



55 Vastern Road, Reading Planning Appeal

Proof of Evidence of Scott Witchalls

On behalf of **Berkeley Homes Ltd (Oxford and Chiltern)**

Project Ref: 47500 | Rev: | Date: September 2021

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Description **Proof of Evidence of Scott Witchalls for Appeal Against Reading Borough Council's Refusal of Planning Application (LPA ref. no. 200188) by Berkeley Home (Oxford and Chiltern) for the redeveloped for the former SSE site at 53-55 Vastern Road to accommodate 209 new homes.**

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1 Introduction

1.1.1 This Proof of Evidence (PoE) has been prepared by me on behalf of Berkeley Homes Ltd (Oxford and Chiltern (BHOC)) ('the Appellants') who have submitted an appeal under Section 78 of the Town and Country Planning Act 1990 (as amended), following the refusal by Reading Borough Council ('RBC') to grant full planning permission in respect of planning application reference 200188 ('the Planning Application') by notice dated 9th April 2021.

1.1.2 The Planning Application relates to 55 Vastern Road, Reading ('the Site'). The following description of the development was agreed with RBC:

"Demolition of existing structures and erection of a series of buildings ranging in height from 1 to 11 storeys, including residential dwellings (C3 use class) and retail floorspace (A3 use class), together with a new north-south pedestrian link, connecting Christchurch Bridge to Vastern Road." ('the Proposed Development')

1.1.3 The Planning Application was submitted to RBC on 4th February 2020 and validated on 16th March 2020.

1.2 Qualification and Experience

1.2.1 My name is Scott Withcalls. I hold a Master of Science degree in Transportation Planning and Engineering from the University of Southampton. I am a Chartered Member of the Institution of Logistics and Transport, a Member of the Institution of Highways and Transportation, and a Member of the Transport Planning Society. I have over thirty-five years' experience in the field of transportation planning and engineering.

1.2.2 I have appeared as an expert witness at numerous Public Inquiries including CPO Inquiries, at the High Court, Court of Arbitration, Examinations in Public and in front of Parliamentary Committees.

1.2.3 I am a Director of Transport and Infrastructure at Stantec. Stantec is a multi-disciplinary development and infrastructure consultancy that advises public and private sector clients with respect to planning, design and construction of infrastructure and land development projects in the United Kingdom and overseas. Stantec's Infrastructure and Buildings Group, of which I am a member, provides consultancy services in all areas of transportation planning and engineering.

1.2.4 I have worked on a variety of major transport planning and land development projects, including all aspects of transport assessment, site layout and design, access and operation. In Reading, these include the design of the Reading station train/bus interchange areas catering

for over 15 million passengers per annum, Station Hill development (mixed use c.1.8M sq.ft and 700 homes), Royal Elm Park (Convention Centre, Hotels and 660 homes), Green Park (c2.2M sqft commercial and 750 homes) and various transport schemes including the mass rapid transit (MRT) network, Christchurch Bridge and M4 Junction 11 upgrade scheme.

1.2.5 I am familiar with the site and its surroundings having worked on the numerous development and infrastructure projects in Reading since the 1990's as above, and on behalf of the Council, been involved in the preparation of respective Reading Local Transport Plans since 2001 and the adopted Reading Station Area Framework. I also advised SSE (the former owners of the site) in consideration of their options for the site.

1.2.6 In undertaking the analysis for the purposes of preparing the Transport Statement and this expert witness proof, I have been assisted by specialist technical teams at Stantec under my supervision.

1.3 Scope of Evidence

1.3.1 My evidence presented in this proof of evidence explores the transport related matters identified as main issues for reasons for refusal, as well as other matters raised by RBC officers and those of third party objectors. A comprehensive Statement of Case (SoC) dated 20th May 2021 was prepared by me on Transport and Highways matters and sought to address the specific concerns raised, including:

- Proposed North-South link directness and appropriateness;
- North-South link width;
- Switchback ramp alignment rationale;
- Servicing and vehicle movements and pedestrian/cycle safety;
- Local parking and disabled parking access; and
- Design of a proposed toucan crossing at Vastern Road.

1.3.2 This PoE will not repeat the content of my transport and highways statement but provides further evidence in response to previous matters, updated based on the policy changes to NPPF, responds to RBC's Statement of Case and covers transport matters raised by Rule 6 (R6) and other 3rd Party objectors.

1.3.3 My evidence is structured as follows:

- Section 2 - Summary of RfR and Inspector's Issues

- Section 3 - Legislative and Policy Context Update
- Section 4 - Introduction to Response to RBC SoC
- Section 5 - North-South Link Rationale
- Section 6 - Towpath Connection
- Section 7 - Servicing and Delivery Strategy
- Section 8 - Rule 6 Statements and 3rd Party Objections
- Section 9 - Summary

2 Reasons for Refusal and Inspector's Issues

2.1 Overview

2.1.1 Since validation of the Planning application on 16th March 2020 by RBC, a series of comments relating to transport and highways were received (through both meetings and written comments). The Appellants provided technical responses and made a series of alterations to the Proposed Development to seek to address RBC's comments. However, RBC subsequently refused the Planning Application.

2.2 Reason for Refusal (RfR1)

2.2.1 RBC cited 7 Reasons for the Refusal of the application, the following of which are relevant to transport and parking matters:

- RfR 1 - The proposed development fails to provide a high quality north-south link through the site by virtue of related public realm, safety and directness concerns, largely due to the alignment of the site and overprovision of proposed buildings, primarily contrary to Policies CR11ii and CR11g of the Reading Borough Local Plan (2019) and guidance within the adopted Reading Borough Supplementary Planning Document Reading Station Area Framework (2010), and also Policies EN11, CC7, CR2, CR3, TR3 and TR4 of the Reading Borough Local Plan (2019).

2.3 Inspector's Issues

2.3.1 Following refusal of the planning application and BHOC decision to appeal, a Case Management Conference (CMC) took place on 26th August 2021, where the Inspector was appointed to conduct the Vastern Road Inquiry, and the main issues of the appeal were identified. I understand that transport is to be dealt with as part of the first main issue which is;

- The effect of the proposed development in design terms with particular reference to the quality and effectiveness of the proposed north-south link through the site and the setting and character of the River Thames and the Thames Path

3 Legislative and Policy Context

- 3.1.1 The SoC dealt with the relevant local and national planning policies from a Transport and Highways perspective.
- 3.1.2 As part of that policy review the February 2019 release of the National Planning Policy Framework (NPPF) was considered. Since the submission of the SoC, a revised version of the NPPF was published in July 2021.

3.2 Revised NPPF (July 2021)

- 3.2.1 There have been no fundamental changes to the latest version of the NPPF from a transport specific perspective that would alter our previous transport and highways SoC. A comparison of the current and previous versions highlights a change in the description of new pedestrian and cycle facilities replacing *'high quality'* with *'attractive and well designed'*.
- 3.2.2 Section 8, *'Promoting healthy and safe communities'*, Paragraph 92 (Part B) adds reference to *'attractive, well designed, clear and legible pedestrian and cycle routes'*. This policy section is targeted at creating places which are safe and accessible such that crime and disorder, and the fear of crime, do not undermine quality of life or community cohesion by encouraging active and continual use of public spaces. In the context of the appeal proposal, the pedestrian and cycle routes are attractive and well-designed since they meet design standards, will be lit, have good natural surveillance from overlooking properties, have good visibility and will be well used.
- 3.2.3 Paragraph 106 (formerly para 104) under section 9, *'Promoting Sustainable Transport'* states that planning policies should *'provide for attractive and well-designed walking and cycling networks with supporting facilities such as secure cycle parking'*.
- 3.2.4 In my opinion, the walking and cycling routes proposed will be both attractive and well designed. I also set out in Paragraphs 6.3.7 to 6.3.10 of the Statement of Case, which draws upon the BHOC Design Addendum Report, that straightening the link and ramps would make the development less attractive and less accessible. Extracts of the Design Addendum (Figures 1.14, 1.15 and 1.18) are included in **Appendix A** of this evidence illustrating that the alternative straighter route options examined, as requested by RBC, could damage community cohesion and reduce the attractiveness and accessibility of the routes.
- 3.2.5 Paragraph 110 (formerly 108), *'Considering Development Proposals'*, part C, has been introduced in the latest release. Part C states that:

“c) the design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the National Design Guide and the National Model Design Code”

- 3.2.6 The original Transport Statement for the development pre-dates the latest guidance on cycle design. However, it was noted in my SoC that the LTN 1/20 Cycle Infrastructure Design Guide (July 2020) was considered during the development of the proposals and that the width of the north/south pedestrian/cycle link is in accordance with the recommend minimum width at its narrowest point (Para 6.4.4 of SoC).
- 3.2.7 The application of Manual for Streets (MfS) guidance has been widely applied to the development proposals. This proof will draw upon further evidence, supporting the previous discussions, demonstrating the suitability of the pedestrian and cycling routes designed through the development.
- 3.2.8 The National Design Guide and National Model Design Code contain a number of references to the promotion of walking and cycling for shorter distance trips by means of the provision of safe, accessible routes and facilities. Such facilities have been designed into the proposals from the outset including the provision of new walking and cycling connections that are more direct and convenient than car connections, in full compliance with both the Guide and Code.
- 3.2.9 Importantly, in the context of the unchanged paragraph 111 of NPPF (previously paragraph 109), the evidence set out in the TA, supplementary Technical Responses, Statement of Case (and as also later summarised in **Chapters 5 to 7** of this evidence), demonstrates that there are no unacceptable impacts on highway safety and that the residual cumulative impacts on the road network are not severe.

4 Response to RBC SoC; Introduction

4.1 RBC's Statement of Case - Appendix H - Transport

4.1.1 The Local Planning Authority's concerns cover 4 areas which this proof responds to in the following Chapters.

- Proposed North-South link directness and appropriateness and Switchback ramp alignment rationale (Response in Section 5.1, 5.2 and 5.3 of this evidence)
- North-South link width (Response in Section 5.4 of this evidence)
- Southern towpath access (Response in Section 6.1, 6.2 and 6.3 of this evidence)
- Servicing/vehicle movements and pedestrian/cycle safety (Response in Section 7.1 and 7.2 of this evidence)

4.2 RBC's Statement of Case - Appendix G - Urban Design (UD)

4.2.1 This statement was prepared by Doyle Design LLP to address urban design matters, and specifically the RfRs relating to the design of the scheme, RfR 1, 2 and 6. Some of the matters raised relate to Transport issues, namely:

- Alignment/ Directness of the North-South link (UD SoC Section 2.11). A response to relevant transport matters in this area of dispute is covered in **Section 5.2** of this evidence.
- Alignment and configuration of the ramp to Christchurch Bridge (UD SoC Section 2.13). A response to relevant transport matters in this area of dispute is covered in **Section 5.3** of this evidence.
- The proposed width of the North-South link (UD SoC Paragraph 2.15.1 to 2.15.6). A response to relevant transport matters in this area of dispute is covered in **Section 5.4** of this evidence.

5 North-South Link Rationale

5.1 Policy

5.1.1 The Transport Statement (TS) submitted as part of the planning application in 2020 identified the proposals for a new shared north-south pedestrian and cycle link which included a 1:21 switchback ramp at the northern end of the site which is required to transition between the level change from the site to a podium connection onto the existing Christchurch Bridge.

5.1.2 As concluded in the '*Policy Assessment Note: North/South Shared Pedestrian Cycle Route*' (Barton Willmore, September 2020) and as referred to in my Transport SoC (para. 6.3.2), the n-s route is of high quality, safe and direct in the context that:

- There is no likelihood of conflict between cyclists and pedestrians.
- The switchbacks maintain a direct route for pedestrians, as required by policy, but also have the effect of encouraging cyclists to cycle responsibly and not at high speeds.
- Pedestrians are also provided with direct stepped access avoiding the switchbacks, further limiting the likelihood of conflict in the ramped sections of the route.
- It is considered that the policy intention of directness was not envisaged to be interpreted as 'straight'.
- The proposed route complies with the strategic route noted within the Local Plan and RSAF, so conceived for its directness, and also provides the shortest route for pedestrians and cyclists to access Christchurch Bridge or the Town Centre, when travelling to and from Reading Station.

5.1.3 The council have implied in their Highways statement (App.H para. 5.3.3) that the development should provide the fastest possible route through the development to comply with the directness design criteria set out in the LTN 1/20 Cycle Design Guide. It is acknowledged that the n-s link and ramp design is not the fastest possible route through the site; it was not intended to be, and there is no requirement that it must be. However, the route would be significantly faster and more direct than the existing cycle route via Norman place, and when broadening the consideration beyond that of just directness, the proposals also deliver well on the other design criteria measures of safety, coherence, comfort, and attractiveness.

- 5.1.4 In the council's Urban Design report (App.G of RBC's SoC) prepared by Doyle Design, reference is given to the National Model Design Code (NMDC) in paragraph 2.5.16 which discusses Section M.2(i) Walking and Cycling of the guidance which states:

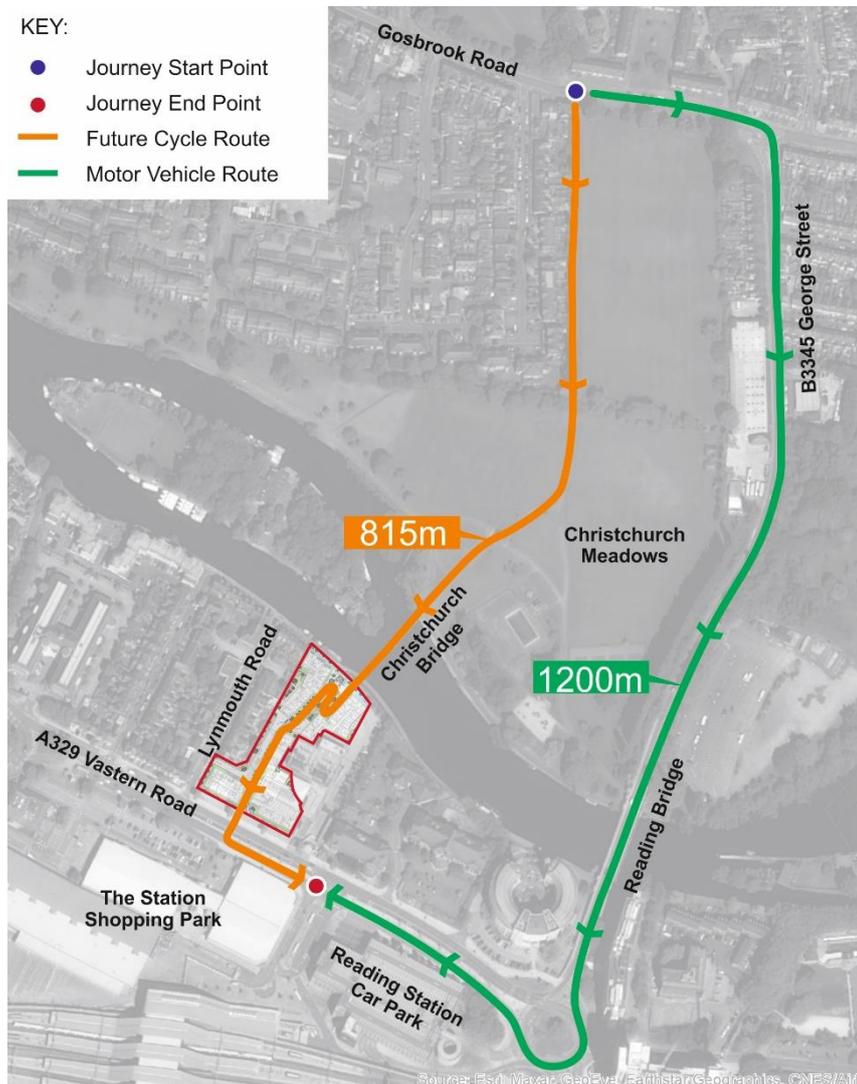
"34. For local journeys, this means creating continuous, clear, relatively direct and attractive walking and cycling routes..."

- 5.1.5 The wording within Paragraph 34 of the NMDC can be interpreted as meaning that a 'relatively direct' route may be one that is not essentially a straight line between two points, but a route that offers a more direct route in comparison to an alternative, which is the case with the n-s link proposed.
- 5.1.6 Contrary to RBC's SoC (App.H para. 5.3.8) that states '*The development does not comply with any of the design standards specified within the Local Plan, the Reading Station Area Framework, Local Transport Note 1/20 Cycle Infrastructure Design dated July 2020, as well as the National Design Guide and the National Model Design Code*', in my view the proposals do provide a new direct route to/from Christchurch Bridge and Reading Station, as envisaged by policy, and the route complies with the listed policies and standards.

5.2 Measures of Directness

- 5.2.1 It is important to note that directness is determined by the ability to minimise the effort required to cycle, by enabling cyclists to maintain some momentum (i.e. not having to stop for motorists or due to other barriers/obstacles). The widened geometry and levelling of gradient at the proposed switchback turns allows for cyclists to maintain their momentum, as do the crossing points within the site where motor vehicles are required to give way, since pedestrians and cyclists are given clear priority.
- 5.2.2 Directness is also dealt with in RBC's Local Cycling and Walking Infrastructure Plan (LCWIP). Based on the exact approach adopted in the LCWIP Route Selection Tool (LCWIP, Appendix D, Pg 2), the directness of the proposed N-S cycle route link (from Gosbrook Road to Trooper Potts Way, via Christchurch Bridge and the switchback ramps through the site), has been evaluated. An extract of the Route Selection Tool Directness measurement table is provided as **Appendix B** of this evidence.
- 5.2.3 The results of the directness exercise show that in the scenario with the development there would be a future cycle route length of approximately 815m (North to South) from Gosbrook Road to Trooper Potts Way. In comparison, the alternative motor vehicle route which is via Reading Bridge and Vastern Road has a total journey length 1,200m. The two routes discussed are illustrated in **Figure 5.1**.

Figure 5.1: Future Cycle Route vs Existing Vehicular Route



5.2.4 The corresponding directness score is based on a length factor, which is the length of the cycle route divided by the corresponding shortest motor vehicle route. In this case, this would be 0.68 which according to the LCWIP Route Selection Tool thresholds would achieve the highest score of 5 for directness. Therefore, based on RBC's own assessment criteria, the proposed n-s link should be considered as direct.

5.2.5 Building on this, an exercise to spatially set out the switchback ramp arrangement was undertaken. Through setting out the switchback arrangement we could test the suitability of the route to accommodate various users, the ability for a cyclist to negotiate the turns and also evaluate an understanding of travel time. Photographs of this exercise are included within **Appendix K**. The switchback was set out on a slow grass surface thereby partly mimicking the effect of the uphill ramp gradient. Speeds would naturally be slightly faster travelling down the ramp. The results of this test showed that the switchback ramp, from the point of entering

the site at the bottom of the switchback to the bridge (74m route) could take between 15 and 20 seconds. This equates to an average cycling speed of between 8 to 11mph broadly in accordance with the LTN 1/20 guideline which states in para 13.6.3 that '*An average speed of 10mph provides a baseline for calculating cycle journey times*'. This journey time would not be significant in the context of a typical cyclist's wider journey.

5.3 Switchback Ramp Design

- 5.3.1 The design of the switchback ramp was widely discussed in Section 6.5 of the Transport SoC which described the significant improvements the proposed north/south link delivers compared with the current cycle route along the towpath and via Norman Place, which RBC have recognised in their SoC (App.H para. 6.2). However, RBC remain of the view that the proposals should be replaced with a more direct/straighter ramp.
- 5.3.2 The delivery of a straight route was covered in detail in BHOC Design SoC and covered in my Transport SoC (paragraphs 6.3.7 to 6.3.10). This demonstrated that it is not possible to deliver a 'straight' route through the site due to the constraint of the retained SSE equipment, and similarly that the constraints of site topography and ramp connection to Christchurch Bridge prevent the provision of a straight route without significant detriment to the policy requirement to create active frontages and high quality public realm.
- 5.3.3 It remains the case that any design that removes the proposed switchback and replaces with a straighter alignment would require ramps to extend further south into the site (towards Vastern Road) as shown on Figures 1.14 and 1.15 of BHOC Design Addendum (extracts provided in **Appendix A**). This would be of disbenefit to those accessing the ramp from properties in the northern areas of site as well as those using the towpath.
- 5.3.4 Switchback ramp designs are used fairly widely to move cyclists from one level to another. Within Reading, there are switchback ramp configurations provided as part of RBC's existing cycle network (designations shown in parentheses) along the A33 western side at Rose Kiln Lane to connect to the River Kennet towpath (strategic), across M4 Junction 11 over-bridges at the south-east and north-east corners (strategic), and on both sides of the River Kennet crossing at Kennet Walk (local). I have annotated the locations of these ramps onto RBC's LCWIP cycle network plan alongside photos of the ramps in **Appendix J**.
- 5.3.5 Notwithstanding this, the proposed switchback ramp is designed with short ramp sections meaning cyclists will have sight of the full ramp while travelling along it, which helps to maintain a sense of moving in the desired direction and not a feeling of doubling back. Figure 6.3 in the Transport SoC (which is provided again for ease of reference in **Figure 5.2a**) illustrates the nature of the switchback ramp with attractive landscaping and clear lines of sight and views of the wider area that both cyclists and pedestrians will have. **Figures 5.2b** and

Figure 5.2c provide further illustrations of the proposed ramp demonstrating the clear legibility of the route with good sightlines through the development at the switchback ramp.

Figure 5.2a: View from The Turbine Hall building looking across the ramp



Figure 5.2b: View from the café podium looking across the ramp towards the south into the site



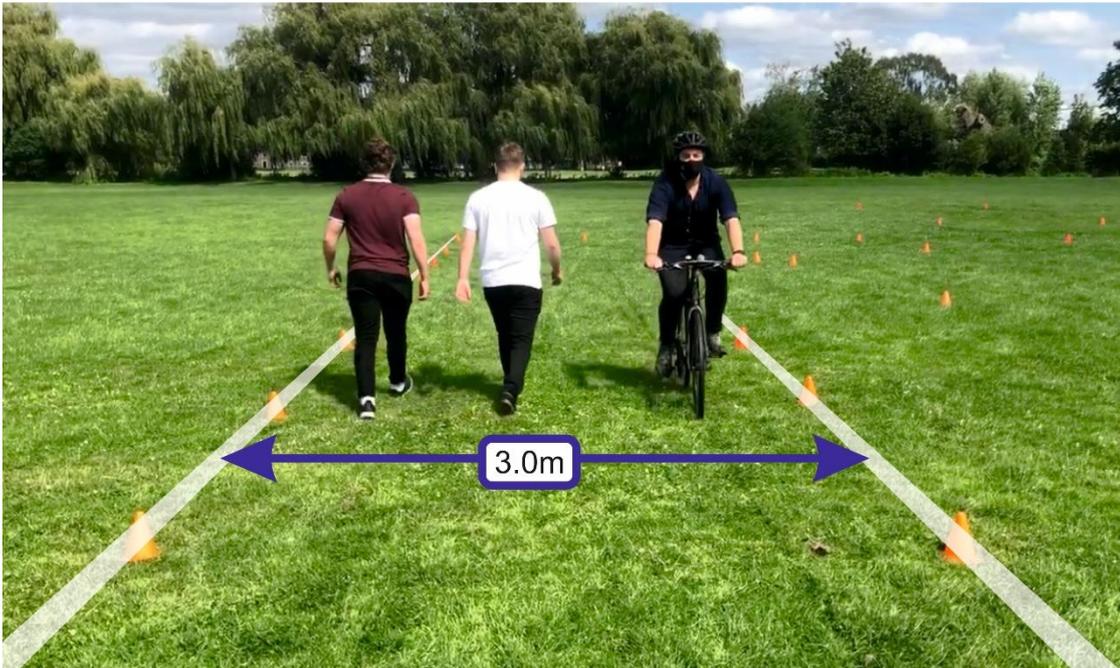
Figure 5.2c: View from bottom of the ramp looking towards Christchurch Bridge



5.4 Width of North/South Link

- 5.4.1 While not included as a RfR, the width of the n-s link was discussed in the Transport SoC (Para. 6.4.5 to 6.4.9) with the Council in agreement to the proposed width as stated in the LPA Highway Soc (App.H para. 5.4.1).
- 5.4.2 However, in RBC's Urban Design SoC (App.G para 2.15.1) it was commented that the 3m n-s link would *"be the narrowest section of the north-south spine and therefore likely to 'throttle' the capacity, restrict flow and limit the multi-modal functions"*.
- 5.4.3 I do not believe the proposed link will throttle movements or restrict flow. Table 6-3 of LTN 1/20 (**Appendix D**) notes that the recommended minimum width of 3.0m for shared routes can accommodate flows of up to 300 pedestrians and 300 cyclists per hour, equating to 600 multimodal movements every hour.
- 5.4.4 As noted in paragraph 5.2.5 of this evidence, an assessment has been carried out to provide confidence on the capabilities of a 3.0m wide shared path in relation to multi-modal movements. In the image below, a 3.0m wide path has been set out representing the narrowest part of the proposed n-s link, with a cyclist and two pedestrians travelling side by side. As clearly shown the proposed width provides sufficient room for each user with no one user restricted in any way.

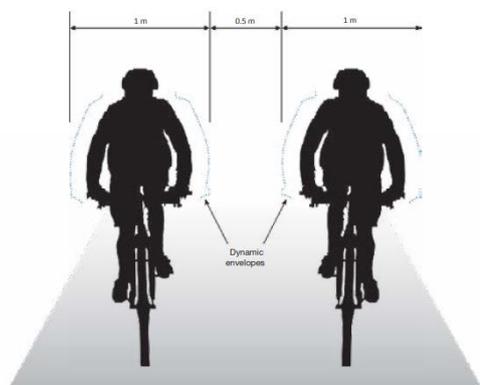
Figure 5.3: Example Pedestrians vs Cyclist on 3.0m wide path



5.4.5 This is also supported by Figure 5.1 of the LTN 1/20 guidance which illustrates (extract given below in **Figure 5.4**) that two cyclists travelling side by side typically need a dynamic envelope of 0.5m thereby requiring a width of 2.5m, which is 0.5m less than the minimum width of the proposed route.

5.4.6 In addition, the width of Christchurch Bridge and its approach ramps is 3.5m, but this is restricted on either side by bridge and ramp parapets. These have the impact of reducing the effective width to 3m or less.

Figure 5.4: Dynamic kinetic envelope of cyclists



(Extract taken from DfT LTN 1/20 Figure 5.1)

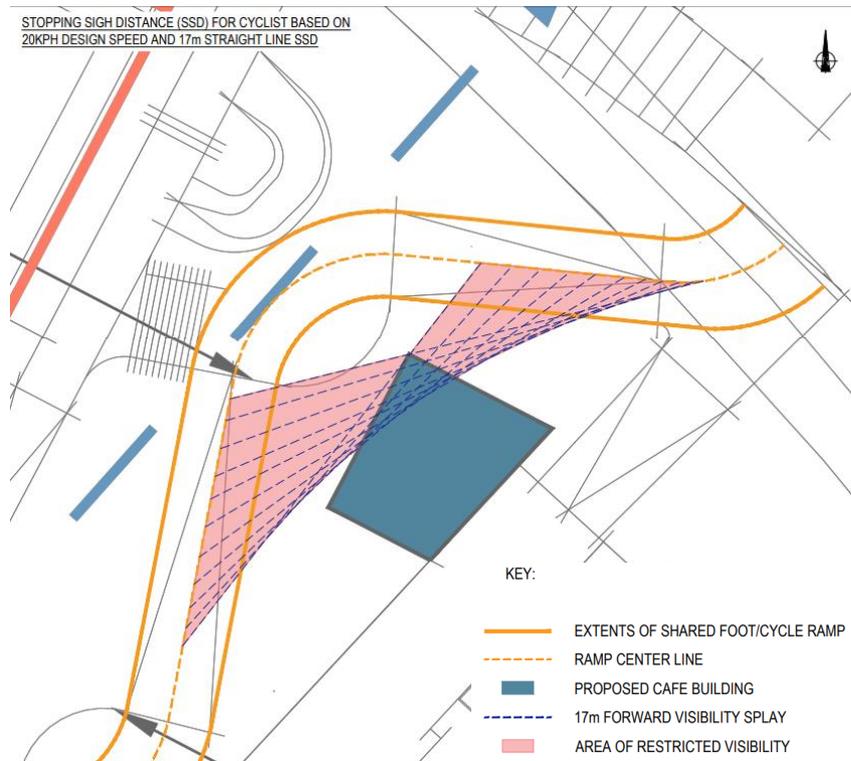
5.5 Mr Doyle's Alternative Scheme Options - Review

5.5.1 The LPA Urban Design SoC prepared by Mr Doyle, offers a series of alternative scheme options (App G. Figures 13 to 15) in a bid to create a more direct visual link through the site alongside an alternative ramp configuration to the north to address the Highways officers' concerns over the switchback ramp.

5.5.2 There are a number of issues with these alternative designs, which are intended to deal with RBC's directness requirements. Dealing with the ramp design first, I have the following observations of Mr Doyle's options:

- The design does not provide the shortest or fastest route, which is the criticism that RBC have given in their SOC (App.H para. 5.3.5) regarding the current proposals. The suggested design still provides a zig-zag arrangement comprising of near 90 degree bends but with an alignment which will enable faster cycling on a shared path with cyclists likely to aim for the straightest path by cutting across the route at each bend. This would naturally increase the risk of higher speed collisions with pedestrians.
- The arrangement of the ramp around the café building reduces the forward visibility for a pedestrian or cyclist travelling along the link and would lead to an increased risk of collisions since users may not see another person travelling along the link, leaving a much shorter time to react. This restricted forward visibility is illustrated in the figure below which shows the required 17m forward visibility envelope for cyclists (corresponding with a 20kph design speed) at the top of the ramp being obstructed by the café building.

Figure 5.5: Forward visibility for cyclists on My Doyle's alternative ramp design



In comparison, the switchback ramp proposal that forms part of the application achieves very good visibility across the full extent of the switchback (see Figure 5.2a to 5.2c) meaning a cyclist or pedestrian can see all potentially opposing movements and have time to respond accordingly.

- At two of the turns along Mr Doyle's alternative option designs, stepped access points are provided. These however lead directly onto the link where there is no widening or additional space provided for pedestrians to wait. This results in a greater potential for conflict between a pedestrian stepping out into the path of a faster moving cyclist.
- The difference in level between the ramp and the ground towards the top of the ramp in particular means that guardrails will be required, thereby reducing the effective width of the ramp to well below 3.0m.
- In comparison, the switchback ramp proposals widen the path around the bends (where the pedestrian steps are located) which therefore offers more space and time for a pedestrian to wait, if necessary, without obstructing others should there be a cyclist in their path, and its alignment correlates with adjacent made ground levels removing the need for obtrusive and restrictive guardrails.

- 5.5.3 On review of the wider n-s link alternative options presented in Mr Doyle's statement, two of the three options (Versions A and B) retain the broad principles of the current development proposals with respect to the layout and location of the n-s crossings and northern turning head.
- 5.5.4 Therefore, the concerns raised by the LPA Highways Officer regarding reversing vehicle movements (discussed in Section 7.2 of this evidence) would apply to these two options as a larger HGV would similarly be required to drive onto the link in a forward direction prior to reversing back into the turning head.
- 5.5.5 Version B is broadly similar in dimension to the application scheme in this regard. However, Mr Doyle's 'Version A' (SK03) has a smaller turning head area to the west of the crossing than the application scheme (9m in length compared with 13.2m in length) which would mean that the majority of delivery vehicles, even smaller LGVs, would need to overrun onto the pedestrian/cycle route and would find it very difficult to turn around at all without overrunning the parking and landscaping areas (**Appendix H**).
- 5.5.6 I have previously demonstrated (shown in swept paths on **47500/5501/012A** contained in **Appendix C**) that for the proposed development scheme, LGVs are able to turn at the northern turning area without any interaction with the crossing.
- 5.5.7 A final option, Mr Doyle's 'Version D' (SK 07) (there is no version C), presents the most significant change across the site with the shortening of the internal access road, the removal of The Goods Office building, the loss of parking and removal of the northern turning area. However, this option does not provide a suitable turning head facility at all, substantially limiting the ability to service the site with larger vehicles. Since there is no suitable turning facility, the only apparent solution would be for larger goods vehicles to park on Vastern Road and wheel all goods through the site along the pedestrian/cycle link, including refuse bins.
- 5.5.8 It may be possible to create a larger turning area at the southern end of the site by removing on street parking, but even if this additional loss of parking were acceptable to RBC, refuse operators would need to wheel the bins over 60m from the bin store at The Generator building and over 80m from The Coal Drop building to the waiting refuse truck. This is well beyond the 10m maximum RBC guideline distance and would not be acceptable.

6 Towpath Connection

6.1 Design Principles

- 6.1.1 The footway and cycleway connections through the site were developed by the design team on the basis that the link down to the towpath from the site would be dedicated for pedestrians only and cyclists would therefore need to dismount.
- 6.1.2 Existing RBC policies do not require this connection to be a cycle route, and therefore Paragraph 110 of the NNPF which requires designs to reflect national guidance should only relate to pedestrian route design.
- 6.1.3 RBC's Highway SoC state (App H para. 5.5.12) that the proposals for this link to be a pedestrian only connection, it will *"be in conflict with the clear Policy requirements within Policy CR11"* and require *"a development that should maintain and enhance public access along and to the Thames and improved permeability for pedestrians and cyclists"*.
- 6.1.4 Firstly, the proposals do facilitate greater pedestrian and cycle permeabilities for the key movement corridor which, as illustrated in *'Figure 5.3 Station/River Major Opportunity Area Strategy'* of the Local Plan is the Station to Christchurch Bridge. This satisfies Part ii) of CR11 and paragraph 5.4.6 of the site specific Local Plan policies.
- 6.1.5 Secondly, the provision of a footpath down to the towpath undeniably enhances public access through the development site and to the River Thames which in turn complies with the first line of Local Plan policy 'CR11g Riverside' which states *"Development should maintain and enhance public access along and to the Thames,..."*.
- 6.1.6 There is, in any event, no evidence that the towpath will be converted to a cycleway, and even if there were, the LCWIP shows on the proposed infrastructure plan (App J, dwg Ref.39118-TP-RBC-001D), also contained in **Appendix J** of this evidence, that this route would be classified only as a leisure route in the future strategy, not forming part of their strategic or local cycle network strategy.

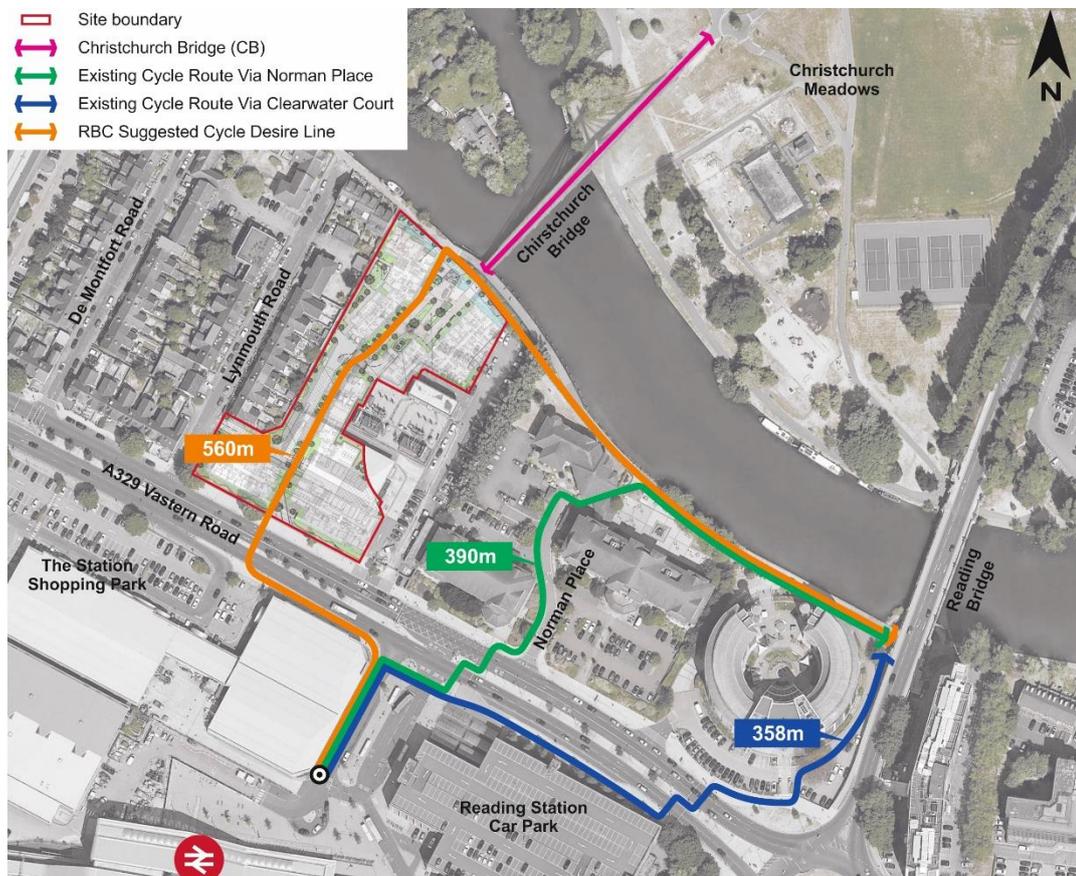
6.2 Assessment of Future Cycling Desire Routes

- 6.2.1 Furthermore, for the reasons I set out in Section 6.6 of the Transport SoC, I do not believe that this link should be designed to accommodate cyclists and in reality, if this link were to permit cyclists in the future, this would likely lead to increasing conflicts between users at the narrow point on the towpath where the two paths would meet.

6.2.2 Also, on review of the possible future cycling routes in the area, were there to be a connection to the towpath the route created would be neither more direct, quicker or more convenient than the existing cycle links going east or west from the station area.

6.2.3 A route comparison between the future cycle route that is suggested by RBC (App.H para 5.5.7) via the site and going eastwards along the towpath, which they suggest will be the new desire line, and the existing route via Norman Place is given in **Figure 6.1** and discussed further below in 6.2.4 to 6.2.6.

Figure 6.1: Cycle routes for access to/from Reading Station to Thames Towpath (east of site)



6.2.4 For those leaving the station area and seeking access to the towpath to the east of the site (which is part of the NCN R5), cyclists would likely continue to use Norman Place via the staggered signalised crossing on Vastern Road to the east of the Trooper Potts way signals which provides the most direct route and shorter (green route in Figure 6.1). As an alternative, cyclists have also been observed use the path that borders the Thames Water building to the east and while it is not clearly signed for cycles to use, it has become a more established point of access for cyclists who know the area. Both these routes provide a shorter and more direct journey to give access to the towpath to head in an eastbound direction toward King's Meadow.

- 6.2.5 In the scenario presented in RBC's Highways SoC (para 5.5.7), it is outlined that opening the link up to cyclists would in turn be the future desire line between the town centre and NCN R5. In practice this means that a cyclist leaving the northern station interchange would counter-intuitively head westbound along Vastern Road crossing at the proposed toucan crossing, and then proceeds through the development site and turning right onto the towpath to head eastbound (orange route in Figure 6.1).
- 6.2.6 This is not a direct route in comparison to the routes via Norman Place and around the Thames Water building and in my opinion is not a key cycle movement that the development proposals should need to account for. Notwithstanding these points, the site will in fact provide cycle access to the Towpath to the east, should a cyclist need to use this route, by going up the switchback ramp and then down the existing Christchurch Bridge ramp.

6.3 Gradient Review

- 6.3.1 The other focus of the discussions relating to the towpath presented in RBC's Highways SoC are the gradients outlined in the DfT's Inclusive Mobility design guidance published in 2005. The Highways officer has stated in their Statement (App. H para 5.5.5) that the pedestrian links should adhere to a maximum gradient of 1:21 in line with Inclusive Mobility. Inclusive mobility (2005) provides best practice guidance for design that organisations can apply but the "guidelines do not have any legal status" ("1 Introduction", para. 6). Therefore, by its nature, it provides more general rules/recommendations and provides a level of flexibility in its application.
- 6.3.2 Notwithstanding this, the guidance notes that in the case of maximum pedestrian ramp gradients: *'Most guidelines also agree that 5 per cent (1 in 20) is preferred.'* There is no specific reference to 1:21 gradients.
- 6.3.3 The shallower gradients are not stated as guidance in Inclusive Mobility, but merely as being *'described in the Swedish publication Streets for Everybody'* and that they may be *'regarded as a counsel of perfection as the terrain in many places imposes steeper gradients than 2.5 per cent, but the standard of 5 per cent should be borne in mind when designing new footpaths and pedestrian areas'*.
- 6.3.4 In any case, this suggested gradient (5%) is discussed within the Guidance under Section 3 for 'Footways, footpaths and pedestrian areas', which doesn't cover ramps. The section heading clearly states this *'3.2 Gradients (see Section 8.4 for design of steps and ramps)'* (my emphasis), and I discuss this in para. 6.3.5 below. Therefore, the gradient of 1:21 suggested by RBC is not appropriate for this part of the development.

6.3.5 As defined by the guidance (para. 3.2 and 8.4.2) “A ramp is generally defined as a pathway with a slope of more than 5 per cent” or a gradient of more than 1 in 20. In line with this, the proposed link to the towpath is designed as a ‘ramp’ by way of having a gradient of more than 1:20 and in that context, a different set of gradients and lengths are clearly applicable to those in RBCs SoC. The applicable ramp gradients, which are given in the extract below, are limited in length to ensure maximum rises are not exceeded and landing/resting places should be provided.

Figure 6.2: Inclusive Mobility Ramp Gradients

Going of a flight	Maximum gradient	Maximum rise
Not exceeding 2m	1:12	167mm
Not exceeding 5m	1:15	333mm
Not exceeding 10m	1:20	500mm

(Extract taken from Inclusive Mobility, 2005, “8.4.2 Ramps”)

- 6.3.6 With the exception of the 1:15 section of the link (dealt with in Paragraph 6.3.7 of this evidence), the towpath link complies with the maximum ramp gradients outlined in the Inclusive Mobility guidance for pedestrians.
- 6.3.7 I acknowledge that one of the 1:15 ramp sections, which rises by 345mm over a 5.175m length, at the top of the towpath connection is more than the maximum rise suggested by the guidance of 333mm, by 12mm. This minor design alteration can be addressed through the detailed design of the site to fully accord with the guidelines, as illustrated in **Appendix F**. This shows that the ramp can readily be altered to achieve the maximum change in level of 333mm without a noticeable difference to the layout providing a suitable gradient of 1:15 over three short (5.0m) ramp sections without comprising the design and quality of the rest of the link.
- 6.3.8 RBC’s SoC (App. H para. 5.5.5) states that the site is relatively flat and therefore the site should adhere to gradients of 1:21. It is clearly the case that the site is not relatively flat. There is a significant level difference between the site and the southern towpath of 2.17m and the site itself is required to maintain the elevated level at building entrances to avoid any development in the flood plain and facilitate evacuation routes. It may be possible to design the connection from the towpath to a continuous 1:21 gradient, but in my opinion, a series of three shorter ramp sections as proposed, at 1:15 with resting places every 5.0m, is a more appropriate design. This also allows the flat areas of the ramp to coincide with the building entrance points at Christchurch Wharf (Block E) and Coal Drop Building (Block F), whereas the 1:21 slope would encroach into the Coal Drop Building entrance area, as illustrated in **Appendix F**.

6.3.9 It is also the case that within Mr Doyle's Urban Design SoC, an alternative design of the proposed n-s link ramp (Figure 12) was prepared with the intention of addressing the concerns that RBC have raised regarding the current development proposal. However, this alternative scheme (reflected in all of Mr Doyle's Versions A, B and D) illustrates a link to the towpath as per the Appellant's development proposal, as a ramped footpath, and therefore all of the alternative options presented in RBC's case also do not permit cycling down to the southern towpath, or achieve a 1:21 gradient.

7 Servicing and Deliveries

7.1 Number of Servicing and Delivery Vehicles

- 7.1.1 The trip generation associated with the overall development was set out in Section 5.3 of the TS report prepared by Stantec in January 2020. During the planning application process, the trip rates which formed the basis of the future trip generation assessment were agreed with RBC Highways. This provided the peak hour 'total person trips' with a corresponding peak hour car/van trip generation based on local area travel to work mode share data. The traffic impacts associated with the future development have not been made a reason for refusal, and RBC Highways have accepted the site's traffic generation forecasts (RBC Committee Report para 4.13.80).
- 7.1.2 Although the number of trips to and from the site have been agreed, this section of my evidence provides a more detailed assessment of the predicted volume of delivery and servicing vehicles estimated to be generated by the site on a day to day and weekly basis. This supports the wider evidence presented in the report regarding the servicing strategy and responds to a specific concern raised by another Rule 6 objector.
- 7.1.3 The predicted number of HGVs was reviewed during post application liaison with RBC Highways (Stantec TN005) where it was outlined that the development proposals for 209 units would lead to a maximum value of 1.6 HGVs per day, but it would be reasonable to presume that there could be between 0 and 1 HGV's on a typical day including refuse vehicles.
- 7.1.4 Mr Sarafian of the Thames Path Residents Association (TPRA) raises concerns in Section 2 Part B 'Traffic Congestion' of his SoC stating that the volume of delivery and servicing trips, given the reduced volume of residential parking provision on site, is unlikely to be accommodated for within site and will thereby impact the surrounding roads.
- 7.1.5 Building on the information submitted to RBC in the post submission responses, a revised delivery and servicing TRICS assessment has been prepared for this evidence to quantify the volume of all deliveries (not just HGVs), also reflecting the proposed site's lower parking provision.
- 7.1.6 The revised assessment has been assessed based on a recognised industry standard TRICs assessment, which uses survey data recorded from selected comparable residential sites which have a parking ratio of less than 1 space per unit and includes residential sites from within London. A total of 8 sites have been selected and the results of the servicing and deliveries numbers are summarised in the table below. The more detailed output for each site is contained with **Appendix E**.

Table 7.1: Servicing and Delivery Trip Rates and Generation

Site Ref.	No. of Dwellings	Parking	Parking Ratio	Servicing and Delivery Trips by Car/LGV/OGV					
				Total Trips (2-way)	Trip Rate	LGV %	OGV1 %	OGV2 %	CAR %
BM-03-C-01	160	83	0.5	21	0.131	90%	10%	0%	0%
BT-03-C-02	472	151	0.3	25	0.052	28%	8%	0%	64%
HF-03-C-03	91	60	0.7	7	0.081	81%	0%	0%	19%
HG-03-C-01	255	110	0.4	37	0.145	100%	0%	0%	0%
HM-03-C-02	194	53	0.3	65	0.337	72%	9%	0%	19%
HO-03-C-04	203	142	0.7	83	0.409	76%	22%	2%	0%
IS-03-C-07	185	86	0.5	57	0.307	93%	0%	0%	7%
TH-03-C-04	83	25	0.3	10	0.120	80%	20%	0%	0%
Average				0.186	77.6%	8.6%	0.3%	13.5%	

Delivery and Servicing Vehicle Trips	Flow	Estimated Trip Gen	LGV	OGV1	OGV2	CAR
55 Vastern Road Development (based on 209 homes)	Two-way	39	30	3	0	5
	One-Way	19	15	2	0	3

Note: TRICS records HGVs as Ordinary Goods Vehicles 1 (OGV1) and OGV2 based on the vehicle size. OGV1 includes all commercial rigid vehicles over 3.5t with two or three axles and includes 10m HGVs, box vans and similar larger panel vans. OGV2's are All goods vehicles with 4 or more axles.

7.1.7 This assessment shows that the development would likely generate approximately 19 servicing and delivery trips across a daily period or 114 vehicles over a weekly 7 day period when factored up, assuming 70% of the weekday figure on a Saturday and 30% on Sundays, since these are typically much quieter days for loading and unloading activities. The above includes all service and delivery vehicles including refuse, recycling, deliveries, removals, and general maintenance service vehicles.

7.1.8 Analysis of the vehicle classifications provided by the TRICs surveys shows that across the 8 sites reviewed 77.6% of these trips would be carried out by a Light Goods Vehicle (LGV) while the remaining trips are those carried out by a motor car (13.5%) OGV1 (8.6%) and OGV2 (0.3%) vehicles. There would also be a small number of trips in addition to the above which are delivery trips carried out by motor cycles/scooters.

- 7.1.9 Based on these proportions, the proposed development site could generate 17 LGVs and 2 OGV1 arrivals across a daily period. OGV1 vehicles comprise of a range of classifications including all rigid type vehicles over 3.5t with two or three axles including 10m HGVs, box vans and similar larger panel vans. Given the range of vehicles OGV1 covers, of the 2 OGV1's predicted it would be reasonable to expect up to a maximum of 1 large HGV entering the site per day (max 10m length), which aligns with the previous assessment work completed in TN005.
- 7.1.10 The overall number of service and delivery vehicles arriving to the site equates to just 2 to 3 vehicles per hour, assuming most of these trips will typically be undertaken between the hours of 0800 and 1700. In reality, deliveries are now undertaken over an extended day, hence the hourly flows are likely to be lower than assumed here. This level of delivery and servicing can comfortably be catered for within the proposed development site via either kerbside loading (at permitted locations) or from within the on-street parking bays located internally within the site (when more likely to be empty during the working day). No loading or unloading would need to take place from local residential roads.

7.2 Site Strategy

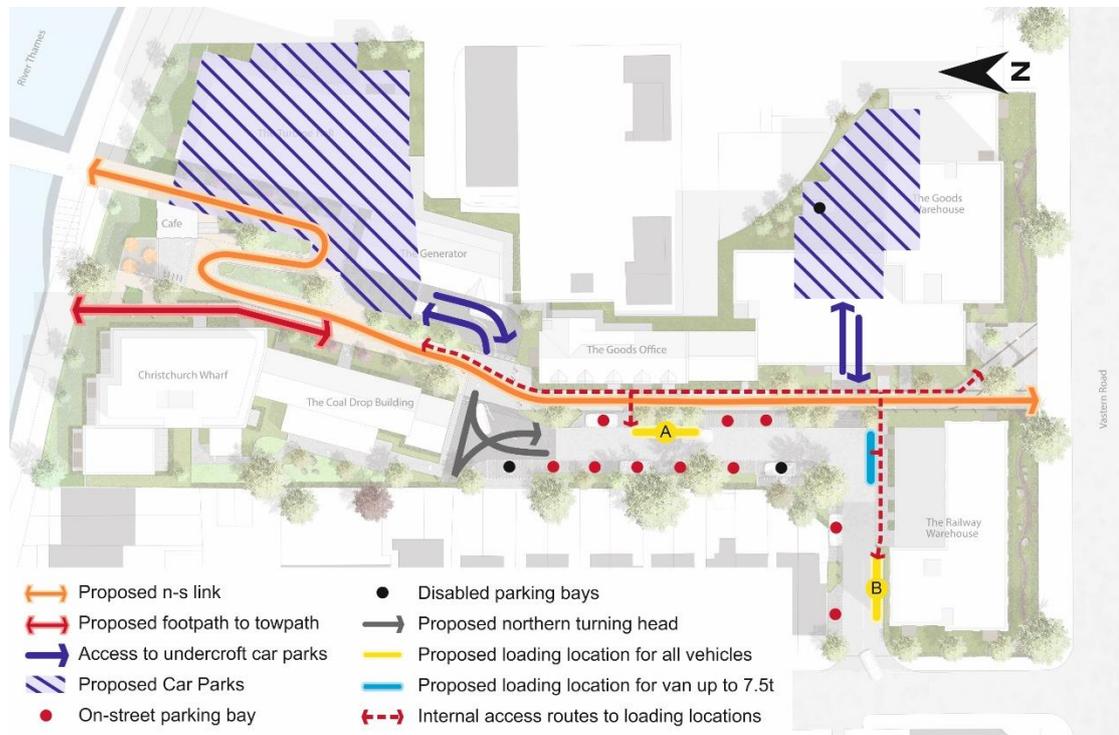
- 7.2.1 RBCs SoC (App. H para 5.6.7) incorrectly assumes that service/delivery vehicles will use the turning head as a parking space/delivery zone.
- 7.2.2 The northern turning head is not planned to facilitate loading/unloading by HGV's and would be signed to prohibit parking and loading at any time.
- 7.2.3 I set out below why this is the case by explaining how the site servicing strategy will function (including the role of the turning head), and also why the RBC assumed operation is in fact not possible.

Site Servicing Strategy (Loading and Unloading)

- 7.2.4 The proposed internal access road is intended to be used for kerb side loading/unloading by all vehicle types. A swept path assessment has previously been undertaken to illustrate the ability of a large 10m HGV and 12m HGV vehicle to use the turning head to turn around without the need to reverse onto the n-s link, and to then park up on the kerb side facing south. There are 2 separate locations where this loading would take place while maintaining sufficient width for a car to pass through the site. This is shown on drawing **47500/5501/014** contained in **Appendix C**.
- 7.2.5 Smaller service and delivery vehicles will be able will be able to carry out kerbside loading/unloading, but also be able to make use of the 10 proposed on-street parking bays if available at the time of accessing the site. The location of loading places across the site are

illustrated in **Figure 7.1** and supported by the swept path information shown in **47500/5501/014**.

Figure 7.1: Site Loading/Unloading Places



7.2.6 As described in 6.7.23 of my Transport SoC, servicing or delivery movements to the buildings in the northern half of the site (The Turbine Hall/ The Generator and The Coal Drop/ Christchurch Wharf) would be carried out from the internal road adjacent to The Goods Office building in the centre of the site (Location A on Figure 7.1). Goods would then be carried or wheeled to the desired building which is typical practice in developments comprising large blocks of flats.

7.2.7 This approach is in accordance with Manual for Streets guidance which states in Section 6.8, Service Vehicles, that:

'The design of local roads should accommodate service vehicles without allowing their requirements to dominate the layout.'

and that

'Larger vehicles which are only expected to use a street infrequently, such as pantechnicons, need not be fully accommodated – designers could assume that they will have to reverse or undertake multipoint turns to turn around for the relatively small number of times they will require access.'

7.2.8 Based on the number of predicted deliveries set out in **Section 7.1**, and the provision of loading areas shown in Figure 7.1, I believe that the site can comfortably and safely accommodate the predicted number of delivery and servicing trips without impacting the surrounding local roads, or affecting the n-s link, and that the design is in accordance with Manual for Streets guidance.

Reversing Movements at the northern n/s link crossover

7.2.9 The council's Highway officer accepts in their SoC (Para. 5.6.1) that a controlled reversing movements over the pedestrian and cycle link for refuse collection is acceptable stating that he is *"...content that vehicles can cross the shared footway / cycleway in a forward gear or a controlled manner i.e. by way of a banksman."*

7.2.10 The weekly Refuse vehicle is the only vehicle that must reverse onto the n-s link for access to The Turbine Hall undercroft bin store. The site is designed so that all other larger vehicles will need to turn right towards the crossing and then reverse away into the turning head. However, the LPAs Highway SoC quotes in para. 5.6.12 that:

"...the layout will result in HGVs reversing over the footway / cycleway at a point at which drivers will have extremely limited visibility of pedestrians / cyclists leading to conflict between HGV's and pedestrians /cyclists."

7.2.11 This matter was discussed in detail in my Transport and Highways Soc (para. 6.7.9 to 6.7.11). In summary:

- No cars or light goods vehicles servicing the site will encroach onto the footway/cycleway at all.
- The above make up the vast majority of vehicles servicing the site.
- Only a weekly refuse truck will need to reverse onto the foot/cycleway – this has been stated as acceptable by RBC.
- For the very few larger HGVs that may need to service the site, these will not reverse onto the pedestrian cycle link at all, as I describe further below.

7.2.12 For all large HGV and infrequent movements (excluding refuse vehicles) arriving at the site (max. approx. 1 per day), there is no requirement for the vehicles to reverse onto the shared link (and it is indeed not possible for larger HGVs as I describe below). Such vehicles will never be reversing onto the crossing, only reversing off the crossing as shown in the swept path assessment drawing **47500/5501/011B** given in Appendix G of the Transport SoC and **Appendix C** of this evidence. It will be physically impossible for lager HGVs to undertake the

manoeuvre suggested by RBC (reversing onto the link) without significantly overrunning kerbs, landscaping and a disabled parking bay, as illustrated in the swept path drawing **47500/5500/015** in **Appendix G**, so will not arise.

- 7.2.13 Drivers will have full sight of the link on their approach in a forward gear. At the point where the vehicle begins to reverse, the vehicle will have already been on the crossing therefore pedestrians and cyclists will have been able to see this and wait for the very short time when the vehicle reverses away and off the link.
- 7.2.14 Nonetheless RBC have continued to object to the development proposals at the northern crossover because of the apparent need for HGVs reversing over the n-s link. The Council's SoC prepared on Urban Design matters, offers a series of alternative scheme options presumably to satisfy RBC concerns. These have been reviewed and discussed in **Section 5.5** of this evidence, and other than Version B which is similar to the current proposals, the others wouldn't be able to accommodate service vehicles in the safe way demonstrated by this application.
- 7.2.15 I noted in my Transport and Highways SoC (para. 6.7.30 to 6.7.35) that there had been no injury accidents involving reversing HGV's at similar locations. The LPAs Highway SoC states that these are not comparable sites. I have therefore undertaken a review of *all* injury accidents in central Reading for the past 5 years involving an HGV and a pedestrian or cyclist. **(Appendix I)**. None of the recorded collisions involved HGV reversing manoeuvres.

8 Rule 6 Statements and 3rd Party Objections

8.1 Introduction

8.1.1 This section of the evidence summarises issues raised by Rule 6 (R6) and other 3rd Party objectors, along with our responses to these. R6 Parties that have raised matters relevant to this evidence are:

- Reading Cycle Campaign (Mr K Elliott)
- Thames Path Residents Association (Mr Sarafain, 20 Lynmouth Road)

8.1.2 Additional objections with specific transport and parking comments have been raised by:

- Local Residents at Lynmouth Road (specifically Mr Sarafain at 20 Lynmouth Road as above)

Reading Cycle Campaign (RCC)

8.1.3 In their correspondence the RCC state that:

“... we considered the wholly unsuitable design of the southern ramp to the cycle / pedestrian bridge over the River Thames (Christchurch Bridge)”.

8.1.4 And that:

“The proposals from Berkeley involving two 180 degree switchbacks, poor sight lines and weak linkage to Vastern Road that do not provide the quality cycle route demanded.”

- **Response:** Concerns regarding the design and suitability of the proposed switchback ramp and n-s link have been covered in detail in this evidence (see **Section 5.1 to 5.4**) and also in Chapter 6 of the Transport SoC.

Thames Path Residents Association (TPRA)

8.1.5 The TPRA welcome the redevelopment of the site but have given comments over concerns of traffic congestion and deliveries, stating:

“With over 150 residents – most without cars – the demand for deliveries of food, furniture, white goods, ebay purchases and the like will be significant and we feel that this has been under-appreciated in the plans.”

Even assuming only 2 deliveries per week per person and allowing a minimal 10 minutes for delivery, the site will require at least 50 hours of delivery per week. This is unlikely to be accommodated within the site and thereby impact on surrounding roads.”

- **Response:** A detailed traffic forecast has been presented in this evidence (see **Section 7.1**) to demonstrate the generation of servicing and delivery vehicles to the site. Based on similar residential development sites that have a parking ratio of less than 1 space per unit, Paragraphs 7.1.4 to 7.1.10 and **Table 7.1** show that the proposed 209 home development would generate 19 delivery and servicing vehicles across a single day.

The site provides several locations from which servicing and deliveries will be carried out (see section 7.2), which enables multiple delivery vehicles in the site at any one time whilst not blocking access for other vehicles. The predicted number of delivery and servicing vehicles in combination with the availability of loading locations means there would not be a material impact on the surrounding local roads with all loading and unloading undertaken from within the site.

9 Summary of Evidence

9.1 North-South Link Rationale

- 9.1.1 RBC RfR 1 suggests that the north-south link proposals do not comply with any of the design standards and that the development should provide a high quality route which is the fastest possible route through the development by way of a straighter alignment.
- 9.1.2 This evidence alongside my previous Statement of Case clearly demonstrates this is a high quality link which proposes to deliver a new pedestrian and cycle route that provides a safe, coherent, comfortable, and attractive link and significantly faster and more direct than the existing cycle route via Norman Place.
- 9.1.3 It was not the intention of the proposals for the n-s link to be the fastest possible route as there is not a requirement for it to be. The journey time through the site from the point of entry at the bridge down to the bottom to the switchback would take 15 to 20 seconds. This journey time will not be significant in the context of a cyclist's full journey. In my opinion, the proposals comply with the most recent NPPF requirements and CR11g policy in RBC Local Plan.
- 9.1.4 Using RBC's methodology for measuring directness of routes which has been taken from their LCWIP, the proposed route from Gosport Road to Reading Station through the site compared to the corresponding motor vehicle route via Reading Bridge would achieve the highest score of 5 for directness and therefore based on RBCs own assessment criteria is direct.
- 9.1.5 Directness is also influenced through the ability to minimise the effort required to cycle, by enabling cyclists to maintain some momentum. The switchback ramp is designed with short, open ramp sections creating good visibility and views through the wider area to the continuation of the route without the feeling of counter-intuitive doubling back. The design at the proposed switchback turns allows cyclists to maintain their momentum as do the crossing points within the site where pedestrians and cyclists have priority over cars. Switchback ramp designs are used widely to move people from one level to another with a number of examples across Reading that also form part of the existing cycle network.

9.2 Link Width

- 9.2.1 While the width of the n-s link is not raised as an RfR, it forms part of the general discussion of quality. National cycle guidance outlines that a 3.0m wide shared path can accommodate up to 600 multimodal movements every hour (300 pedestrians and 300 cyclist) and therefore I do not believe that the link will throttle capacity, contrary to the statements given by RBC Urban Design assessment.

9.2.2 Through setting out the proposed switchback ramp, I have demonstrated that the width proposed gives sufficient room for multiple users to travel side by side.

9.3 Mr Doyle's Alternative n-s Link Design

9.3.1 The LPA Urban Design SoC offers a series of alternative scheme options to satisfy the LPA concerns regarding the directness of the n-s link and the switch back ramp. These options are not suitable and present several other problems namely:.

- The designs do not provide the shortest or fastest (straight) route, which is the criticism of the current proposals. The suggested design still provides a zig zag arrangement, but one which may encourage faster cycling on a shared path with cyclists cutting across the path thereby increasing the risk of collision with pedestrians or wheelchair users.
- The alternative ramp designs have reduced levels of forward visibility around the café building for a pedestrian or cyclist travelling along the link which may result in a further increased risk of collisions between users.
- The alternative ramp designs would require the use of guardrails effectively reducing their width to well below 3.0m
- No widening or additional space is proposed at the stepped access points that lead directly into on to the link increasing potential for conflict between a pedestrian stepping out into the path of a faster moving cyclist,
- The alternative designs do not propose alterations to the footpath link to the towpath, which RBC have said should permit cycling.
- The alternative designs (Versions A and D) reduce the scope or ability to effectively service the site by reducing the size of the vehicle turning head or removing it completely.

9.4 Towpath Connection

9.4.1 Existing RBC policies do not require the proposed link from the site to the southern River Thames Towpath to permit cyclists. However, RBC have now stated that this must be provided and that the gradient of the connection be adapted accordingly.

9.4.2 The proposed link to the towpath must be ramped to overcome the 2.17m level difference between the site and the towpath (the site being higher). With the exception of minor excess rise at the 1:15 section of the link, which can be designed out in detailed design, the towpath link complies with the maximum ramp gradients for a pedestrian ramp as required by Inclusive Mobility guidance.

- 9.4.3 I do not believe that this link should be designed to accommodate cyclists and nor is it practical. If this link was to permit cyclists in the future this would likely lead to negative outcomes by increasing conflicts between users where the two paths meet at the towpath.
- 9.4.4 Further to this, on review of the future cycling routes in the area, a cycle link from the site down to the towpath going eastwards would not be the desired cycle route given the availability of other existing routes to/from the towpath that would offer a more direct journey to/from the Station and beyond. In any case the site will in fact provide cycle access to the Towpath to the east by easily going up the switchback ramp and then down the existing Christchurch Bridge ramp.
- 9.4.5 In line with the policies in CR11g, the proposals do facilitate greater pedestrian and cycle permeability for the key movement corridor, which is the Station to Christchurch Bridge, and will also enhance public access through the development site and to the River Thames via the pedestrian link to the towpath.

9.5 Servicing and Deliveries Strategy

- 9.5.1 The traffic impacts associated with the future development has not been made a reason for refusal and RBC Highways have accepted the site's traffic generation.
- 9.5.2 A concern raised by a 3rd party objector suggests the site would have adverse impacts on the local residential street due to the high volumes of deliveries to the site, which would be compounded further by a lower parking provision proposed at the site.
- 9.5.3 A detailed assessment of other residential sites shows that the development would generate approximately 19 servicing and delivery trips across a daily period or 114 vehicles over a 7 day period. This includes all service and delivery vehicles including refuse, recycling, deliveries, removals, and general maintenance service vehicles.
- 9.5.4 The overall number of service and delivery trips equates to no more than 2 to 3 vehicles per hour on the basis that most of these trips will typically be undertaken between the hours of 0800 and 1700. 77.6% of these trips would be carried out by a Light Goods Vehicle (LGV) while the remaining trips are those carried out by a motor car (13.5%) OGV1 (8.6%) and OGV2 (0.3%). The majority of the OGV1 category deliveries are likely to be larger 6 wheel transit vans and box vans, with a much smaller proportion of longer vehicles (up to 10m in length). Based on this, the site is likely to need to accommodate less than 1 larger (c.10.m long) HGV per day, and possibly a single OGV2 per month.
- 9.5.5 The proposed internal access road allows for kerb side loading/unloading by all vehicles including large HGVs from 2 separate locations whilst maintaining sufficient width for a car to pass through the site. Smaller service and delivery vehicles will be able will be able to carry

out kerbside loading/unloading from the same locations, but also able to make use of the 10 proposed on-street parking bays if available at the time of arrival.

- 9.5.6 The northern turning head is not planned to facilitate loading/unloading and would be signed to prohibit parking and loading at any time. The only exception to this will be the weekly refuse collection vehicle which is required to temporarily wait to collect bins from The Coal Drop and Christchurch Wharf Buildings. Delivery movements to the buildings in the northern half of the site would be carried out from the internal road adjacent to The Goods Office building in the centre of the site with goods carried or wheeled to the desired location. It is not possible for larger HGVs to service the site in the manner suggested by RBC.
- 9.5.7 It is clear from the result of the trip assessment and site layout that the proposals will not have an adverse impact on the surrounding local roads with the predicted volume of delivery and servicing trips able to be accommodated within the development.

9.6 Reversing Movements within the Site

- 9.6.1 The weekly refuse vehicle is the only vehicle that must reverse onto the n-s link for access to The Turbine Hall undercroft bin store which would be undertaken in a controlled manner.
- 9.6.2 I have demonstrated that the vast majority of vehicles, including a range of LGVs are able to safely turn around within the turning head without the need to cross over the n-s link at all.
- 9.6.3 The northern turning head has been designed so that for infrequent larger HGVs turning around, they must turn right onto the crossing (in a forward gear with full sight of the crossing) and then reverse back away into the head towards the western edge of the site. In other words, they do not reverse onto the link, but only off it, when pedestrians and cyclists will be able to see them blocking the link. In my view, this is safe and is in accordance with the Manual for Streets guidance that designs '*should accommodate service vehicles without allowing their requirements to dominate the layout*'.

9.7 Conclusions

- 9.7.1 The design clearly provides a highly accessible development in compliance with policy that will deliver a significantly improved route, safe and attractive to all users. The development has also been demonstrated to have no detrimental impact on the local highway network or safety. Suitable access is provided for all potential users.
- 9.7.2 The development will create a completely new, safe and attractive pedestrian and cycle route between the town centre/Reading station and Caversham that reflects a significant improvement in terms of permeability and connectivity compared with the current route via Norman Place.
- 9.7.3 Overall, I do not believe that Reason for Refusal 1 and the other matters raised in relation to transport matters, is justified.