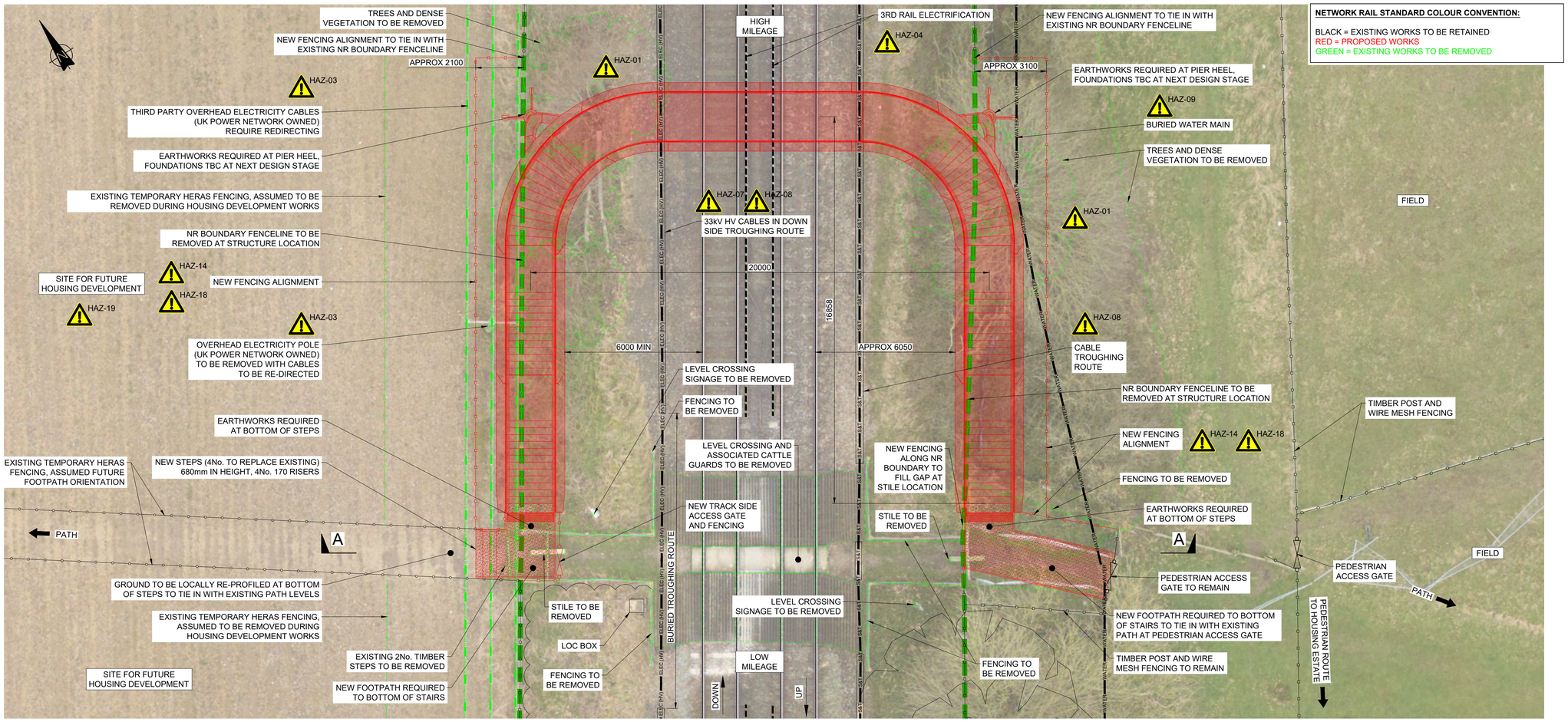
DRAWING TITLE:
EXISTING GENERAL ARRANGEMENT

DESIGNED	L. TAYLOR	SIGNED	Date 22/11/2024
DRAWN	L. EVANS	SIGNED	Date 22/11/2024
CHECKED	J. OLLERHEAD	SIGNED	Date 22/11/2024
APPROVED	S. GOMEZ	SIGNED	Date 22/11/2024

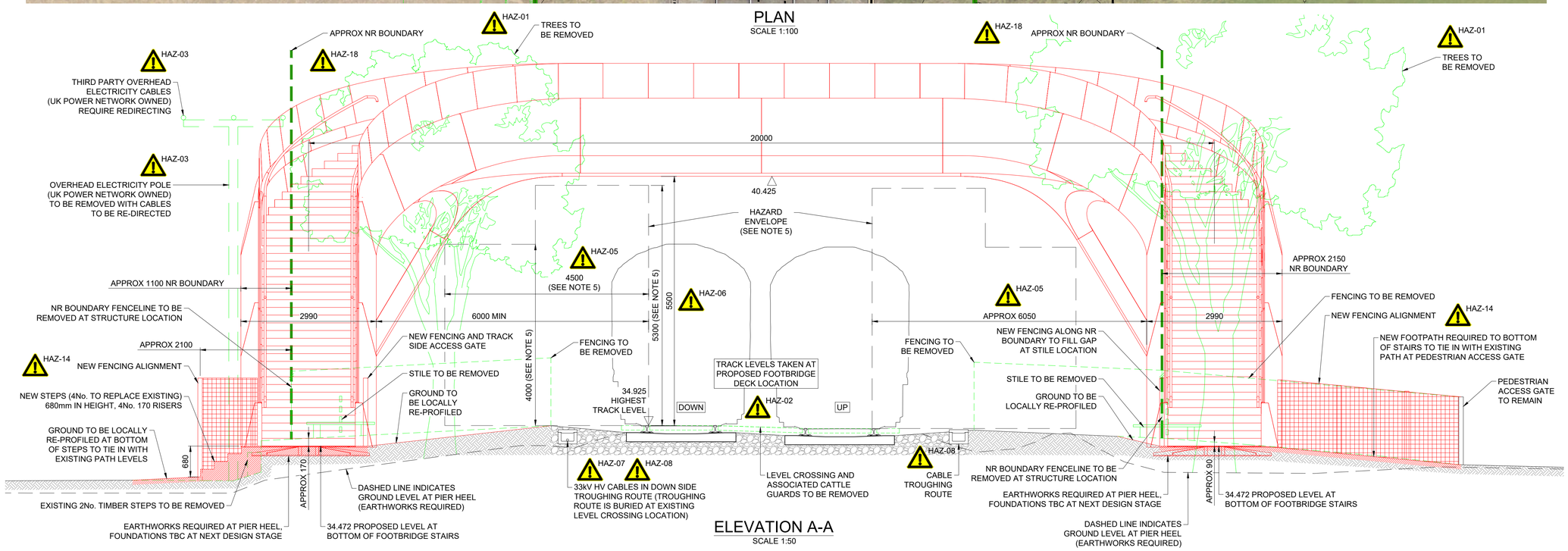
SCALE (@ A1 SHEET SIZE = 841 x 594): AS SHOWN
ELR: ACR
MILEAGE: 58 miles 0804 yards

DRAWING NUMBER: 186814-NRD-1706-ACR-DRG-ECV-000001
REVISION: P03

Sheet Size A1 594 x 841



PLAN
SCALE 1:100



ELEVATION A-A
SCALE 1:50

NETWORK RAIL STANDARD COLOUR CONVENTION:

BLACK = EXISTING WORKS TO BE RETAINED
RED = PROPOSED WORKS
GREEN = EXISTING WORKS TO BE REMOVED

Legend/Notes

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5. DETAILS OF THE SHAPE AND DIMENSIONS OF THE HAZARD ENVELOPE CAN BE FOUND IN THE FEASIBILITY REPORT.
6. FOUNDATION SOLUTION TO BE CONFIRMED AT NEXT DESIGN STAGE SUBJECT TO GROUND INVESTIGATION SURVEYS.

KEY:

- LOCATION OF PROPOSED BRIDGE
- NETWORK RAIL OWNERSHIP BOUNDARY
- DC (3rd RAIL) ELECTRIFICATION
- ELECTRIC — OVERHEAD ELECTRIC CABLE
- S&T — S&T — CABLE TROUGHING ROUTE
- ELEC (HV) — 33kV HV CABLES
- WATER — WATER — BURIED WATER MAIN
- FENCING
- TEMPORARY FENCING (HERAS)

IMPORTANT CDM / H&S NOTE

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HAZ-05	TRAIN DERAILMENT
HAZ-06	GAUGE CLEARANCE
HAZ-07	HV CABLES
HAZ-08	CABLE TROUGHING ROUTES
HAZ-09	BURIED WATER MAIN
HAZ-14	TRESPASS
HAZ-18	LAND PURCHASE
HAZ-19	LINESIDE NEIGHBOURS

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"EVERYDAY" LOW RISK HAZARDS AND THOSE HAZARDS WHICH SHOULD BE OBVIOUS TO A COMPETENT CONTRACTOR HAVE NOT BEEN INDICATED ON THIS DRAWING. SHOULD ANY ADDITIONAL HAZARDS BE IDENTIFIED DURING THE COURSE OF THE WORKS THE CONTRACTOR SHALL NOTIFY ALL RELEVANT MEMBERS OF THE PROJECT TEAM.

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SCALE 1:50

REV	DATE	DESCRIPTION OF REVISIONS	DRAWN	CHK'D	APPR'D
P03	22/11/2024	ISSUE TO CLIENT	RD	JO	SG
P02	07/11/2024	DRAFT ISSUE	RD	MM	JO
P01	31/10/2024	DRAFT ISSUE FOR COMMENTS	LE	JO	JO

STATUS
FEASIBILITY

DESIGNERS
Network Rail Engineering Services
Part of Route Services.

Manchester Square One, 4 Travis Street, Manchester, M1 2NY
Tel: 0161 880 3936 Web: www.networkrail.co.uk

PROJECT:
FLOWBRIDGE FEASIBILITY - CONNINGBROOK PARK

DRAWING TITLE:
PROPOSED GENERAL ARRANGEMENT

DESIGNED	L. TAYLOR	SIGNED	Date 22/11/2024
DRAWN	L. EVANS	SIGNED	Date 22/11/2024
CHECKED	J. OLLERHEAD	SIGNED	Date 22/11/2024
APPROVED	S. GOMEZ	SIGNED	Date 22/11/2024

SCALE (@ A1 SHEET SIZE = 841 x 594) AS SHOWN | ELR ACR | MILEAGE 58 miles 0804 yards

DRAWING NUMBER 186814-NRD-1706-ACR-DRG-ECV-000002 | REVISION P03

Sheet Size A1 594 x 841

Option Visualisations


Looking Northwest, approaching from
the southeast side of the railway


Looking Southeast, approaching from
the northwest side of the railway

stimation for future costs

Conningbrook Flow Bridge - Cost Estimate			
Item Ref	Description	Cost Estimate GBP £	Comments
1	**ES4 Stage – Approval In Principle**	£ 96,800	Including surveys (approximately £30k)
2	**ES5 Stage – Detailed Design**	£121,000	
3	**ES6-7 Stage – Construction & Hand-back**	£1,126,961,73	
	Total Estimated Cost	**£1,344,761.70**	
4	**Exclusions**		
4.01	Land Purchase	TBC	(If required)
4.02	Proposed new paths – Conningbrook to Bolleaux	TBC	By others (Housing Developer or Council funded)
4.03	11kV Overhead Line Diversion (UK Power Networks)	TBC	C3/C4 Quotation to be obtained
4.04	21" Southeast Water main Diversion	TBC	C3/C4 Quotation to be obtained
4.05	Power Supply for sensors / Lighting / CCTV provision	TBC	C3/C4 Quotation to be obtained + Design / Installation cost

Designers Risk Assessment

186814-NRD-1706-ACR-RSA-ECV-000001

Page 95

Design Risk Assessment

DESIGN RISK ASSESSMENT	Project Ref: 186814 (Oracle)	Project Title:	**Conningbrook Flow Bridge**	Doc ref: Version:	186814-NRD-1700-ACR-RSA-ECV-000001
Design Stage: ES2		Status:		Version:	01
		Prepared by: Sign:	L Taylor	Checked by: Sign:	J Ollerhead
		Date:	22/11/2024	Date:	22/11/2024
		Approved by: Sign:	S Gomez	These signatures cover items between 01 and 21.	
		Date:	22/11/2024	Signatures are filed for items up to 21.	

All=All; A=Architecture; B=Buildings; C=Civils; D=Drainage; Eo=E&P OLE; El=E&P LV; E3=E&P 3rd rail; G=Geotech; L=Level Xings; M=M&E; O=Operations; S=Sig'g; Te=Telecoms; Tr=Track; Z=Other

Design Risk Assessment

Discipline(s)	Ref	Risk description	Risk consequence	Phase Construction / Operation / Mtce / Demolition	Mitigation measures The reason for providing no mitigation must be explained. Eliminate = E Reduce = R	Residual Risk Reduced or Eliminated or Not Changed,	Residual risk - and - **Method of communicating mitigation measures and residual risk** Inform = I	Responsibility for control of risk (beyond this design stage) Control = C	Notes (Including assumptions, dependencies and constraints)
C, Z	01	**Dense Vegetation** Bridge clashes with existing vegetation.	Vegetation to be removed leading to an adverse impact on local ecology e.g. nesting birds.	C	Bridge positioned so deck is to the north east of the crossing as opposed to the south west to minimise the impact on vegetation. Designer notes works to remove vegetation are undertaken outside bird nesting season. Preliminary Ecological Appraisal to be undertaken to establish any unforeseen ecology issues, invasive species requiring removal / treatment or fence zone affected. At this stage no further mitigations are possible.	R	No Ecological appraisal has been undertaken by an ecologist at this stage. Area of vegetation to be removed demonstrated on Drawing 186814-NRD-1706-ACR-DRG-ECV-000002. De-vegetation works should be outside bird nesting season.	Designer at next design stage.	Z = Ecology

C, Z	02	**Third Party Overhead Electricity Distribution Lines** Electricity distribution system (not related to NR traction power distribution and electrification systems) will be affected by the new bridge.	Electric shock / electrocution to bridge users due to new standing surfaces being close to power distribution cables leading to serious injury or fatality. Plant clashes with cables during construction leading to damage to infrastructure and / or serious injury or fatality.	C, O	New bridge is shown to intersect with the cables therefore requiring them to be relocated / diverted. Liaison with asset owner (UKPN) will be required for relocation / diversion requirements. A C3 / C4 quotation for the diversion works should be sought. Report notes that there is scope at future design stages to reduce the length of the bridge span. This may still require the cables to be relocated / diverted due to the close proximity they will have with the bridge – subject to electrical clearance checks. An exclusion zone would need to be established due to plant interface should cables remain close to site. Goal posts, signage as well as appropriate safety documentation would also be required.	R	Cables requiring relocation / diversion which may lead to increased project scope / costs / programme. Additional stakeholder management with the DNO may increase project complexity. Potential for power supply to low voltage elements may be required as part of the project which will lead to additional costs. Cables demonstrated on Drawing 186814-NRD-1706-ACR-DRG-ECV-000002.	Project Team Designer at next design stage.	Z = UK Power Networks Notification period for the diversion works (thought to be 12-16 weeks potential leading time).
All	03	**Lack of Full Topographical Survey** No topographical survey for the railway available at this design stage.	Incorrect level / geometry information leading to misleading drawings. This can lead to an increase in scope and thus costs due to additional / more onerous works being required.	C	Drawings based off available AIS and point cloud data for the site and cross checked against Geo-RINM and on-site observations.	NC	Full topographical survey required at next design stage.	Designer at next design stage.	
E3	04	**DC Electrification** NR DC electrification system (including conductor rails /	Damage to Network Rail infrastructure during construction leading to	C	Based on the preliminary design, the bridge is unlikely to impact the DC conductor rails and DC	R	Surveys have not been undertaken at this design stage and thus accurate positioning of	Designer at next design stage. Contractor.	It is assumed that the bridge design will consider the risks associated with

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		third rails and DC traction cables) may be affected by the new bridge.	disruption to railway and / or serious injury or fatality.		traction cables – subject to verification on site. To avoid possible damages, the assets may need to be protected during the construction stage. Isolation shall be required during possession works so workforce can cross and work on the track safely.		infrastructure not possible at this design stage. Protection of the assets may be subject to temporary works design and approval. Electrification demonstrated on Drawing 186814-NRD-1706-ACR-DRG-ECV-000002.		projectiles / objects from the bridge which may damage the DC electrification system. Any works affecting the 750V DC electrification system may require electrical isolations during construction stage.
C, Tr	05	**Train Derailment** Bridge collapsing as a result of a train derailment.	Trains derailing and colliding with the bridge causing the collapse of the structure leading to serious injury or fatality.	O	Hazard zone in line with NR/L2/CIV/020, GCGN5612 and UK NA for BS EN 1991-1-7 has been considered with no structural elements positioned within this area.	R	Future scope to reduce the hazard zone offset from the running edge. Hazard zone demonstrated on Drawing 186814-NRD-1706-ACR-DRG-ECV-000002.	Designer at next design stage.	

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C, Tr	06	**Gauge Clearance** Trains colliding with bridge.	Trains colliding with the bridge causing the collapse of the structure leading to serious injury or fatality.	O	Bridge is sized to allow for sufficient clearance for gauge profile for this line and in line with minimum soffit clearances stipulated in the Form A for the Standard Design.	R	Bridge has a clearance of 5.5 from running edge to soffit. Clearance to soffit from running edge demonstrated on Drawing 186814-NRD-1706-ACR-DRG-ECV-000002.	Designer at next design stage.	
E3	07	**HV Cables** NR 33kV HV traction power distribution and pilot cables may be affected by the new bridge.	Damage to Network Rail infrastructure during construction leading to disruption to railway and / or serious injury or fatality.	C	Based on the preliminary design, the bridge is unlikely to impact the NR HV feeder cables – subject to verification on site. To avoid possible damages, the assets may need to be protected during the construction stage.	R	Surveys have not been undertaken at this design stage and thus accurate positioning of infrastructure not possible at this design stage. Protection of the assets may be subject to temporary works design and approval. Cable route demonstrated on Drawing 186814-NRD-1706-ACR-DRG-ECV-000002.	Designer at next design stage. Contractor.	Any works affecting the existing NR 33kV HV feeder may require electrical isolations / switch-outs during construction stage.

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E3, S, Te	08	**Cable Troughing** NR E&P and S&T cable routes may be affected by the new bridge.	Damage to Network Rail infrastructure during construction leading to disruption to railway and / or serious injury or fatality. Slip and trip hazards during construction.	C	Any known cable routes are shown on design drawings. To avoid possible damages, the assets may need to be protected during the construction stage.	R	Surveys have not been undertaken at this design stage and thus accurate positioning of infrastructure not possible at this design stage. Protection of the assets may be subject to temporary works design and approval. Cable route demonstrated on Drawing 186814-NRD-1706-ACR-DRG-ECV-000002.	Designer at next design stage. Contractor.	It is assumed that the bridge design will consider the risks associated with projectiles / objects from the bridge which may damage the cable trough routes.

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C, Z	09	**Buried Water Main** Buried water main shown to interface with proposed flow bridge footing.	Interface leading to damage during construction or increased scope to move as part of project.	C	Use of rapid root system to minimise risk of damage on site to water main. Temporary works will be required to protect the pipe during construction from works and access road. A C3 / C4 quotation for the diversion works should be sought.	R	Interface highlighted in drawing and in report. Potential for the bridge footing to be moved closer to the track / orientation amended / location amended and thus reduce the risk of interface. Surveys in the form of trial pits to accurately locate the water main are recommended. Route of buried water main demonstrated on Drawing 186814-NRD-1706-ACR-DRG-ECV-000002.	Designer at next design stage.	Z = South East Water Notification period for the diversion works (thought to be 12-16 weeks potential leading time).

Design Risk Assessment

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A, C	09	**Accessibility** Stepped footbridge precludes persons with reduced mobility from using the crossing.	Discrimination against persons based on their protected characteristics as defined in the Equality Act 2010 leading to reputational damage.	O	Diversity Impact Assessment undertaken to review the works and determine if they would have a negative impact on users. DIA noted that the existing crossing was not suitable for persons with reduced mobility however due to the adjacent areas scheduled for development future proofing the crossing to allow enhancement for step free access should be considered.	R	Future changes to demographics in the local area could lead to an increased case to enhance the site and provide step-free access at the crossing.	Project Team Client	
A	10	**Aesthetics** Bridge having an adverse visual impact on the area.	Bridge adversely impacting the local aesthetic leading to opposition from Local Authority and residents.	O	Design has been reviewed from an architectural standpoint and visualisations provided to allow a greater understanding at design stage as to the visual impact on the area.	NC	Relevant planning approvals / reviews to take place at future design stages.	Designer at next design stage.	

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A, Z	11	**Anti-social behaviour** Bridge providing a secluded environment that could attract anti-social behaviour / act as a deterrent for prospective users.	Anti-social behaviour becoming prevalent at the site leading to crime. Persons feeling unable to use structure due to fear of entering the crossing.	O	Flow bridge features glazed parapets allowing persons to be viewed from areas adjacent to the railway. Curved corners also allow sightlines across the bridge. Lighting / CCTV coverage should be considered with power supply / telecoms network connection investigated in line with Local Authority and Developer.	R	Future changes to the adjacent land use could lead to security requirements at site changing.	Project Team	Z = Developer and Local Authority
C, G, Tr	12	**Track Stability** Track becoming unstable due to ground works around bridge.	Track becoming unstable leading to track faults causing disruption to services and / or derailments.	C	Track monitoring to be undertaken to ensure track alignment is not undermined. NR/L2/CIV/177 trigger levels to be adopted if / when required.	E	Track monitoring required during construction.	Contractor	
C, S	13	**Signal Interface** Bridge affecting signal sighting.	Bridge affecting the sighting of signals leading to disruption to services.	O	A review of signal interface has been undertaken and the position of the bridge is such that no impact on signalling is envisaged.	R	A further review of signal impact should take place at future design stages.	Designer at next design stage.	

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C	14	**Trespass** Persons trespassing onto the railway where bridge is situated.	Persons accessing the railway corridor beyond the Network Rail boundary causing disruption to services and / or serious injury or fatality.	O	New boundary fences are proposed as part of the works.	NC	A review of the boundary measures at the site should be undertaken as part of the works to develop the site due to changes to the adjacent land use.	Network Rail Asset Team Project Team Client	
C	15	**Public Right of Way** Public rights of way being diverted leading to opposition from Local Authority.	Rejection of closure of AU17 crossing and diversion of AU22 footpath over the railway.	O	No impact on the proposed diversion paths already proposed between AU17 and AU22 parallel to the railway.	R	Local Authority approval shall still be required.	Project Team	
C	16	**Additional Maintenance Liability** Additional structural asset to be inherited.	Additional maintenance and operational costs.	O, M	Bridge features steps only and doesn't include lifts which would present additional operational and maintenance requirements. Bridge features remote condition monitoring to assist with maintenance over design life.	R	New structures asset shall be installed. Removal of a crossing asset.	Network Rail Asset Teams	

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Tr	17	**Objects on line** Construction works near the tracks and working over the tracks leading to objects falling / striking the tracks. Objects falling onto the railway during operations by the public	Defected track componentry, derailment by construction plant striking train, assets leading to serious injury / fatality.	C, O	Contractor to ensure sufficient protection of the existing track assets during construction is in place. Protection measures to be within the contractor's method statement. Proposed bridge parapet height to help deter objects from being thrown over by the public. Lighting and CCTV to also be considered. ALO plan as well as other safety documentation to be provided by contractor.	R	Contractor to inspect track componentry before handback of the railway. Routine track patrolling within the area to identify possible defected componentry. ALO management, monitoring by the contractor during the works (plant exclusion zone required).	Contractor Network Rail Asset Team Maintenance	

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All	18	**Land Purchase** Land required to be purchased as part of the scheme.	Additional land required to facilitate the bridge in the permanent case. Risk of excessive costs to procure land.	C	Bridge shown as minimum width to ensure outside hazard zone from track. Report notes the potential to reduce this overall span and thus reduce / eliminate permanent land purchases.	R	Extent of land purchase shown on drawings. Potential to remove this risk at later design stages. Lack of topographical information at this stage reduces designers' ability to quantify exact amount of land required.	Project Team	

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All	19	**Lineside Neighbours** Disruption to lineside neighbours from construction activity in the form or noise and light pollution as well as dust.	Disruption to lineside neighbours leading to reputational damage and increased risk of on-site hostility from neighbours.	C	Maximise day shift and Monday to Friday working days. Modular construction used to reduce construction period. Use of silent generator, use of baffle soundproofing wall around working area, use of electric powered tools. Night shift working – temporary lighting to be directed away from houses. Briefing to operatives on noise management.	R	Active communication to neighbourhood on work undertaken, letter drop, and potential disruption during the construction period.	Contractor	
G	20	**Lack of Ground Investigations** Lack of Ground Investigations informing the geotechnical and foundation design.	Insufficient Ground information leading to assumptions which could be incorrect at this stage. Risk of increased scope of works leading to increased costs.	C	Ground Investigations required are listed in the geotechnical section of the report.	NC	Weaker ground conditions affecting the rapid root standard design solution is possible. Potential for landfill gas and contaminated ground (WAC test required).	Designer at next design stage	

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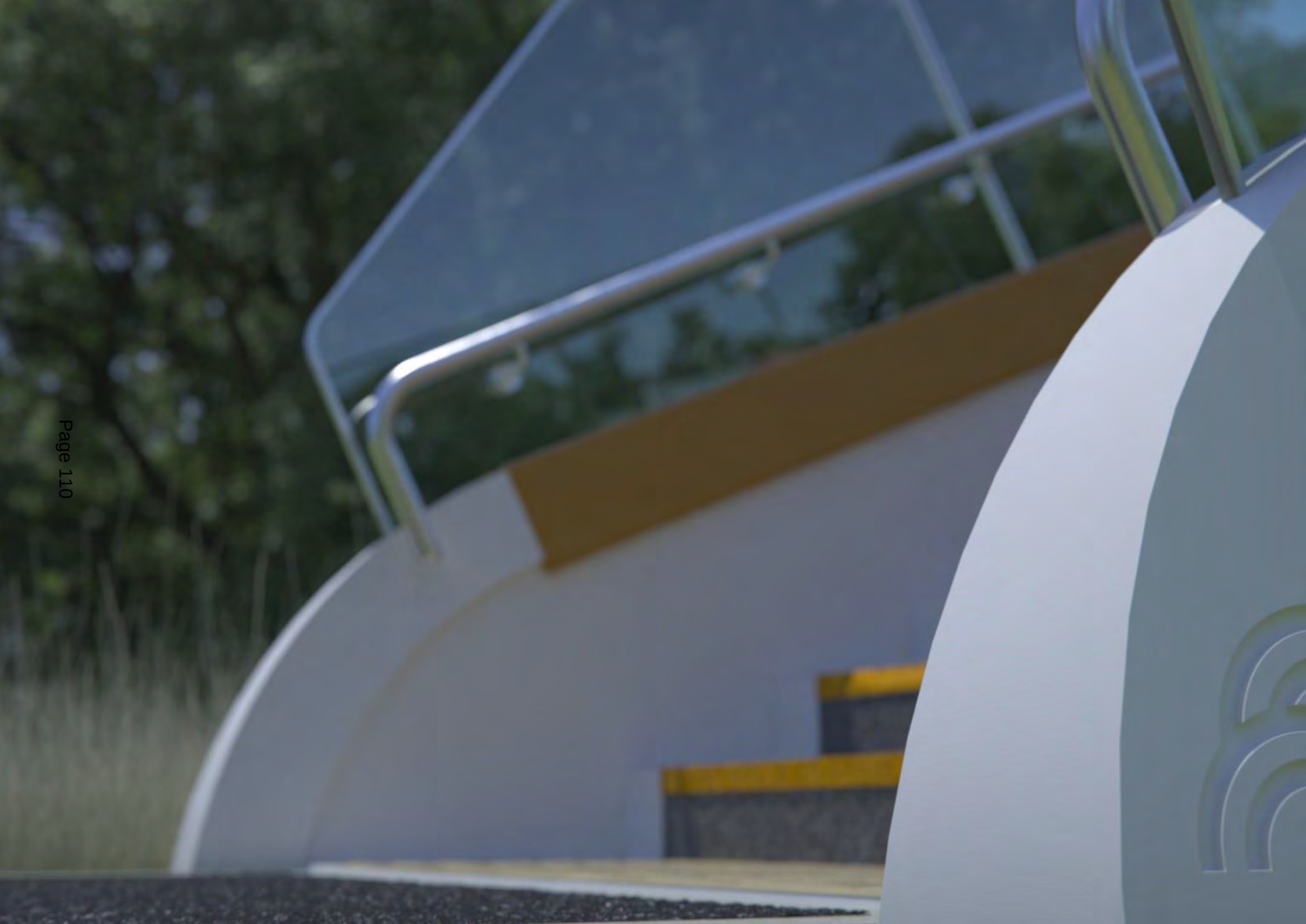
C, G	21	**Flooding** Flooding to the site causing damage to structure.	Flooding from adjacent land onto the railway causing damage to the structure leading to significant future maintenance and repair costs.	O, M	Flood maps have been reviewed which highlight minimal risk to bridge. Developer to ensure drainage of proposed hosing estate to not have a detrimental impact on the railway.	NC	Further review of flood risk to take place at next design stage.	Designer at next design stage.	



Officer's Assessment Sheet

Application Number	**NOT/2025/0708**		
Type	**Prior approval - Network Rail (Part 18)**		
Location	Cradle Bridge Level Crossing Conningbrook Park, Kennington Road, Willesborough		
Proposal	Prior approval of the design and siting of a stepped 'Flow Bridge' footbridge at Cradle Bridge Level Crossing pursuant to Part 18 (Class A) of Schedule 2 of the Town and Country Planning (General Permitted Development) Order 2015.		
Case Officer	Matthew Durling		
Registration Date	07/04/2025	**Consultation Ends**	15/05/2025
Valid Date	07/04/2025	**Deadline Date**	10/07/2025
Applicant	Nicola Perry		
Agent			

Environmental Impact Assessment

Is EIA Required: No Reason:

RECOMMENDATION

Prior Approval Is Given

Proposal

1. The application seeks the prior approval of the local planning authority (LPA) to the detailed plans and specifications of a proposed railway footbridge (FLOW bridge) at the site known as Cradle Bridge Level Crossing.

2. The FLOW bridge would link the Conningbrook Lakes Country Park and existing Phase 1 and proposed Phase 2 Conningbrook Lakes development (comprising up to 470 homes) on the eastern side of the railway with the major mixed use residential-led development (comprising up to 725 homes) under construction on land to the west of the railway (reference 19/00025/AS). This includes a primary school and local centre with retail space.

3. The bridge would be a standardised FLOW bridge design. The applicant states that the modular design offers benefits in terms of construction and maintenance and allows for smaller components to be transported to site and installed or replaced as necessary. The project is expected to start in March 2026.

4. The application is submitted by Network Rail as the statutory undertaker for maintaining and operating railway infrastructure in England. Network Rail are engaged in discussions with the landowners on both sides of the railway to gain permission to construct and land the bridge.

Site and Surroundings

5. The site is located at the existing Cradle Bridge pedestrian crossing which forms an at-grade crossing over the Ashford to Ramsgate railway line. The existing crossing comprises a timber boarded surface accessed via stiles at both sides of the railway boundary. The eastern side of the railway comprises the Conningbrook Lakes Country Park. This land is owned by Brett's with a long lease to Ashford Borough Council. The western side of the railway benefits from planning permission for a major mixed use residential-led development (reference 19/00025/AS) which is currently under construction and referred to here as Conningbrook Park. Part of this land is owned by Redrow and part by Quinn Estates Limited. To the south-east is the Great Stour River beyond which are wetlands and agricultural land.

6. The existing at-grade crossing is a Public Right of Way (PROW) and forms part of footpath AU22 which runs east-west from the site of the recently approved Conningbrook Park development and crosses the railway via existing gates and continues into the country park.

7. The site is not subject to any statutory or non-statutory nature conservation designations. The closest statutory designation is the Ashford Green Corridors Local Nature Reserve (LNR) which is located 1.4km to the southwest of the site. The closest non-statutory designation is the Great Stour, Ashford and Fordwich Local Wildlife Site (which includes the Great Stour River corridor) to the east. The part of the site located to the east of the railway is within the Ashford Biodiversity Opportunity Area.

8. The site comprises relatively flat land within Flood Zone 1. It is not subject to any statutory or non-statutory landscape designations. The Kent Downs National Landscape is approximately 1km to the north.

Background

9. The approved development ref. 19/00025/AS includes full planning permission for 288 homes and a serviced plot for a primary school plus outline planning permission for up to 437 homes on land forming part of Local Plan site allocation S2. It is subject to a s106 legal agreement which includes obligations relating to the delivery of a footbridge (subject to costs as explained below) which is required to be open for use no later than the occupation of more than 288 dwellings within Conningbrook Park or the expiry of four years from occupation of the first dwelling. The requirement for the bridge stems from site allocation policy S2(d).

10. The delivery of the bridge is subject to a maximum cost cap and in the event that delivery of the bridge would exceed the cap of £4,000,000, index-linked, the s106 requires a payment to instead be made to the Council to deliver alternative highway measures relating to the improvement and/or provision of public rights of way footpaths cycle paths bridge/bridges or highway capacity improvements serving the development.

11. Planning permission was granted for a footbridge in 2023 (ref. 22/01041/AS); however it has been demonstrated that it would exceed the cost cap and cannot be delivered in accordance with the terms of the s106 legal agreement. The developer is seeking a variation to the legal agreement to facilitate the delivery of an alternative bridge, subject of this prior approval application, by Network Rail.

12. The proposed bridge would replace the existing at-grade pedestrian crossing known as the Cradle Bridge level crossing which forms part of adopted PROW AU22. The crossing is one of two that crosses this section of the Ashford to Ramsgate railway. The other is approximately 300 metres to the north and forms part of adopted PROW AU17 and is known as the Bolleaux crossing. When operational, the footbridge will connect footpath AU21 from the west to AU22 within the country park.

13. In addition to the requirement to deliver the bridge subject of this application, the s106 pursuant to planning permission 19/00025/AS also identifies the need to either divert or stop up PROW AU17 (which lies outside of the Conningbrook Park boundary) to ensure the at-grade crossing to the north of the Conningbrook Park site is closed or to ensure the connection from that development to PROW AU17 is stopped up.

14. It is important to note that public rights of way can only be created, extinguished or diverted by Orders that are separate to the planning application process and therefore it cannot be assumed they will be made. For this reason the s106 legal agreement refers to the use of ‘reasonable endeavours’ in relation to changes to the public right of way network. It is however envisaged the provision of the footbridge will also result in the diversion of PRoW AU21 and AU22 and diversion or extinguishment of AU17 where it crosses the railway (known as the Bolleaux crossing) which, again, cannot be assumed due to the separate process.

15. Once the bridge has been built it is envisaged that AU17 is diverted to AU21/22, both at-grade footpath crossings over the railway line are closed and stopped up and the bridge forms the single crossing over the railway line.

16. The closures, and the requirement for temporary signage to divert users to the rail crossing at AU17 for the duration of the closure will necessitate separate applications to KCC and this is outside the remit of this prior approval application. The KCC PROW Officer has confirmed that arrangements are progressing. If the proposals are unopposed once KCC provide the notice of the Order being made for 28 days, then the Order may be confirmed by KCC. If there are objections which cannot be negotiated, then the Secretary of State will deal with the matter by way of a hearing or inquiry.

Relevant History

17. The following is relevant to this prior approval application;-

Conningbrook Park (19/00025/AS): Hybrid planning application seeking:

i) Outline planning permission (all matters reserved except for points of access) for up to 437 dwellings; formal and informal open space incorporating SuDS; and associated services, infrastructure and groundworks; and
ii) Full planning permission for the erection of 288 dwellings; the creation of serviced plot of land to facilitate the delivery by Kent County Council of a two form entry primary school with associated outdoor space and vehicle parking; a new Bowls Centre including a clubhouse of 292 sq.m, ancillary building and a bowling green; a local centre to provide 280 sq.m of A1 (retail), 180 sq.m of A1 (retail food store), 100 sq.m A3 (café), 75

sq.m A5 (takeaway), 190 sq.m D2 (gym/fitness studio space) open space incorporating SuDS; vehicle parking; and associated services, structural landscaping, infrastructure and groundworks. GRANTED 2022

Cradle Bridge Level Crossing (22/01041/AS): Full planning application for the construction of a footbridge crossing over the railway line and associated works. GRANTED 25/09/2023

Consultations

18. PPG states that "Statutory undertakers carrying out development under permitted development rights are not subject to the same publicity requirements as a full planning application. However, public consultation may be beneficial if development is expected to have a particularly significant impact. In such instances consultation could be initiated by either the local planning authority or the statutory undertaker. Any consultation will need to allow adequate time to consider representations and, if necessary, amend proposals."

19. The application has been subject to formal statutory and non-statutory consultation comprising the display of site and press notices and notification letters sent to occupiers of buildings in the vicinity of the application site. A summary of the consultation responses received is below:

Kennington Community Council: object as summarised below:
- Providing proper pedestrian access between amenities on both sides of the railway and to the wider area from Kennington to Willesborough, is essential.
- Lack of step free or ramped access unsatisfactory and discriminatory and will disadvantage large section of community.
- Disability Impact Assessment is wrong and should take account of future circumstances.
- To be compliant with the Public Sector Equality Duty the Assessment must take into account the future circumstances as documented in the approved planning applications on both sides of the railway.

Neighbours – 21 neighbours consulted; 5 objections received as summarised below:

- Bridge is ugly.
- No need for it as there is an existing level crossing and new footpath using the road bridge to the west.
- Lack of step free or ramped access unsatisfactory and discriminatory and will disadvantage large section of community.
- Ramped access would allow parents with younger children in pushchairs to walk to primary school.
- Disability Impact Assessment is wrong and should take account of future circumstances;
- Direct onward access to Wye required to mitigate for closure of the Bolleaux Crossing.

Planning Policy

20. Applications for prior approval are not assessed against the Development Plan and therefore the following are relevant:

- GPDO
- National Planning Policy Framework (NPFF) Revised 2024
- Planning Practice Guidance (PPG)

Assessment

21. This application has been submitted under the provisions of Class A of Part 18 of Schedule 2 of the Town and Country Planning (General Permitted Development) Order 2015 (as amended) (GPDO). The GPDO provides that certain classes of development are "permitted development" meaning that no express permission is required. A number of classes of permitted development require an application to be made to the local planning authority for "prior approval". Prior approval means that a developer has to seek approval from the LPA that specified elements of the development are acceptable before work can proceed. The matters for prior approval vary depending on the type of development and these are set out in the GPDO.

22. Part 18 relates to 'Miscellaneous development' and Class A states that, subject to conditions, the following works are 'permitted development':

A. Development authorised by—
(a) a local or private Act of Parliament,
(b) an order approved by both Houses of Parliament, or
(c) an order under section 14 or 16 of the Harbours Act 1964 (orders for securing harbour efficiency etc, and orders conferring powers for improvement, construction etc of harbours), which designates specifically the nature of the development authorised and the land upon which it may be carried out.

23. Network Rail have advised that the proposed development comprises operational railway development and is authorised by a combination of the South Eastern Railway (Ashford, Canterbury, Ramsgate & Margate) Act 1844 and the South-eastern Railway Act 1836.

24. Based upon the background information provided by Network Rail I am satisfied that the proposed works fall within Class A of Part 18 of the GPDO. In effect, the principle of the provision of this bridge is established under the above Acts, and the GPDO states that it is 'permitted development' subject to conditions. These conditions are explained below.

Conditions

25. The proposals constitute operational railway development for which permission is granted under Part 18 of the GPDO subject to a condition A.1 which states that the erection of any bridge (in addition to other specified structures) is not permitted "unless the prior approval of the appropriate authority to the detailed plans and specifications is first obtained".

26. Permission is also granted under Part 18 of the GPDO subject to a condition A.2 which sets out the extent of matters which may be considered as part of this prior approval process. It states:

“The prior approval referred to in paragraph A.1 is not to be refused by the appropriate authority nor are conditions to be imposed unless they are satisfied that—
(a) the development (other than the provision of or works carried out to a dam) ought to be and could reasonably be carried out elsewhere on the land; or
(b) the design or external appearance of any building, bridge, aqueduct, pier or dam would injure the amenity of the neighbourhood and is reasonably capable of modification to avoid such injury”.

27. An application for prior approval is not an application for planning permission but an application for the authority’s determination as to whether prior approval of siting and appearance is required and these are considered in turn below. The PPG states that prior approval is a light-touch process which applies where the principle of the development has already been established (Paragraph: 028 Reference ID: 13-028-20140306) and an LPA cannot consider any other matters when determining a prior approval application (Paragraph: 026 Reference ID: 13-026-20140306).

Whether the development (other than the provision of or works carried out to a dam) ought to be and could reasonably be carried out elsewhere on the land [A.2(a)]

28. Network Rail confirm that a Passive Level Crossing Risk Assessment undertaken in 2022 recommended replacement of the Cradle Bridge Level Crossing with a bridge. The need for the bridge is therefore established. The proposed FLOW bridge is proposed to be sited in the location of the existing at grade crossing and to connect with the existing alignment of the PROW on both sides of the railway.

29. The proposed site has been established as an appropriate location for a footbridge by the consented masterplan (ref. 19/00025/AS) which makes provision for a bridge in accordance with Policy S2 (Land North-East of Willesborough Road, Kennington) of the Local Plan and by the planning permission for a footbridge granted in 2023 (ref. 22/01041/AS). The FLOW bridge would remove the existing high-level risk of conflict between members of the public and moving trains and provide an efficient and safe walking route between the consented major mixed use development, including homes and a primary school to the west of the railway and the country park and adjacent housing to the east of the railway.

30. There would be a need to formally divert a small section of the PRoW so that it aligns with the span of the bridge and provides suitable onward connections within the country park and this is being progressed by Network Rail under the Highways Act as a separate process. The proposed diversions appear to be the minimum necessary to maintain footpath connectivity; were the footbridge to be located elsewhere then this would necessarily involve longer and potentially less direct diversions.

31. In summary the bridge represents a significant public safety benefit for existing and future users of the PROW network. I am satisfied that the proposed siting is

appropriate and that there is no justification for requiring the work to be carried out elsewhere.

Whether the design or external appearance of the bridge would injure the amenity of the neighbourhood and is reasonably capable of modification to avoid such injury [A.2(b)]

32. The FLOW bridge would have a C-shaped alignment which would connect to the existing PROW on both sides of the railway. It would also have a limited footprint to minimise land take on both sides of the railway and thereby have least impact on existing trees. The FLOW bridge would be structurally supported by a striking arch-like central spine with the 20m wide deck featuring a curved layout, which the applicant states improves deck visibility and pedestrian flow. The upper part of the parapet would comprise translucent toughened glass laminate which the applicant states would provide enhanced visibility, safety and user experience over the alternative of a solid parapet.

33. The height of the FLOW bridge (5.5m from the railway to the underside of the deck and an overall height of 8.47m) is determined by the requirement for it to span the railway and in order to comply with the minimum height clearance dictated by Network Rail.

34. The bridge would be stepped-only on both sides; each staircase would be 2.99m wide and 16.86m long with two landings. I note that the stepped design would preclude the use of the bridge by everyone, including wheelchair users or those with reduced mobility or with young children in pushchairs.

35. I'm aware that the unmade access paths, gates and stiles on both sides of the railway crossing effectively preclude existing access for wheelchair users or those with reduced mobility or with young children in pushchairs. In this context and notwithstanding Network Rail's own Diversity Impact Assessment, I am mindful of the requirement under the Public Sector Equality Duty (PSED) to have regard to the need to eliminate discrimination and promote equality and good relations between persons sharing relevant protected characteristics and those who do not. The GPDO however limits consideration of the proposal to whether it would injure the amenity of the neighbourhood. The word 'injure' normally refers to significant harm.

36. The stepped bridge subject of this application would improve the desirability of the crossing and make it safe for most users, whereas a ramped bridge would enable people with reduced mobility to have an equally safe and convenient way to cross the railway and would provide a better long-term solution to serve the development on both sides. On this basis the lack of ramped access could be injurious to those who are unable to use steps and the GPDO requires me to consider whether the scheme would be reasonably capable of modification to avoid such 'injury'.

37. In considering the current proposal I need to take a proportionate approach to my application of the duty in respect of the PSED in the light of the tests set out in the GPDO. In this respect Network Rail do not currently have sufficient land to enable ramped accesses to be provided and they state that the costs for ramped access would be significantly higher than the funding allocated to the project. I note that the modular design of the bridge makes it capable of providing an accessible crossing through the potential

future addition of lifts. I am also mindful that the bridge represents an upgrade to the existing crossing, that alternative fully accessible walking and cycling routes exist on Willesborough Road to the south and improvement to all-movement routes between the two sides of the railway line remain part of the wider strategy for this area as both areas develop.

38. I note that in some circumstances, wheeling ramps have been installed to the steps to facilitate easier access for bicycles and scooters. Network Rail have advised that substantial design changes to the footbridge would be required to accommodate the additional width needed to meet standards, which would incur further costs to the project. In the absence of further information or evidence and in light of the significance of the bridge for future users I recommend that a condition be imposed requiring a scheme for the installation of ramps, or alternatively evidence to demonstrate it is neither technically or financially feasible in this case. In these circumstances, I consider amendments to the design to make it fully accessible would not be reasonable.

39. There is no requirement for prior approval applications to be supported by a Landscape and Visual Assessment (LVA) and none has been submitted with this application. Having regard to the LVA submitted pursuant to the planning application for the previous bridge (ref. 22/01041/AS), the development would be highly visible from localised viewpoints, including the adjacent PRoW network with little or no visibility from more distant views, including from within the National Landscape to the north.

40. The FLOW bridge would be manufactured from a fibre-reinforced polymer (FRP) composite that the applicant states is a lightweight, strong, durable and cost-effective low maintenance solution. No lighting is proposed. The finishes would comprise:

- Outer deck: RAL 7035 Light grey
- Spine: RAL 8011 Nut brown
- Upper Fascia: 2008 Bright red orange
- Internal Fascia: RAL 7035 Light grey

41. As noted above the LPA is required to limit consideration of this application to whether the design or external appearance of the bridge would be injurious to the amenity of the area. From a number of viewpoints, views of the bridge would be filtered by existing trees. Good design is a subjective matter and I acknowledge the objections received in relation to the proposed appearance. Although the bridge would have an inevitable impact on the character of the site I am mindful that it will in time be viewed in the context of surrounding development, including a primary school. In this context I am satisfied that the distinctive and modern design of the flow bridge would not injure the amenity of the area.

42. Previous applications for development in this location have had regard to potential impacts on the setting of the National Landscape. Section 85(A1) of the Countryside and Rights of Way Act (2000) places a statutory duty upon the decision maker to have regard to the purpose of conserving and enhancing the natural beauty of the NL. By reason of the scale of the development and the separation distance from the National Landscape I am satisfied the proposal would not have an adverse impact on its setting and in so doing it would conserve its scenic beauty.

43. For all the above reasons I find that the proposal would not result in injury to the amenity of the neighbourhood and there is no reason why prior approval should be withheld.

Other

44. The application is not supported by a landscape strategy; however given the small footprint and the fact that the land to the west is subject to landscaping conditions and the land to the east is within the Council's control I am satisfied that an appropriate soft landscaping scheme is capable of being delivered post construction. The applicant states that they will comply with all relevant ecological and wildlife legislation and obtain any necessary consents.

Human Rights Issues

45. I have also taken into account the human rights issues relevant to this application. In my view, the "Assessment" section above and the Recommendation below represent an appropriate balance between the interests and rights of the applicant (to enjoy their land subject only to reasonable and proportionate controls by a public authority) and the interests and rights of those potentially affected by the proposal (to respect for private life and the home and peaceful enjoyment of their properties).

Working with the applicant

46. In accordance with paragraph 39 of the NPPF, Ashford Borough Council (ABC) takes a positive and creative approach to development proposals focused on solutions. ABC works with applicants/agents in a positive and creative manner as explained in the note to the applicant included in the recommendation below.

Conclusion

47. The proposed development comprises a critical piece of walking infrastructure. The prior approval process requires that the detailed plans and specifications of the bridge are acceptable before work can proceed. Although the development would not be fully accessible, the FLOW bridge represents a significant public safety benefit and an upgrade to the existing crossing. The modular design allows for future accessibility improvements and further details relating to the feasibility of installing a wheeling ramp are to be sought by condition. I have found that the distinctive and modern design of the bridge would not injure the amenity of the area, and the proposal would not impact the setting of the National Landscape. I recommend that prior approval is granted.

Conditions:

1 Prior to the commencement of above ground works a scheme for the installation of a wheeling ramp to the hereby approved bridge shall be submitted to and approved in writing by the Local Planning Authority, unless evidence is submitted to demonstrate to the satisfaction of the Local Planning Authority, and the Local Planning Authority confirm their agreement in writing, that the provision of a wheeling ramp would not be technically or financially feasible for this

development. The development shall be implemented in accordance with the details so approved.

Public Rights of Way & Access Service

Equality Impact Assessment

S118A & S119A Highways Act 1980

Activity	Definition - Rail Crossing Public Path Order (PPO)
Directorate	Growth, Environment and Transport
Service/Division	Growth and Communities
Head of Service	Graham Rusling (Head of Public Rights of Way and Access Service)
Manager:	Laura Wilkins (Definitive Map Team Leader)

CAMS no	**01149**	**Furniture no** if applicable	

Area	**Ashford**	**Parish**	**Kennington**	**Path Number**	**AU22**
Completed By	**Maria McLauchlan**			**Date**	**29/08/2025**

Path Category Delete as appropriate	**Footpath**	~~Bridleway~~	~~Byway~~	~~Restricted Byway~~

Type of Activity	▪ **Diversion Order**
Proposal	**To divert Public Footpath AU22 from the at grade crossing over the railway to a stepped bridge at Kennington.**
Background	Public Path Orders (PPO'S) relating to Rail Crossings are Orders that are made under the Highways Act 1980. These Orders affect footpaths, bridleways & restricted byways.. The Highways Act 1980 gives Kent County Council (KCC) the power to make a Rail Crossing Diversion or Extinguishment Order if it can be shown that it is in the interests of the safety of users or likely users of at grade crossings. Particular consideration has to be given to whether or not it is reasonably practicable to make the existing crossing safe for the public and what arrangements will be made to erect and maintain barriers and signs at the closed crossing. The statutory tests (Highways Act 1980) to divert or extinguish a Public Right of Way from an at grade crossing can be summarised as follows: ▪ Whether it is in the interests of the safety of users or likely users of at grade crossings. ▪ Whether it is reasonably practicable to make the crossing safe for use by the public, and what arrangements have been made for ensuring that, if the order is confirmed, any appropriate barriers and signs are erected and maintained. ▪ Whether the diversion order alters a point of termination of the path or way, if that point is not on a highway over which there subsists a like right of way or, otherwise than to another point which is on the same highway, or another such highway connected with it.

	▪ Whether the order should make provision requiring the operator of the railway to maintain all or part of the right of way created by the order. To be taken into account but not listed as criteria under Section 119A of the Act but in Rights of Way Circular (1/09): • Whether the right of way will be reasonably convenient to the public. • The effect the proposal will have on the land served by the existing path or way and on land over which the new path or way is to be created. • The effect that the diverted way will have on the rights of way network as a whole. • The safety of the diversion, particularly where it passes along or across a vehicular highway. Any implications of a diversion or extinguishment and of any structures/surfacing on any new route, are assessed in accordance with the public sector equality duty.
Site Specific Information	**Public Footpath AU22 connects to Public Bridleway AU105 at its south-eastern end and Public Footpath AU21 at its western end.** **Part of the footpath runs alongside the Great Stour river, then over fields, crosses the railway line, and then continues over fields again. The path crosses the railway line via a level crossing which is accessed by a stile at each side and 2 steps on one side. The surface of the path is mostly grass except for where it passes over the railway, and is uneven in parts.** **There is a recorded width in the Definitive Statement of 6 feet for the part of the path lying to the east of the railway line as a result of a Public Path Diversion Order in 1978.** **There is no other width recorded for the remainder of the path.** **The land to the west of the railway line has planning permission for a residential development consisting of up to 725 houses, a new primary school and a community centre.** **The new path will have a width of 2.5 metres where it does not form part of the bridge or bridge approach. It will have a surface of bonded, crushed aggregate pressed into asphalt.**

Impact of the proposed change				
Protected Characteristic Group	**Positive Impact**	**Negative Impact**	**Proposed Mitigation**	**Source of evidence**
Age	▪ Reduce barriers to older age groups (55+) from accessing the network and both encourage and increase use of the routes/network. ▪ Improve and maintain high quality infrastructure in areas of countryside and green space for people of all ages across the county. ▪ Reduce health inequalities and assist in the long-term prevention of health and wellbeing issues associated with youth or older age inactivity and lack of access to good quality open spaces and the countryside. ▪ Provision of accessible routes and improve areas of connectivity to accommodate active travel and encourage leisure and recreational use (such as walking, cycling and horse riding), providing physical and mental health benefits for all age groups. ▪ Ensure that the PROW infrastructure is fit for purpose and supports existing and growing communities with opportunities/access and services that meet the needs of the community and visitors both now and in the future. ▪ Create an environment which unconsciously provides progression through the ages and in which people of all ages can navigate their way safely and with ease, whilst enabling people of different ages to socialise or exercise together. ▪ The PROW network provides a breadth of interaction, challenge and exploration through navigation which develops and supports social skills, and stimulates visual, sensory, physical and emotional experiences across the age groups.	▪ There may already be limitations by the very nature of the rural/urban setting, which means those with protected characteristics, potentially would not be able to use the PROW very well. ▪ Users of mobility vehicles or wheelchairs would not be able to use the whole route and connection across the rail line would not be available to those using wheel chairs or mobility vehicles and may be more challenging for those with an ambulant disability. ▪ Reduction of access to the network for a limited number of users but balanced against the statutory rights of the landowner to efficiently use their land. See Transport: Disability and Accessibility Statistics, England 2020	▪ There may already be limitations by the very nature of the rural setting, which means those with protected characteristics, potentially would not be able to use it very well. The Flow bridge design seeks to deliver a stepped solution that is as accessible as possible – but it is a stepped solution.	▪ ROWIP 2018-2028 ▪ Manufacturers specification / supplier product information.

Disability Page 124	▪ Provide improved accessible and inclusive opportunities to access the countryside/open spaces for a range of impairments, including but not limited to, physical, visual, hearing and learning. ▪ Provide increased opportunities for those with additional needs to socialise or participate in recreational activities with and alongside their peers. ▪ Improving access to the countryside and outdoor spaces will support the development of cognitive, physical and social skills amongst this group. ▪ Reduce health inequalities and assist in the long-term prevention of health and wellbeing issues associated with youth or older age inactivity and lack of access to good quality open spaces and the countryside. ▪ The PROW network provides a breadth of interaction, challenge and exploration through navigation which develops and supports social skills, and stimulates visual, sensory, physical and emotional experiences. ▪ Ensure that the PROW infrastructure is fit for purpose and supports existing and growing communities with opportunities/access and services that meet the needs of the community and visitors both now and in the future.	▪ There may already be limitations by the very nature of the rural/urban setting, which means those with protected characteristics, potentially would not be able to use the PROW very well. ▪ Users of mobility vehicles or wheelchairs would not be able to use the whole route and connection across the rail line would not be available to those using wheel chairs or mobility vehicles and may be more challenging for those with an ambulant disability. ▪ Reduction of access to the network for a limited number of users but balanced against the statutory rights of the landowner to efficiently use their land. See Transport: Disability and Accessibility Statistics, England 2020 ▪	▪ Design and reasonable adjustments have been taken into account when considering the specification of the bridge. ▪ There may already be limitations by the very nature of the rural setting, which means those with protected characteristics, potentially would not be able to use it very well. The Flow bridge design seeks to deliver a stepped solution that is as accessible as possible – but it is a stepped solution.	▪ ROWIP 2018-2028 ▪ Manufacturers specification / supplier product information
Gender	▪ The Public Rights of Way network and associated furniture is gender neutral, in that both boys and girls, men and women, and those who identify as non-binary have access to and can socialise or exercise within the same space, on the same path, separately and together.	▪ There are no specific negative impacts known with regards to this characteristic.	▪ None required	▪ ROWIP 2018-2028
Gender Reassignment	▪ There are no specific positive impacts known with regards to this characteristic	▪ There are no specific negative impacts known with regards to this characteristic.	▪ None required	▪ ROWIP 2018-2028
Marriage or Civil Partnership	▪ There are no specific positive impacts known with regards to this characteristic	▪ There are no specific negative impacts known with regards to this characteristic.	▪ None required	▪ ROWIP 2018-2028
Religion or belief	▪ There are no specific positive impacts known with regards to this characteristic	▪ There are no specific negative impacts known with regards to this characteristic.	▪ None required	▪ ROWIP 2018-2028

Race	▪ Ensure that the PROW infrastructure is fit for purpose and supports existing and growing communities with opportunities/access and services that meet the needs of the community and visitors both now and in the future. ▪ Improve areas of connectivity to accommodate active travel and encourage leisure and recreational use (such as walking, cycling and horse riding).	▪ There are no specific negative impacts known with regards to this characteristic.	▪ Ensure that Orders and Notices are made available in a range of formats and languages if requested.	▪ ROWIP 2018-2028
Sexual Orientation	▪ There are no specific positive impacts known with regards to this characteristic	▪ There are no specific negative impacts known with regards to this characteristic.	▪ None required	▪ ROWIP 2018-2028
Pregnancy or Maternity	▪ Improve and maintain high quality infrastructure in areas of countryside and in urban environments to enable users with buggies/pushchairs to access the paths. ▪ Maintaining, repairing the surface of the paths access will improve connectivity, increase cohesion and sociality whilst maintaining supervision and independent exploration and an environment in which parents can interact and enjoy the countryside alongside their children. ▪ Ensure that the PROW infrastructure is fit for purpose and supports existing and growing communities with opportunities/access and services that meet the needs of the community and visitors both now and in the future.	▪ Reduction of access to the network for a very limited number of users but balanced against the statutory rights of the landowner to efficiently use their land. ▪ There may already be limitations by the very nature of the rural/urban setting, which means those with protected characteristics, potentially would not be able to use it very well.	▪ There may already be limitations by the very nature of the rural setting, which means those with protected characteristics, potentially would not be able to use it very well.	▪ ROWIP 2018-2028

Carers Responsibility	▪ Reduce barriers to accessing the network, and both encourage and increase use of the County's Rights of Way. ▪ Reduce health inequalities and assist in the long-term prevention of health and wellbeing issues associated inactivity and lack of access to good quality open spaces and the countryside. ▪ Provision of accessible routes and improve areas of connectivity to accommodate active travel and encourage leisure and recreational use providing physical and mental health benefits for all. ▪ Ensure that the PROW infrastructure is fit for purpose and supports existing and growing communities with opportunities/access and services that meet the needs of the community and visitors both now and in the future. ▪ The PROW network provides a breadth of interaction, challenge and exploration through navigation which develops and supports social skills, and stimulates visual, sensory, physical and emotional experiences.	▪ There are no specific negative impacts known with regards to this characteristic other than those already listed above with regards age and disability.	▪ None required	▪ ROWIP 2018-2028

Assessment of Potential Impact			
None Identified	Low	Medium	High
Unlikely to impact	Minor impact	Likely to Impact ▪ Mitigation needed (if negative impact)	Certain to Impact ▪ The change will have an adverse impact on one or more protected groups that are not justified and cannot be mitigated. ▪ The proposed change must be amended or stopped.

Protected Characteristic	Positive Impact	Negative Impact
Age	Low	Medium
Disability	Low	Medium
Gender	Low	None Identified
Gender Reassignment	None Identified	None Identified
Marriage or Civil Partnership	None Identified	None Identified
Religion or belief	None Identified	None Identified
Race	Low	None Identified
Sexual Orientation	None Identified	None Identified
Pregnancy or Maternity	Low	Medium
Carers Responsibility	Low	Medium

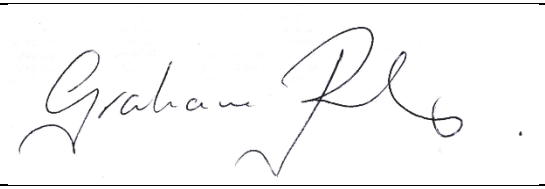
Additional Information/Supporting Evidence (to help determine the likely impact of the proposed change and how it has influenced the proposed change)	
Additional Information/Supporting Evidence	**Information/Evidence Source**
Section 118A: Extinguishment Orders – power to extinguish a PROW if it is in the interests of the safety of users or likely users of at grade crossings. Section 119A: Diversion Orders – power to divert a PROW if it is in the interests of the safety of users or likely users of at grade crossings.	▪ Highways Act, 1980
A site visit is undertaken with the Area Officer and the applicant and following this a Certificate of Works is drafted detailing all necessary works and requirements (e.g. width, surfacing, gradient, signage & furniture) should the application be successful. A pre-Order consultation is carried out with the District/Borough Council, County & District Councillors, Parish/Town Council, user groups and statutory undertakers. Notices are also posted on site and all feedback is taken on board and if necessary, changes are made to the proposal.	▪ KCC's Public Rights of Way Network Change Policy ▪ Definitive Map and Statement ▪ Officer inspection ▪ Certificate of Works ▪ Feedback from consultation
Section 147 of the Highways Act 1980, gives the Highway Authority power to authorise the erection on a footpath or bridleway a stile, gate or other structure which prevents the ingress or egress of animals on land which is used, or being brought into use, for agriculture or forestry or for the breeding or keeping of horses. Section 66 of the Highways Act 1980, empowers the Highway Authority to install such barriers, posts, rails or fences as they think necessary for safeguarding persons using the highway. This applies to footpaths, and by virtue of section 70 (1) of the CROW Act 2000 to bridleways. KCC as the Highway Authority, has a duty under Section 41 of the Highways Act, 1980, to maintain all PROW. This includes powers to undertake a range of works and improvements, such as surfacing, vegetation clearance, signage and waymarking and furniture repair and installation.	▪ Officer Inspections ▪ Highways Act 1980. ▪ Rights of Way Improvement Plan (2018 – 2028) ▪ Further EQIAs has been produced that informs the installation of gates and other barriers on the PROW network.

Conclusion
The findings drawn from the Equality Impact Assessment are that the diversion of the PROW will have a negative impact on people that share one or more protected characteristics, more specifically in terms of age (very young and very old), disability (those in wheelchairs or with limited mobility which prevents using steps), pregnancy or maternity, and potentially those who have carers responsibility if caring for the very young, very old or those with disabilities. **Reduction of access to the network is, therefore, possible for a limited number of users. However, in this case, it must be balanced against the safety of the public. A bridge is required to remove the danger to the public of crossing the railway line at grade. Ideally, a ramped bridge would provide the best solution. However, a ramped bridge is not deliverable due to the cost. This provision was originally being considered, the ramps that were needed to reach the bridge's required height, were so long (over 300 metres on the eastern side) due to the lie of the land, that there was also a negative environmental impact associated with the structure.** **The Public Path Order process promotes (indeed requires) engagement and seeks, through the legislative tests to be met, that adverse impact to the public is minimised. Potential negative impacts and issues raised in the tables above for any individual characteristic can be compounded for multiple characteristics.** **This analysis has concluded that the proposed changes to the Highway will have some negative impact on groups that share protected characteristics (compared to non-protected groups). It identifies the positive impact of improving safety for all users by removing the risks associated with crossing the railway line at grade.** **It is noted that due to the presence of stiles and steps on the existing route, that some people with protected characteristics will not currently be able to use the footpath, so they would not be at a greater disadvantage by the proposed change. However, where change is taking place on the public rights of way network, the aim is to try and improve accessibility where possible.** **Therefore, taking everything into account, the conclusion is that no amendments are required to the proposal, with the evidence suggesting that although there is potential detriment to some, all options have been considered and appropriate measures have been taken to advance equality and foster good relations.**

Decision on proposed Change/Activity		Conclusion ✓
Continue with the proposed change/activity	**Where it has been identified that there may be potential for minor adverse impacts or opportunities for one or more protected groups, we are satisfied that the change will not lead to unlawful discrimination and there are justifiable reasons to continue as planned.**	✓

Adjust the proposed change/activity	We will take steps to lessen the impact of the proposed change by implementing the mitigating actions identified.	
Amend or stop the proposed change/activity	Our change would have an adverse impact on one or more protected groups that are not justified and cannot be mitigated. Our proposed change must be amended or stopped.	

Signed	Maria McLauchlan	Date	01/09/2025
Name	Maria McLauchlan	Position	Public Rights of Way Officer – Definitive Map

Signed		Date	16 September 2025
Name	Graham Rusling	Position	Head of Public Rights of Way and Access

Public Rights of Way & Access Service

Equality Impact Assessment

S118A & S119A Highways Act 1980

Activity	Definition - Rail Crossing Public Path Order (PPO)
Directorate	Growth, Environment and Transport
Service/Division	Growth and Communities
Head of Service	Graham Rusling (Head of Public Rights of Way and Access Service)
Manager:	Laura Wilkins (Definitive Map Team Leader)

CAMS no	**01150**	**Furniture no** if applicable	

Area	**Ashford**	**Parish**	**Kennington**	**Path Number**	**AU17**
Completed By	**Maria McLauchlan**			**Date**	**01/09/2025**

Path Category Delete as appropriate	**Footpath**	~~Bridleway~~	~~Byway~~	~~Restricted Byway~~

Type of Activity	▪ **Diversion Order** ▪ Extinguishment Order
Proposal	**To divert Public Footpath AU17 from the at grade crossing over the railway to a stepped bridge at Kennington.**
Background	Public Path Orders (PPO'S) relating to Rail Crossings are Orders that are made under the Highways Act 1980. These Orders affect footpaths, bridleways, restricted byways & byways open to all traffic. The Highways Act 1980 gives Kent County Council (KCC) the power to make a Rail Crossing Diversion or Extinguishment Order if it can be shown that it is in the interests of the safety of users or likely users of at grade crossings. Particular consideration has to be given to whether or not it is reasonably practicable to make the existing crossing safe for the public and what arrangements will be made to erect and maintain barriers and signs at the closed crossing. The statutory tests (Highways Act 1980) to divert or extinguish a Public Right of Way from an at grade crossing can be summarised as follows: ▪ Whether it is in the interests of the safety of users or likely users of at grade crossings. ▪ Whether it is reasonably practicable to make the crossing safe for use by the public, and what arrangements have been made for ensuring that, if the order is confirmed, any appropriate barriers and signs are erected and maintained. ▪ Whether the diversion order alters a point of termination of the path or way, if that point is not on a highway over which there subsists a like right of way or, otherwise than to another point which is on the same highway, or another such highway connected with it.

	▪ Whether the order should make provision requiring the operator of the railway to maintain all or part of the right of way created by the order. To be taken into account but not listed as criteria under Section 119A of the Act but in Rights of Way Circular (1/09): • Whether the right of way will be reasonably convenient to the public. • The effect the proposal will have on the land served by the existing path or way and on land over which the new path or way is to be created. • The effect that the diverted way will have on the rights of way network as a whole. • The safety of the diversion, particularly where it passes along or across a vehicular highway. Any implications of a diversion or extinguishment and of any structures/surfacing on any new route, are assessed in accordance with the public sector equality duty.
Site Specific Information	**Public Footpath AU17 connects with Public Footpath AE323 at its eastern end, Public Footpath AU18, which head north-east, Public Footpath AU21 on the western side of the railway, and Restricted Byway AU17A at its western end.** **Part of the footpath runs over fields, through a wooded area, and crosses the railway line via a level crossing which is accessed by a stile at each side. The surface of the path is mostly grass except for where it passes over the railway, and is uneven in parts.** **There is no width recorded in the Definitive Statement.** **The land to the west of the railway line has planning permission for residential development consisting of up to 725 houses, a new primary school and a community centre.** **The new path will have a width of 2.5 metres where it does not form part of the bridge or bridge approach. It will have a surface of bonded, crushed aggregate pressed into asphalt.**

Impact of the proposed change				
Protected Characteristic Group	**Positive Impact**	**Negative Impact**	**Proposed Mitigation**	**Source of evidence**
Age	▪ Reduce barriers to older age groups (55+) from accessing the network and both encourage and increase use of the routes/network. ▪ Improve and maintain high quality infrastructure in areas of countryside and green space for people of all ages across the county. ▪ Reduce health inequalities and assist in the long-term prevention of health and wellbeing issues associated with youth or older age inactivity and lack of access to good quality open spaces and the countryside. ▪ Provision of accessible routes and improve areas of connectivity to accommodate active travel and encourage leisure and recreational use (such as walking, cycling and horse riding), providing physical and mental health benefits for all age groups. ▪ Ensure that the PROW infrastructure is fit for purpose and supports existing and growing communities with opportunities/access and services that meet the needs of the community and visitors both now and in the future. ▪ Create an environment which unconsciously provides progression through the ages and in which people of all ages can navigate their way safely and with ease, whilst enabling people of different ages to socialise or exercise together. ▪ The PROW network provides a breadth of interaction, challenge and exploration through navigation which develops and supports social skills, and stimulates visual, sensory, physical and emotional experiences across the age groups.	▪ There may already be limitations by the very nature of the rural/urban setting, which means those with protected characteristics, potentially would not be able to use the PROW very well. ▪ Users of mobility vehicles or wheelchairs may not be able to use the route/path and where the diversion will necessitate users to cross the Flow bridge on Public Footpath AU22, the connection across the rail line would not be available to those using wheel chairs or mobility vehicles and may be more challenging for those with an ambulant disability. ▪ Reduction of access to the network for a limited number of users but balanced against the statutory rights of the landowner to efficiently use their land. See Transport: Disability and Accessibility Statistics, England 2020	▪ There may already be limitations by the very nature of the rural setting, which means those with protected characteristics, potentially would not be able to use it very well. Where the diversion will necessitate users to cross the Flow bridge on Public Footpath AU22, this design seeks to deliver a stepped solution that is as accessible as possible – but it is a stepped solution.	▪ ROWIP 2018-2028 ▪ Manufacturers specification / supplier product information.

Disability Page 134	▪ Provide improved accessible and inclusive opportunities to access the countryside/open spaces for a range of impairments, including but not limited to, physical, visual, hearing and learning. ▪ Provide increased opportunities for those with additional needs to socialise or participate in recreational activities with and alongside their peers. ▪ Improving access to the countryside and outdoor spaces will support the development of cognitive, physical and social skills amongst this group. ▪ Reduce health inequalities and assist in the long-term prevention of health and wellbeing issues associated with youth or older age inactivity and lack of access to good quality open spaces and the countryside. ▪ The PROW network provides a breadth of interaction, challenge and exploration through navigation which develops and supports social skills, and stimulates visual, sensory, physical and emotional experiences. ▪ Ensure that the PROW infrastructure is fit for purpose and supports existing and growing communities with opportunities/access and services that meet the needs of the community and visitors both now and in the future.	▪ There may already be limitations by the very nature of the rural/urban setting, which means those with protected characteristics, potentially would not be able to use the PROW very well. ▪ Users of mobility vehicles or wheelchairs may not be able to use the route/path and where the diversion will necessitate users to cross the Flow bridge on Public Footpath AU22, the connection across the rail line would not be available to those using wheel chairs or mobility vehicles and may be more challenging for those with an ambulant disability. ▪ Reduction of access to the network for a limited number of users but balanced against the statutory rights of the landowner to efficiently use their land. See Transport: Disability and Accessibility Statistics, England 2020	▪ Design and reasonable adjustments have been taken into account when considering the specification of the bridge. ▪ There may already be limitations by the very nature of the rural setting, which means those with protected characteristics, potentially would not be able to use it very well. Where the diversion will necessitate users to cross the Flow bridge on Public Footpath AU22, this design seeks to deliver a stepped solution that is as accessible as possible – but it is a stepped solution.	▪ ROWIP 2018-2028 ▪ Manufacturers specification / supplier product information
Gender	▪ The Public Rights of Way network and associated furniture is gender neutral, in that both boys and girls, men and women, and those who identify as non-binary have access to and can socialise or exercise within the same space, on the same path, separately and together.	▪ There are no specific negative impacts known with regards to this characteristic.	▪ None required	▪ ROWIP 2018-2028
Gender Reassignment	▪ There are no specific positive impacts known with regards to this characteristic	▪ There are no specific negative impacts known with regards to this characteristic.	▪ None required	▪ ROWIP 2018-2028
Marriage or Civil Partnership	▪ There are no specific positive impacts known with regards to this characteristic	▪ There are no specific negative impacts known with regards to this characteristic.	▪ None required	▪ ROWIP 2018-2028
Religion or belief	▪ There are no specific positive impacts known with regards to this characteristic	▪ There are no specific negative impacts known with regards to this characteristic.	▪ None required	▪ ROWIP 2018-2028

Race	▪ Ensure that the PROW infrastructure is fit for purpose and supports existing and growing communities with opportunities/access and services that meet the needs of the community and visitors both now and in the future. ▪ Improve areas of connectivity to accommodate active travel and encourage leisure and recreational use (such as walking, cycling and horse riding).	▪ There are no specific negative impacts known with regards to this characteristic.	▪ Ensure that Orders and Notices are made available in a range of formats and languages if requested.	▪ ROWIP 2018-2028
Sexual Orientation	▪ There are no specific positive impacts known with regards to this characteristic	▪ There are no specific negative impacts known with regards to this characteristic.	▪ None required	▪ ROWIP 2018-2028
Pregnancy or Maternity	▪ Improve and maintain high quality infrastructure in areas of countryside and in urban environments to enable users with buggies/pushchairs to access the paths. ▪ Maintaining, repairing the surface of the paths access will improve connectivity, increase cohesion and sociality whilst maintaining supervision and independent exploration and an environment in which parents can interact and enjoy the countryside alongside their children. ▪ Ensure that the PROW infrastructure is fit for purpose and supports existing and growing communities with opportunities/access and services that meet the needs of the community and visitors both now and in the future.	▪ Reduction of access to the network for a very limited number of users but balanced against the statutory rights of the landowner to efficiently use their land. ▪ There may already be limitations by the very nature of the rural/urban setting, which means those with protected characteristics, potentially would not be able to use it very well.	▪ There may already be limitations by the very nature of the rural setting, which means those with protected characteristics, potentially would not be able to use it very well.	▪ ROWIP 2018-2028

Carers Responsibility	▪ Reduce barriers to accessing the network, and both encourage and increase use of the County's Rights of Way. ▪ Reduce health inequalities and assist in the long-term prevention of health and wellbeing issues associated inactivity and lack of access to good quality open spaces and the countryside. ▪ Provision of accessible routes and improve areas of connectivity to accommodate active travel and encourage leisure and recreational use providing physical and mental health benefits for all. ▪ Ensure that the PROW infrastructure is fit for purpose and supports existing and growing communities with opportunities/access and services that meet the needs of the community and visitors both now and in the future. ▪ The PROW network provides a breadth of interaction, challenge and exploration through navigation which develops and supports social skills, and stimulates visual, sensory, physical and emotional experiences.	▪ There are no specific negative impacts known with regards to this characteristic other than those already listed above with regards age and disability.	▪ None required	▪ ROWIP 2018-2028

Assessment of Potential Impact			
None Identified	Low	Medium	High
Unlikely to impact	Minor impact	Likely to Impact ▪ Mitigation needed (if negative impact)	Certain to Impact ▪ The change will have an adverse impact on one or more protected groups that are not justified and cannot be mitigated. ▪ The proposed change must be amended or stopped.

Protected Characteristic	Positive Impact	Negative Impact
Age	Low	Medium
Disability	Low	Medium
Gender	Low	None Identified
Gender Reassignment	None Identified	None Identified
Marriage or Civil Partnership	None Identified	None Identified
Religion or belief	None Identified	None Identified
Race	Low	None Identified
Sexual Orientation	None Identified	None Identified
Pregnancy or Maternity	Low	Medium
Carers Responsibility	Low	Medium

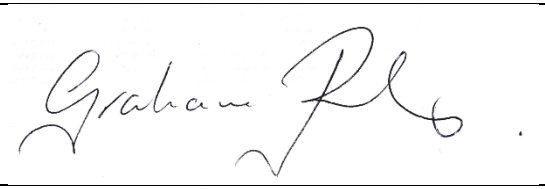
Additional Information/Supporting Evidence (to help determine the likely impact of the proposed change and how it has influenced the proposed change)	
Additional Information/Supporting Evidence	**Information/Evidence Source**
Section 118A: Extinguishment Orders – power to extinguish a PROW if it is in the interests of the safety of users or likely users of at grade crossings. Section 119A: Diversion Orders – power to divert a PROW if it is in the interests of the safety of users or likely users of at grade crossings.	▪ Highways Act, 1980
A site visit is undertaken with the Area Officer and the applicant and following this a Certificate of Works is drafted detailing all necessary works and requirements (e.g. width, surfacing, gradient, signage & furniture) should the application be successful. A pre-Order consultation is carried out with the District/Borough Council, County & District Councillors, Parish/Town Council, user groups and statutory undertakers. Notices are also posted on site and all feedback is taken on board and if necessary, changes are made to the proposal.	▪ KCC's Public Rights of Way Network Change Policy ▪ Definitive Map and Statement ▪ Officer inspection ▪ Certificate of Works ▪ Feedback from consultation
Section 147 of the Highways Act 1980, gives the Highway Authority power to authorise the erection on a footpath or bridleway a stile, gate or other structure which prevents the ingress or egress of animals on land which is used, or being brought into use, for agriculture or forestry or for the breeding or keeping of horses. Section 66 of the Highways Act 1980, empowers the Highway Authority to install such barriers, posts, rails or fences as they think necessary for safeguarding persons using the highway. This applies to footpaths, and by virtue of section 70 (1) of the CROW Act 2000 to bridleways. KCC as the Highway Authority, has a duty under Section 41 of the Highways Act, 1980, to maintain all PROW. This includes powers to undertake a range of works and improvements, such as surfacing, vegetation clearance, signage and waymarking and furniture repair and installation.	▪ Officer Inspections ▪ Highways Act 1980. ▪ Rights of Way Improvement Plan (2018 – 2028) ▪ Further EQIAs has been produced that informs the installation of gates and other barriers on the PROW network.

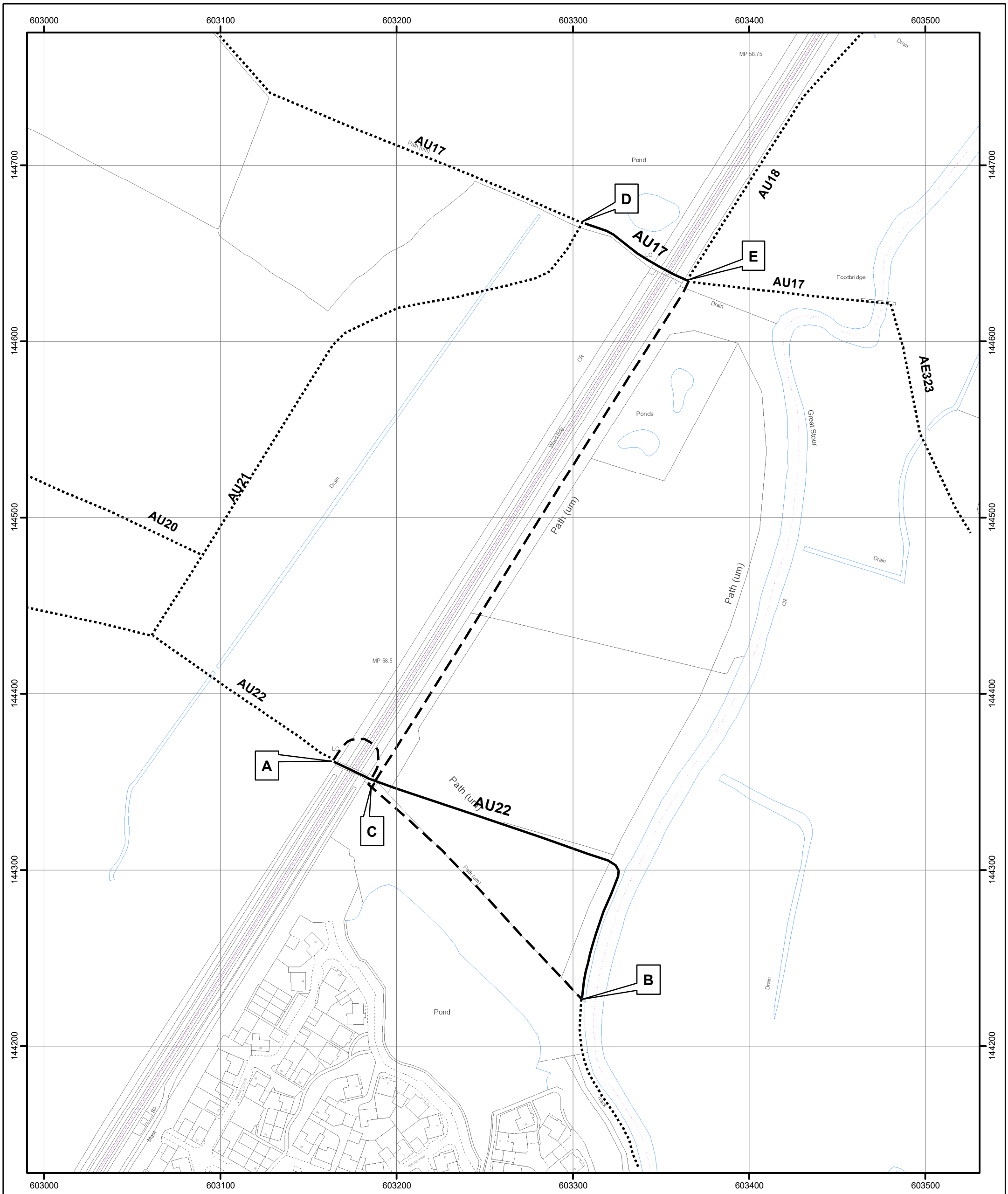
Conclusion
The findings drawn from the Equality Impact Assessment are that the diversion of the PROW may have a negative impact on people that share one or more protected characteristics, more specifically in terms of age (very young and very old), disability (those in wheelchairs or with limited mobility which prevents using steps), pregnancy or maternity, and potentially those who have carers responsibility if caring for the very young, very old or those with disabilities IF their onward journey takes them over the proposed stepped footbridge which forms part of the diversion of Public Footpath AU22. **Reduction of access to the network may be possible, therefore, for a limited number of users. However, in this case, it must be balanced against the safety of the public.** **The Public Path Order process promotes (indeed requires) engagement and seeks, through the legislative tests to be met, that adverse impact to the public is minimised. Potential negative impacts and issues raised in the tables above for any individual characteristic can be compounded for multiple characteristics.** **This analysis has concluded that the proposed changes to the Highway may have some negative impact on groups that share protected characteristics (compared to non-protected groups). It identifies the positive impact of improving safety for all users by removing the risks associated with crossing the railway line at grade.** **It is noted that due to the presence of stiles on the existing route, that some people with protected characteristics will not currently be able to use the footpath, so they would not be at a greater disadvantage by the proposed change. However, where change is taking place on the public rights of way network, the aim is to try and improve accessibility where possible.** **Therefore, taking everything into account, the conclusion is that no amendments are required to the proposal, with the evidence suggesting that although there is potential for some detriment, all options have been considered and appropriate measures have been taken to advance equality and foster good relations.**

Decision on proposed Change/Activity		Conclusion ✓
Continue with the proposed change/activity	Where it has been identified that there may be potential for minor adverse impacts or opportunities for one or more protected groups, we are satisfied that the change will not lead to unlawful discrimination and there are justifiable reasons to continue as planned.	✓
Adjust the proposed change/activity	We will take steps to lessen the impact of the proposed change by implementing the mitigating actions identified.	

Amend or stop the proposed change/activity	Our change would have an adverse impact on one or more protected groups that are not justified and cannot be mitigated. Our proposed change must be amended or stopped.	

Signed	Maria McLauchlan	Date	01/09/2025
Name	Maria McLauchlan	Position	Public Rights of Way Officer – Definitive Map

Signed		Date	16 September 2025
Name	Graham Rusling	Position	Head of Public Rights of Way and Access



Key

- Routes to be diverted
- New Length of routes
- Unaffected Routes

Highways Act 1980
Wildlife and Countryside Act 1981
The Kent County Council
Proposed diversions of public footpaths AU22 (part) and AU17 (part) at Kennington - July 2025

Produced by the KCC Public Rights of Way and Access Service

Created by:	MMcL
Checked by:	DJ
Reference:	PROW/AU22/14/NR PROW/AU17/15/NR

N W E S

1:2,000
at A3 size

0 0.175 0.35 Kilometres

0 0.075 0.15 Miles

Public Rights of Way and Access Service

Kent County Council kent.gov.uk

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		Stepped	Ramped
Direct Construction Costs		£ 1,309,890	£ 2,692,160
Indirect Construction Costs	e.g. contractor's preliminaries such as construction of a temporary haul road, temporary on-site facilities, etc.	£ 424,538	£ 1,157,629
Employers Indirect Costs	e.g. project management costs, design costs, Schedule 4 costs*	£ 674,657	£ 1,111,548
Risk		£ 438,453	£ 891,238
Inflation	This allows the static 'AFC' cost to have a longer shelf-life and account for the change in value of money that has occurred since the moment that the AFC cost has been established.	£ 80,281	£ 163,186
Industry Risk Fee & Network Rail Fund Fee		£ 81,310	£ 331,065
	Total AFC	**£ 3,009,129**	**£ 6,346,826**

Approved for Construction (AFC) figure, essentially gives an idea of what it would take to go from pen and paper through to a bridge being put in place. As more information is being gathered by the project team, costs are being updated to account for 'local' factors. The current AFC figure is £3.09 million for a flow bridge; this is a significant uplift from the £1.34 million quoted.

***Schedule 4 Costs**: these are costs for temporarily closing the railway line and are derived from Schedule 4 of the model passenger/freight contracts; they are costs to compensate train operators where their operations have been impacted financially by planned disruption.

Industry Risk Fee and **Network Rail Fee Fund** are applied to third-party funded projects; they cover Network Rail's contractual liabilities to its customer(s) for breach and negligence: *Risk Fund* covers risks arising from cancellation of possessions (when the railway is closed to traffic), operational emergencies, or changes in standards or legal requirements. **Risk** accounts for any uncertainties and potential risks which might impact the final cost of the project.

The costs listed above are based on standard assumptions made, for instance the height of the bridge, width, etc., and may vary if surveys reveal that more work is needed, i.e., ground investigations lead to a different foundation design, etc. When a detailed design is brought forward, projected costs can be further refined to account for known facts (beyond the height, width of the bridge, etc.).

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