

Appendix A BW Policy Assessment Note

POLICY ASSESSMENT NOTE: NORTH/SOUTH SHARED PEDESTRIAN CYCLE ROUTE**53-55 VASTERN ROAD, READING (RBC PLANNING APPLICATION REFERENCE 200188)****1. Introduction**

1.1. Following a meeting held on Monday 14th September 2020, with Jonathan Markwell (Case Officer – Reading Borough Council) and Darren Cook (Highways Officer – Reading Borough Council), some concerns were noted in relation to the proposed north/south shared pedestrian/cycle route, which extends through the above site. These concerns raised by RBC are summarised as follows:

- A. There is potential for conflict between cyclists and pedestrians (some of whom would use the steps proposed while others would not), including, as a result of limited visibility near to the proposed switchbacks.
- B. There is potential for abuse of the route by cyclists taking shortcuts.
- C. The route is not straight and therefore not in accordance with policy which requires a direct route.
- D. It is not legible and lacks a clear vision of where users need to go/get to.
- E. The route may not be attractive and well used.

1.2. As a result, it was agreed that a detailed note setting out an explanation of how the design of the route was conceived and how it is considered to accord with adopted policy and guidance, would be created to aid further assessment. This note has therefore been prepared by Barton Willmore on behalf of Berkeley Homes (Oxford and Chiltern) Ltd (BHOC) to summarise the rationale and policy justification for the proposed pedestrian/cycle route at 53-55 Vastern Road, Reading ("the Site") as part of planning application reference 200188 submitted to Reading Borough Council (RBC) in February 2020.

1.3. For ease of reference, structure of this note is as follows:

1. Introduction
2. Planning Policy context
3. Design Rationale
4. Technical Assessment
5. Policy Assessment

2. Planning Policy Context

- 2.1. RBC's Development Plan comprises the Local Plan adopted in November 2019, supported by 'other main planning policy documents', 'supplementary planning documents – topics' and 'supplementary planning documents – sites'. For completeness, Local Plan policies considered relevant to the proposed development are identified within Section 6 of the submitted Planning Statement.

For the purposes of this note which responds to concerns relating to the north/south pedestrian/cycle link, only the policies that are directly relevant are considered. In addition, although adopted in 2010 and therefore superseded by both the National Planning Policy Framework (NPPF) and the adopted Local Plan, the Reading Station Area Framework (RSAF) is afforded some weight by the current Local Plan and is included within the 'supplementary planning documents – sites' section of the Development Plan. Reference is therefore made below to relevant policies/sections of both the Local Plan and RSAF. In addition, it is noted that the RBC Highways Officer has referred to the new government guidance 'Local Transport Note 1/20 Cycle Infrastructure Design' (July 2020), therefore this document has also been reviewed and relevance references included below.

Local Plan

- 2.2. The Local Plan policies specifically of relevance to the proposed north-south pedestrian/cycle are noted below, namely Policies CR2, CR3 and CR11.

- 2.3. Part b of Policy CR2, Design in Central Reading, states:

Development will provide appropriate, well designed public spaces and other public realm, including squares, open spaces, streetscape, utilising high quality and well-maintained hard and soft landscaped areas, and public art, that provide suitable functions and interest, sense of place and safe and convenient linkages to adjoining areas. (BW emphasis)

- 2.4. Policy CR3, Public Realm in Central Reading, requires that proposals for new development make a positive contribution towards the quality of the public realm of the central area. Proposals will be assessed against criteria including:

- i. **All proposals on sites of more than 1 hectare will need to provide new public open space or civic squares integrated with surrounding development;**
- ii. **Imaginative uses of open space and the public realm, which contribute to the offer of the centre, will be encouraged, and new open spaces should be of a size and shape to be flexible enough to accommodate such uses. The provision of water features, trees (including street trees) and other planting, as well as hard landscaping, to create high-quality spaces, will be expected, where appropriate;**
- iii. **Development proposals adjacent to or in close proximity to a watercourse will retain and not impede existing continuous public access to and along the watercourses, and will provide legible continuous public access to and**

- along the watercourses where this does not currently exist;
- iv. **The design of developments adjacent to a watercourse, including the refurbishment of existing buildings, will be required to enhance the appearance of the watercourses and to provide active elevations facing the watercourses. Development that turns its back on the watercourses and results in blank or mundane elevations facing the watercourses will not be permitted;**
 - v. **The public realm should conserve and enhance the historic environment of the centre and the significance of heritage assets therein and their setting, including through layout, materials, hard and soft landscaping. There may be opportunities for areas of public realm to provide improved access to and visibility for heritage assets.**

2.5. Policy CR11, Station/River Major Opportunity Area, states that development will:

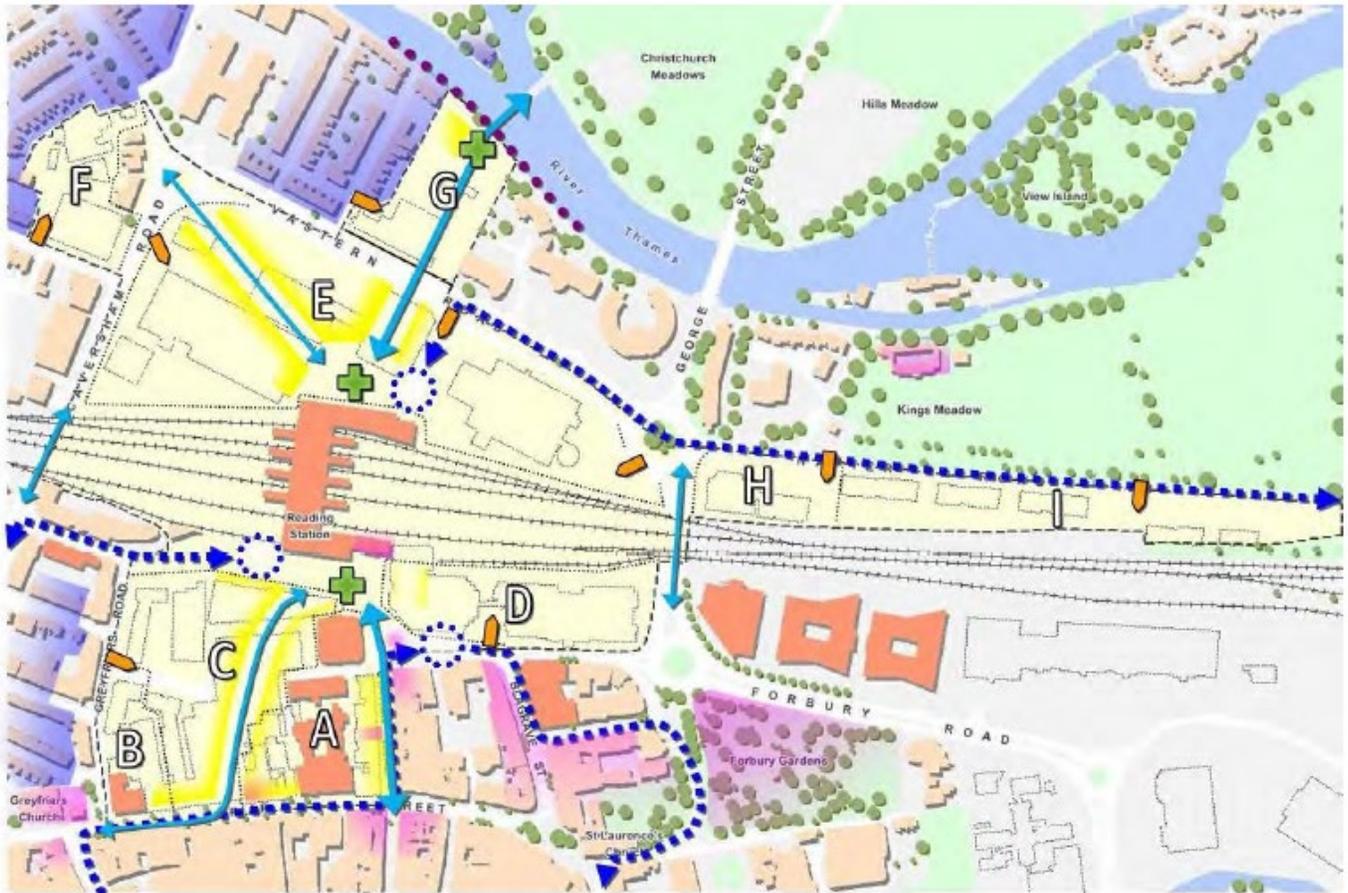
- ii) **help facilitate greater pedestrian and cycle permeability, particularly on the key movement corridors. North-south links through the area centred on the new station, including across the IDR, are of particular importance**
- iii) **provide developments that front onto and provide visual interest to existing and future pedestrian routes and open spaces**
- v) **provide additional areas of open space where possible, with green infrastructure, including a direct landscaped link between the station and the River Thames**

CR11g, Riverside:

Development should maintain and enhance public access along and to the Thames ... Development should continue the high quality route including a green link from the north of the station to the Christchurch Bridge, with potential for an area of open space at the riverside

2.6. Figure 5.3 illustrates the Station/River Major Opportunity Area. The Strategy identifies a key movement corridor through the Site, as well as a desired new area of open space and 'activation' area, as shown below. It is noted that paragraph 5.4.6 of the Local Plan states:

In particular, on the Riverside site (CR11g), achieving this north-south link is the main priority for the site, and this should be given substantial weight in development management.



Key

----- Sub-area boundary

Major Opportunity Area

Footprint of existing building in Major Opportunity Area

Existing building

Recent building or building under construction

Nearby sensitive location—low-rise residential

Nearby sensitive location—heritage assets

+ New area of open space

Vehicle access point

Key movement corridor (pedestrian and/or cycle)

Location of transport interchange

Proposed Mass Rapid Transit route

Retained or new public access along waterways

Activation of key routes and spaces with town centre uses

Sub-Areas

A CR11a: Friar Street and Station Road

B CR11b: Greyfriars Road Corner

C CR11c: Station Hill and Friars Walk

D CR11d: Brunel Arcade and Apex Plaza

E CR11e: North of the Station

F CR11f: West of Caversham Road

G CR11g: Riverside

H CR11h: Napier Road Corner

I CR11i: Napier Court

Figure 5.3: Station/River Major Opportunity Area Strategy

Reading Station Area Framework (RSAF)

- 2.7. Paragraphs 5.4.9 and 10.1.5 of the Local Plan set out that existing planning briefs such as the RSAF will remain in place, it is however noted that the RSAF contains a number of references to outdated policy. As noted above, it is accepted that the aspirations of the RSAF are afforded some weight in the determination of planning applications, given its status as a supplementary planning document.

2.8. Paragraph 2.18 of the RSAF identifies the enclosed electricity board site (the application site) as a major barrier to pedestrian movement in the Station Area, blocking direct access from the Station to the riverside footpath and cycle way.

2.9. Paragraph 3.6 of the RSAF states that:

The redevelopment of large sites provides the opportunity to secure landscaped public space and to extend public access. The layout of these will incorporate east-west and north-south routes to enhance movement and linkages across the area, whilst the construction of a pedestrian/cycle bridge linking the Area to Christchurch Meadows will further integrate and ensure good accessibility to adjoining open spaces. (BW emphasis)

2.10. Figure 4.1 of the RSAF, informed by a now outdated policy context, illustrates the strategy for the area. It includes a strategic-scale key corridor of movement which passes through the Site, as shown below:

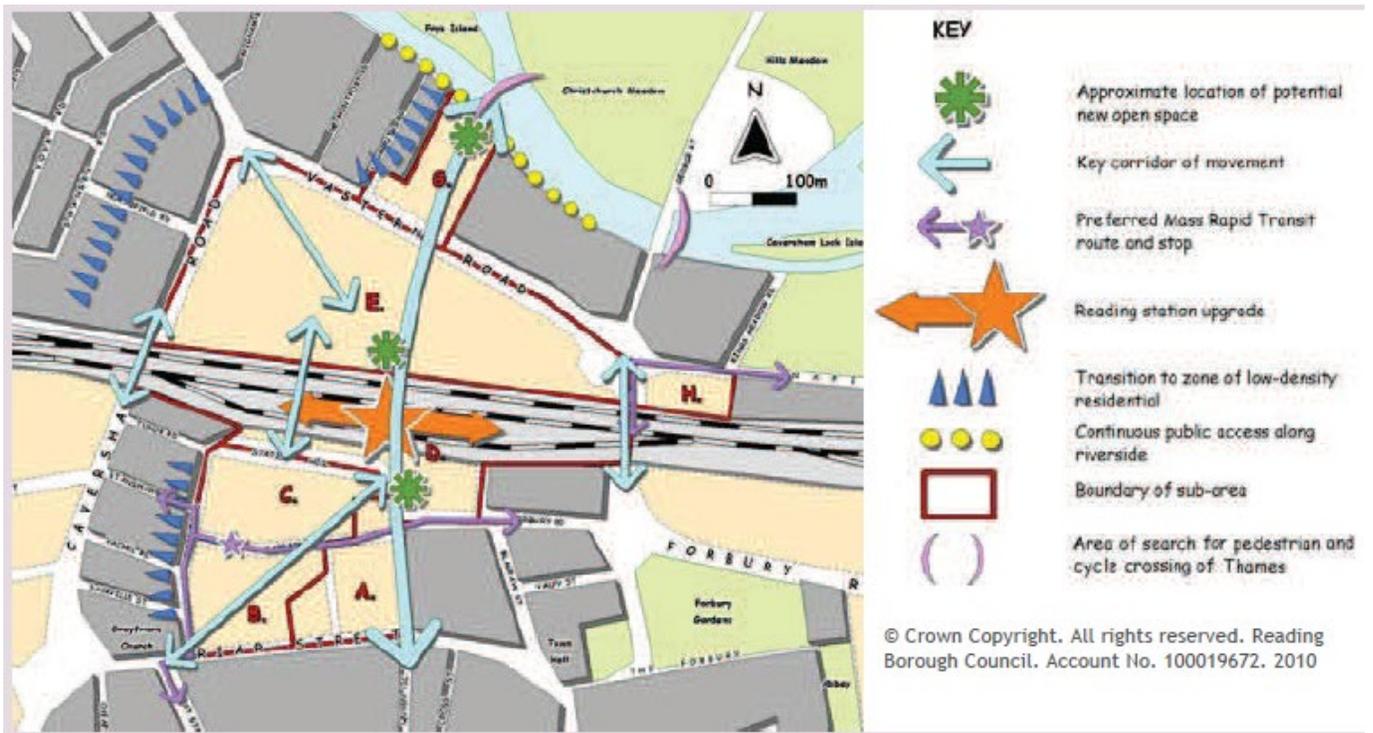


Figure 4.1 Station/River Major Opportunity Area Strategy

2.11. Paragraph 5.4 of the RSAF states that the overall aim is 'to improve the Station Area public realm by creating, improving and connecting public spaces' and identifies more detailed aims including:

- **'Stitching' together the various development sites within the Area, both visually and physically;**
- **Unifying the area through a coordinated design approach that utilises the best contemporary modern materials and street furniture;**
- **Creating an environment that is busy, overlooked and safe through its relationship with adjoining buildings;**
- **Contributing to the character and identity of the town centre, helping to instil a strong sense of place and underpinning investment; and**
- **Creating more opportunities for sustainable forms of transport, particularly walking and cycling, by enhancing the connectivity and legibility of the area.**

2.12. Paragraph 5.5 of the RSAF recognises that 'these aims may be difficult to achieve as a whole. Whilst it is possible for new developments to be carefully knitted into the existing street pattern, traversing the railway tracks and negotiating the many changes in level is a more challenging proposition. Nevertheless, development should seek to achieve this as far as is possible'. (BW emphasis)

2.13. Paragraph 5.6 of the RSAF identifies ten key public realm priority projects, including the Kennet-Thames Spine. Paragraph 5.9 comments on the proposed Kennet-Thames Spine as follows:

A major 'city spine' – a direct pedestrian route – is proposed through the historic core, the Station Area and through to the Thames. This spine is based on the north-south link which is the most significant movement corridor in the RCAAP, and is vital to the success of development in this area. The spine will extend across the Thames with a new footbridge(s) and new riverside parks, which can act as amenity space for new residents. The spine will include enhancements including wider pavements and greater pedestrian priority in Station Road. North of the railway, the spine will incorporate a 'green link' towards the river. Buildings will face onto the spine rather than away from it, and, on all parts of the spine south of Vastern Road, the frontages will be enlivened with active uses including retail and leisure. (BW emphasis)

2.14. Paragraph 11.10 of the RSAF sets out in respect of transport that:

High-density mixed-use development in the Station Area will maximise the potential for local walking and cycling trips. The framework will help to secure high quality pedestrian and cycle facilities to include routes that are direct, well lit, naturally surveilled and safe.

2.15. Paragraph 11.24 states:

Reading Borough Council's Cycling Strategy seeks to improve cycle links to Reading Station and interchange and to improve cycle crossings of and travel on the IDR. Development in the Station Area provides an excellent opportunity to achieve these aims. In particular, the development of the Northside area can provide new cycle links approaching the northern Station entrance, potentially separated where necessary.

Local Transport Note 1/20 Cycle Infrastructure Design (July 2020)

2.16. In addition to the above policy and guidance it was noted during the meeting that Darren Cook referred to the above Government guidance released in July. Whilst this post-dates the submission of the application, we have considered the relevant sections of this guidance below.

2.17. The guidance identifies 5 core design principles: Networks and routes should be coherent, direct, safe, comfortable and attractive. Summary principles include:

- 1) Cycle infrastructure should be accessible to everyone.
- 10) Schemes must be legible and understandable.
- 11) Schemes must be clearly and comprehensively signposted and labelled.
- 18) Cycle routes must flow, feeling direct and logical – Users should not feel as if they are having to double back on themselves, turn unnecessarily, or go the long way round.
- 19) Schemes must be easy and comfortable to ride – Cycling is a physical effort. Schemes should not impose constant stopping and starting or unnecessary level changes.

2.18. With reference to summary principle 18, paragraph 4.2.7 provides more clarity in relation to 'directness':

Directness is measured in both distance and time, and so routes should provide the shortest and fastest way of travelling from place to place. This includes providing facilities at junctions that minimise delay and the need to stop. Minimising the effort required to cycle, by enabling cyclists to maintain momentum, is an important aspect of directness. An indirect designated route involving extra distance or more stopping and starting will result in some cyclists choosing the most direct, faster option, even if it is less safe.

2.19. With reference to summary principle 19, paragraph 4.2.14 of the guidance provides more clarity in relation to 'comfortable conditions':

Comfortable conditions for cycling require routes with good quality, well-maintained smooth surfaces, adequate width for the volume of users, minimal stopping and starting, avoiding steep gradients, excessive or uneven crossfall and adverse camber. The need to interact with high speed or high-volume motor traffic also decreases user comfort by increasing the level of stress and the mental effort required to cycle.

2.20. The guidance also provides clarity in relation to 'attractiveness' at paragraphs 4.2.17 – 4.2.19:

Cycling and walking provide a more sensory experience than driving. People are more directly exposed to the environment they are moving through and value attractive routes through parks, waterfront locations, and well-designed streets and squares...

The environment should be attractive, stimulating and free from litter or broken glass. The ability for people to window shop, walk or cycle two abreast, converse or stop to rest or look at a view, makes for a more pleasant experience...

Cycle infrastructure should help to deliver public spaces that are well designed and finished in attractive materials and be places that people want to spend time using.

2.21. Minimising cycling effort is noted within table 4.1 of the guidance and it is noted that:

Routes that are direct and allow cyclists to maintain a steady speed are the most appealing. Designers should avoid layouts which make cyclists stop, slow down, or deviate unnecessarily from their desired route.

Directness of route may need to be balanced with avoiding steep gradients.

2.22. Finally of note is paragraph 8.2.11 of the guidance, wherein it states:

It may be necessary to encourage cyclists to slow at certain points, such as the access to cycle tracks, areas of high localised pedestrian activity, steep gradients and locations where there is the potential for conflict such as junctions and the entrances to subways and bridges, particularly if visibility is constrained.

Summary of adopted Local Plan and RSAF aspirations for the north/south pedestrian/cycle link

2.23. For clarity, the table provided below consolidates the above references within both the Local Plan and the RSAF, which set out the aspirations for the north/south pedestrian/cycle link, according to adopted policy and guidance:

Policy/Guidance	Aspiration for pedestrian/cycle route
Local Plan Policy CR2	<ul style="list-style-type: none"> - Well designed space - Public art - Suitable functions and interest - Safe and convenient linkages to adjoining areas
Local Plan Policy CR3	<ul style="list-style-type: none"> - Open space integrated with surrounding development - High quality space with trees and other planting
Local Plan Policy CR11	<ul style="list-style-type: none"> - Facilitate greater pedestrian and cycle permeability

	<ul style="list-style-type: none"> - Development to front onto and provide visual interest for route - Direct landscaped link between the station and river
RSAF paragraph 3.6	<ul style="list-style-type: none"> - Enhance movement and linkages across the area
RSAF paragraph 5.9	<ul style="list-style-type: none"> - Direct pedestrian route - Incorporate a green link towards the river - Buildings to face onto the route with frontages enlivened with active uses including retail and leisure
RSAF paragraph 11.10	<ul style="list-style-type: none"> - Direct, well lit, naturally surveilled and safe route for pedestrians and cyclists
Local Transport Note 1/20, core design and summary principles	<ul style="list-style-type: none"> - Safe - Attractive - Accessible - Legible and understandable - Clearly and comprehensively signposted and labelled - Flow, feeling direct and logical - Easy and comfortable to ride

3. Design rationale for the Proposed Pedestrian and Cycle Route

- 3.1. The submitted application material sets out the design rationale and technical justification for the proposed pedestrian/cycle route, taking account of the policy context above. For the purposes of this note the rationale for the proposed route is summarised below.
- 3.2. The proposed pedestrian/cycle route is the product of a considered design evolution process taking account of the context of the Site as well as relevant technical standards.
- 3.3. Initial designs included a straight pathway through the Site. However, the straight route failed to achieve the policy aspirations in relation to attractiveness, activation and safety as set out in section 2 of this note as well as technical standards. The route would have been elevated above the remainder of the Site in order to achieve acceptable gradients, which inhibits the creation of attractive, integrated and useable public realm. The route would have therefore become dislocated from the development and unable to achieve several of the Local Plan Policy requirements and as a result, a straight cycleway was rejected at an early stage of the design process
- 3.4. Further evolution of the route design, taking account of the flaws of the initial straight route, has identified that a route including two switchbacks provides the most appropriate, well-integrated and direct route from Vastern Road to the River.
- 3.5. BHOC submitted a 'Strategic Cycle Footway' booklet (ref: 448.LAND.RP.001RevA) which details the evolution of the route at page 14 (attached for ease of reference). At section 1.3 of the booklet the technical design guidance is specified, which should be read in conjunction with the Technical Note prepared by Stantec (ref: 47500-TN003 Proposed Ramp Design Justification), which is submitted with this note. With reference to this material, the design of the proposed route has been informed by the following considerations:
 - i. Route width of minimum 3m;
 - ii. Activated route through the scheme with active frontage such as front doors and residential entrances;
 - iii. Clear wayfinding strategy;
 - iv. Ensure the route is accessible to all user groups;
 - v. Provide a shared space route;
 - vi. Provide a safe cycle environment through safe geometric design, ensuring the route maintains appropriate widths, minimal street furniture clutter and appropriate gradients (Max 5%);
 - vii. Appropriate surface finishes for combined cycle and pedestrian use;
 - viii. Cycle and pedestrian priority at vehicular junctions;
 - ix. Appropriate landscape treatments;
 - x. Clear stem trees to remove low branches and compact shrub planting to reduce vegetation encroaching onto route;
 - xi. Good visibility throughout the route, especially at junctions and corners; and
 - xii. Appropriate measures to naturally control cycle speeds to ensure a safe environment for all is provided.
- 3.6. To this end a dedicated 3m wide cycle footway runs through the central part of the Site, flanked by landscaped elements and tree planting aspiring to the 'direct green link' which is sought. This route connects the town centre from Vastern Road, through to the Thames Towpath and Christchurch Bridge to the north in accordance with Policy CR11g as noted above.

- 3.7. Given the changes in level between the Site, towpath and Christchurch Bridge, as noted in paragraph 5.5 of the RSAF, gentle deviations are introduced to the route to maintain a DDA-compliant route at 1:21 or less throughout the Site. To ensure the route is appropriate and desirable for all users, the route is supplemented by shorter and more direct, stepped pedestrian routes that provide a more convenient pedestrian journey. These more direct pedestrian routes should also reduce the number of pedestrians using the cycle footway through the section which includes switchbacks.
- 3.8. Two switchbacks have been introduced into the route, which we understand to be the principle area of concern for the Council. The switchbacks themselves widen to 4m to provide safe manoeuvring space for all users and moreover stepped pedestrian routes within the switchbacks, will reduce the number of pedestrians using the cycle footway through the switchback section. It should be noted that without the introduction of these switchbacks, the route would have been unable to maintain a DDA complaint gradient and therefore not be suitable for all users as intended. It should be noted that the introduction of the switchbacks was endorsed by the Councils Disabled Access officer.
- 3.9. The scheme is proposing to use a combination of wayfinding tools, including a landmark sculpture at the entrance to Vastern Road, signage, route markers and design details, to aid navigation through the Site. Whilst commuters and local residents will quickly become familiar with the new route, it is important that visitors are able to also navigate this strategic route from the station to the river.
- 3.10. The space provides a safe cycle footway environment from the bridge level into the Site. The route allows front door access from all proposed buildings to ensure the route is animated.
- 3.11. The route weaves through pockets of grass slopes and terraces that provide resting points and small areas of informal recreation, as advocated by Policy CR11.

Technical Justification

- 3.12. The route has been designed to comply with relevant standards and incorporates the following:
- 3m width provides adequate space for the route to be shared by cyclists, pedestrians and wheelchair users;
 - Route gradient is 4.76% (1:21) which is shallower than the recommended maximum cycle gradient outlined within CD 195: Designing for Cycle Traffic;
 - 3m wide stepped sections are provided to create spacious direct routes for pedestrians;
 - Wide stepped route reduces number of pedestrians using ramped sections;
 - Lengths of ramped sections are also below the recommended maximum lengths of 30m;
 - Ramped sections are supplemented by minimum 5m length flat sections to ease use and naturally reduce cycle speeds creating a safe environment for all users;
 - Route width widens at corners to reduce conflicts between users and ease cycle manoeuvring; and
 - Route is shared to reduce conflicts between user groups and risks of conflicts at front doors and building entrances.

4. Policy Assessment

- 4.1. As set out above, the proposed north-south pedestrian/cycle route has been designed taking account of the adopted policy context and other guidance. An assessment of the proposal against policy is provided below.

Facilitating connectivity and permeability

- 4.2. The Local Plan and RSAF identify aspirations for greater connectivity to the north of the Station. A specific requirement for a link through the Site is identified in Policy CR11g and paragraph 5.9 of the RSAF. The proposal has satisfied the aspiration of improved connectivity and specifically, a 'direct pedestrian route' with the incorporation of a pedestrian/cycle link, removing the barrier to travel between the River and Station and therefore complying with Policy CR11g and the RSAF.
- 4.3. Wayfinding will be an important element to the strategic route as pedestrians and cyclist journey from the station to Christchurch Bridge. It is not possible to look down the entire route from the station given the urban form across the two development sites and such a route was not envisaged as part of the RSAF or Local Plan. Therefore, clear and visually legible wayfinding will be provided as a key element of the proposals, increasing permeability in the area.
- 4.4. In doing so, the proposals help to create more opportunities for sustainable travel due to enhanced connectivity and legality, consistent with the aspiration noted in paragraph 5.4 of the RSAF.

Providing visual interest

- 4.5. Policy CR2 requires the provision of well-designed public spaces that provide suitable functions and interest, sense of place and safe and convenient linkages to adjoining areas. Figure 5.3 identifies a desire for new open space and 'activation' within the Site. The proposed route has been designed as an integral part of the development, providing a convenient and naturally surveilled route linking Vastern Road to the River Thames and Caversham beyond. A high-quality podium courtyard with outdoor social seating and a café spill out area is provided, creating a suitable function for the riverside open space with all the buildings within this area facing on to the proposed route. In this regard, the proposed route is consistent with Policy CR2 as well as Figure 5.3.
- 4.6. Policy CR11iii) seeks developments that front onto and provide visual interest to existing and future pedestrian routes and open spaces. The proposed development would fulfil this requirement as the development fronts onto the route, provides enhanced landscaping, provides areas of public open space and areas for interaction, including a café.
- 4.7. A 'gateway' is proposed between Blocks A and B with new public art providing the entrance to the new pedestrian/cycle route, along with wayfinding and the potential for a water feature, linking Vastern Road, and thus Central Reading, to Christchurch Bridge. The route is therefore consistent with and achieves the aims of Policy CR11ii.
- 4.8. In addition, paragraph 5.9 of the RSAF sets out that buildings will face onto the spine rather than away from it. As noted above, the development fronts onto the proposed route through blocks that have been designed to interact with the route through the site and will incorporate design features to assist wayfinding and provide visual interest.

4.9. RSAF Paragraph 5.9 also states that the spine will include a green link towards the River. The proposed pedestrian/cycle route has also been designed in a landscaped manner with enhanced landscaping throughout the Site and adjacent to the River Thames and is therefore considered to comply with Policy CR11 and the aspirations of the RSAF.

Safety

4.10. Policy CR2 requires the provision of open spaces that provide safe linkages to adjoining areas. Paragraph 11.10 of the RSAF seeks well lit, naturally surveilled and safe routes for pedestrians and cyclists. The route has been designed to ensure safe access for all users, with adequate space provided for the route to be shared by cyclists, pedestrians and wheelchair users. Buildings will face onto the pedestrian/cycle link to provide natural surveillance. It is therefore considered that the proposals comply with the aspirations of the RSAF as well as policies with the adopted Local Plan.

4.11. In addition, a further query raised by RBC was in relation to cyclists potentially taking shortcuts across the route. Within the switchbacks, structured planting has been proposed within certain areas to ensure that there is no abuse by cyclists, ensuring that the route remains safe and useable by all.

Directness

4.12. RSAF paragraph 5.9 requires the provision of direct pedestrian route from the Station, through the Site to the River. As illustrated within figure 5.3 of the Local Plan (see paragraph 2.7 above), this is clearly a macro level aspiration for a key movement corridor, to connect the different areas of central Reading with the northern areas. It is important however to understand the meaning of 'direct', which it is considered to mean the shortest and fastest way from one place to another, as noted within the Government Transport Note (see paragraph 2.19 above). For completeness, reference to 'directness' meaning 'straight' has not been found within any of the key policies or guidance. Regardless, it is considered that the route has been designed to be as straight as possible given site constraints.

4.13. The concept of this route from the station to the river was to provide a direct link for pedestrians and cyclists that did not otherwise exist, as demonstrated on the various plans within the Local Plan and RSAF which show current, convoluted routes. Conceptually therefore the desire line for this route, in other words the line considered to be the most 'direct', was introduced into the RSAF and later the Local Plan, as discussed within the policy section of this note and shown on all of the supporting figures.

4.14. The delivery and facilitation of this route along this desire line, cannot therefore be considered to be anything other than 'direct', particularly from the strategic scale at which it was conceived. Looking at the micro scale of the route, the introduction of the proposed switchbacks is not considered to obstruct the route, slow pedestrians or cyclists down to an unacceptable level, or impact the route's directness. It is noted that on the northern side of Christchurch Bridge a route which is not entirely straight at the micro scale, due to the provision of switchbacks and junctions, has been considered appropriate. This evidently does not impair the directness of the route from Christchurch Bridge to Caversham.

- 4.15. Notwithstanding the above, it is also important to note that this is a pedestrian/cycleway not solely a cycleway. It is relevant therefore for the route to cater for both users, including disabled users and a great level of care has been taken to ensure this is the case.
- 4.16. The proposals therefore ensure that this link is provided in a way that is consistent with adopted policy and the RSAF, and that the route is as direct as possible given the nature of the Site and its surrounding context. The proposed route remains consistent with the strategic aspiration for a direct route from the Town Centre to Christchurch Meadows and also provides opportunities for new open space and active frontages to the route, in line with Policy CR11 and the RSAF.
- 4.17. In the context of technical design a single ramped section to provide a straight route for cyclists would be inappropriate. Policy conflicts of this approach notwithstanding, this route would lead onto Vastern Road and it would not be possible to achieve a shallow enough gradient and a maximum ramp length of less than 30m, to avoid speeding/safety concerns which would conflict with the interchange with Vastern Road.
- 4.18. Given the variety of challenges, it is additionally noted that paragraph 5.5 of the RSAF acknowledges challenges in achieving all of the identified aspirations relating to the public realm, particularly due to level changes (see paragraph 2.13 above). Moreover, paragraph 8.2.11 of the Government's Local Transport Note (see paragraph 2.22 above), notes the need to encourage cyclists to slow at certain points in (inter alia) areas of high localised pedestrian activity. Given the dual nature of the route, in needing to cater for both cyclists and pedestrians, this is an important part of the route, which the switchback design adequately provides without the need for cyclists to come to a stop. The design is therefore considered appropriate and consistent with the policy context, and is therefore considered to be entirely policy compliant.

5. Summary

- 5.1. This note has been prepared on behalf of Berkeley Homes (Oxford and Chiltern) Ltd and assesses the pedestrian/cycle route proposed as part of the development of the Site against adopted planning policies.
- 5.2. The policy assessment demonstrates that the proposed route is entirely consistent with adopted policy and relevant guidance.
- 5.3. Returning to the concerns raised by RBC Highways Officer:
 - A. There is potential for conflict between cyclists and pedestrians (some of whom would use the steps proposed while others would not), including, as a result of limited visibility near to the proposed switchbacks.
 - B. There is potential for abuse of the route by cyclists taking shortcuts.
 - C. The route is not straight and therefore not in accordance with policy which requires a direct route.
 - D. It is not legible and lacks a clear vision of where users need to go/get to.
 - E. The route may not be attractive and well used.
- 5.4. With regard to point A – It is considered that there is no potential for conflict between cyclists and pedestrians. The switchbacks maintain a direct route, as direct by policy, but encourage cyclists to slow marginally due to high pedestrian activity, which is supported by government guidance. Pedestrians are also provided with direct stepped access through the switchbacks, further limiting the conflict in this section of the route.
- 5.5. With regard to point B – It is considered that there is no opportunity for abuse by cyclists, as there are no shortcuts to be taken. In accordance with policy aspirations, the route proposed represents the most direct link from the station to Christchurch Bridge.
- 5.6. With regard to point C – It is considered that the policy intention of directness was not envisaged to be interpreted as 'straight', indeed nowhere within adopted policy or supporting guidance could the term 'straight' be found as the meaning of the term 'direct'. As covered in detail within this note, directness is measured in distance and time. 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. The proposed route is therefore entirely direct and in accordance with policy aspirations and requirements.
- 5.7. With regard to point D – It is considered that the proposed route is legible. It would never be possible for users to see from one end of the route to the other, for a variety of reasons, nor would they conceivably expect to. For the infrequent user therefore, wayfinding will assist in understanding where users need to get to, which as discussed within this note is proposed as part of the scheme. The simplistic nature of the route, as conceived by policy aspirations and without deviation from this, combined with the level of wayfinding proposed will ensure the route is entirely legible and accessible to a range of users.
- 5.8. With regard to point E – Given the route through the site is an integral part of the proposed scheme, a great level of care and detail has been expended in ensuring it achieves the urban design requirements of our client and indeed of the attributable Local Plan policies and associated

guidance. This relates to (inter alia) the landscaping of the route, its legibility, the way the buildings front onto it and the café proposed fronting onto the river, all of which are explained in detail within this note. The scheme as a whole has taken on board the advice received from Design South East as part of the Design Review Panel process undertaken by our client to ensure the creation of an attractive and well-designed place.

- 5.9. The proposed development will provide a direct route to/from Christchurch Bridge to/from Reading Station, as envisaged by policy. This is considered a vital link and by virtue of its directness will be well used by commuters and visitors. For those users who are visitors unfamiliar with the area, a clear and comprehensible wayfinding strategy has been proposed which will facilitate greater pedestrian and cycle permeability not only within the site, but also to the adjoining areas. Moreover, the attractiveness of the green route and its response in terms of public realm will ensure that it is well used by casual walkers and cyclists delivering the strategically important landscaped link between the station and the river.

Appendix B BHOC Design Addendum

The Old Power Station, Design Addendum

12 November 2020

Dave Taylor RIBA
Design Director, Berkeley Homes (Oxford & Chiltern) Ltd

Introduction

This document has been produced in response to the comments received on 22 October 2020 from Darren Cook, Transport and Development Control Manager, and Mark Worringham, Area Planning Team Leader.

The purpose of this document is to review and respond to comments raised in relation to the design and access through the site, connecting through to Christchurch Bridge.

Part 1 of the document assesses the main assertions from the comments received, demonstrating that the suggested approaches are not achievable given the constraints of the site.

Part 2 of the document illustrates how we have worked with the site constraints to achieve the principles of the RSAF in providing a direct route between the Station and Christchurch Bridge.

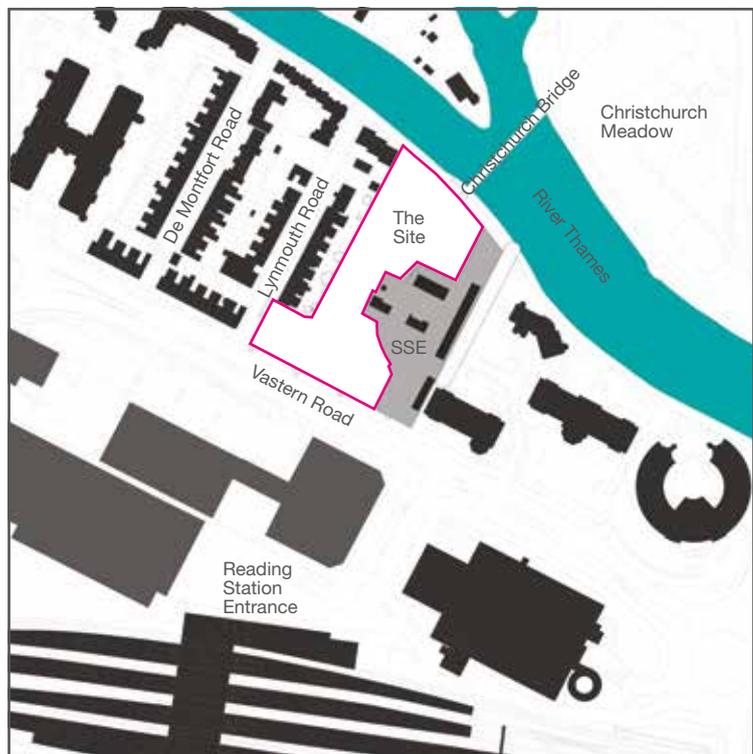
Part 3 of the document compares the proposals to plans from the RSAF document, and in response to direct comments from the Area Planning Team Leader.

Part 4 examines the questions over the widths and gradients of the foot / cycleway and the route which this takes through the site.

Site Location Plan

The adjacent plan shows the site in context, stripped back to show the “fixed” constraints - i.e. built form, land ownership, and the key features such as the Station, Christchurch Bridge and Meadow.

For the purpose of this document, all plans contained are drawn to the same scale. Where illustrative plans from other documents have been included, these have been scaled to match this plan to ensure consistency in approach.



Part 1 Demonstrating Unachievable Route Options

Figure 1.1
Existing Access Points

The three principle access points consist of the North Entrance to Reading Station, the Station Underpass and the crossing over the River Thames via Christchurch Bridge.

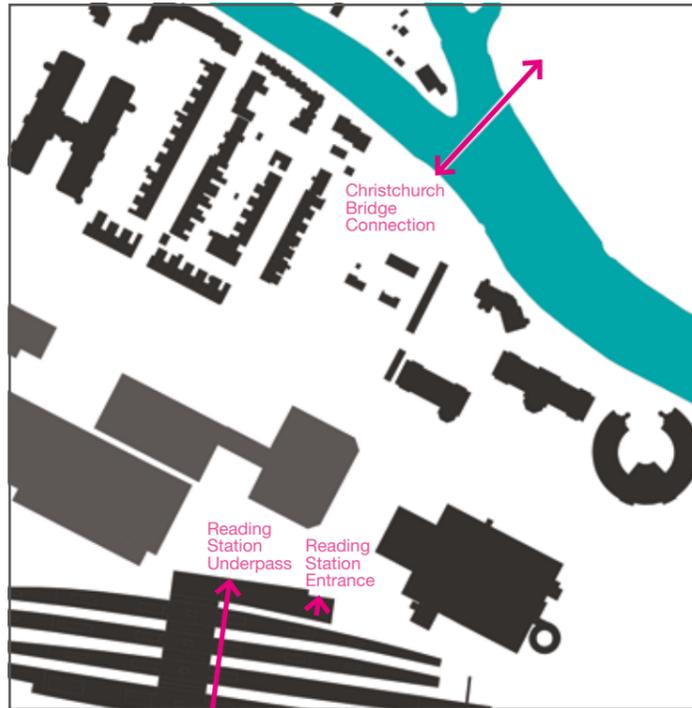


Figure 1.2
Line of Sight from the Station to Christchurch Bridge

Extrapolating a line of sight from each of the access points, through to the landing of the Bridge, demonstrates that neither route would be achievable owing to the retention of the SSE equipment.

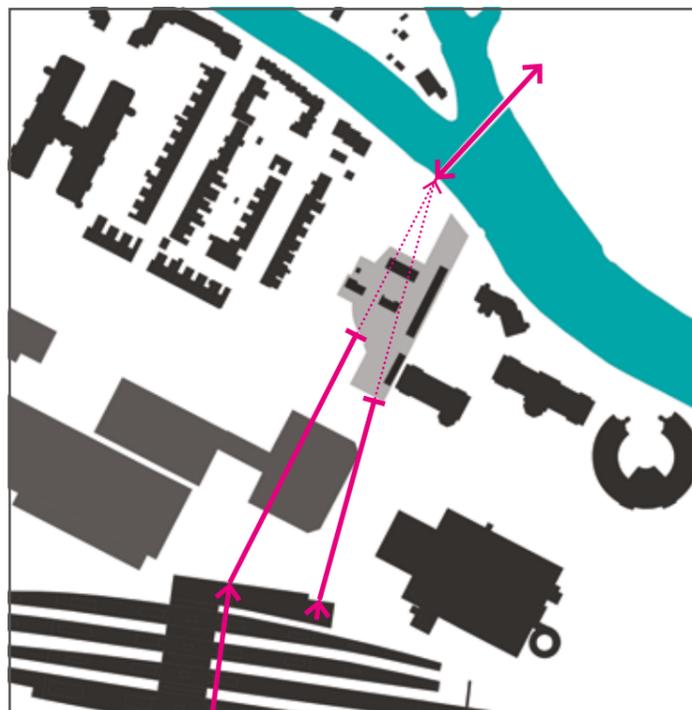


Figure 1.3
Line of Sight from Christchurch Bridge to Vastern Road

As demonstrated in Figure 1.2, a line-of-sight route is not achievable between the Station and the Bridge.

An alternative approach can also be demonstrated taking a line of sight from the Bridge towards Vastern Road.

As with figure 1.2, this straight route is not possible due to the retained SSE equipment.

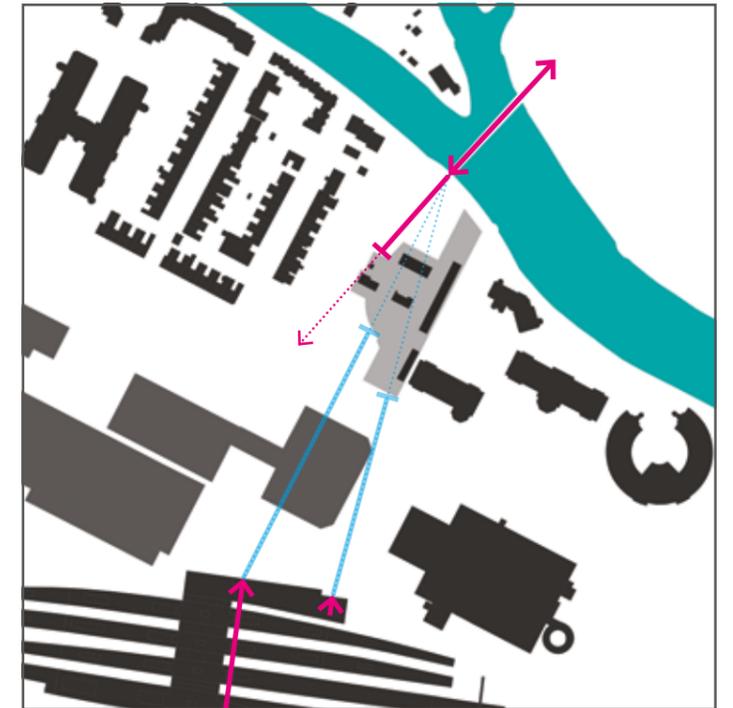
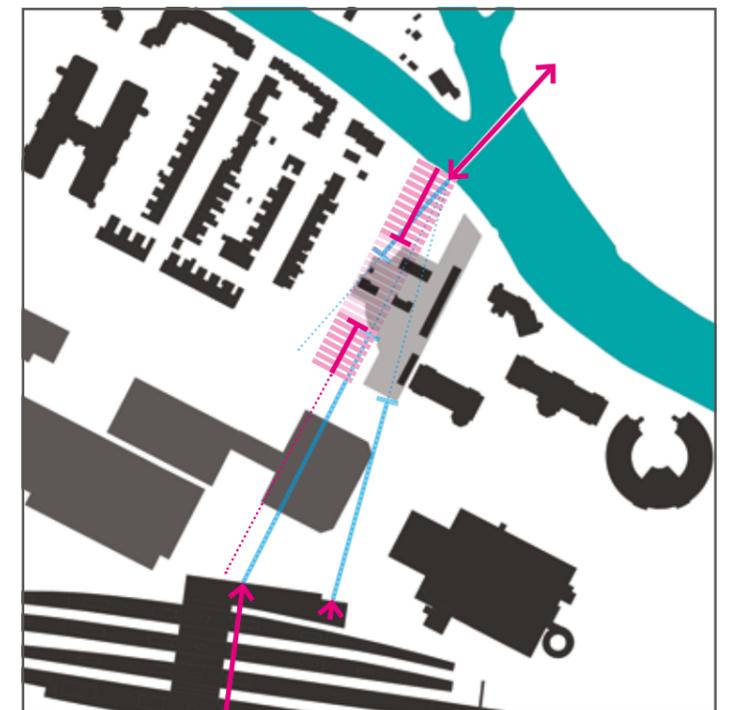


Figure 1.4
Creating a Linear Corridor to the Bridge

Taking in to account the diagrams located within the RSAF, a linear corridor was proposed connecting the Bridge to Vastern Road.

As with the previous proposals, this option is also unachievable due to the retained SSE equipment.

It is also worth noting that the provision of such corridor through the site would not align with the two station entrances in any case, and as such a cranked or arched route would still be required.



Part 2

Creating a Direct Route Between the Station and Bridge

Figure 1.5
Providing a Screen to the SSE Equipment

Figures 1.1 to 1.4 show that a route extending from the Bridge, and routes in line-of-sight between the Bridge and Station, are not possible with the retained SSE equipment.

Before developing this further, it is also worth noting the visual, noise and safety requirements to the boundary of the equipment, which would need to wrap around the main elements to a height of 3m. This boundary treatment can consist of either a wall or building(s) but a 2m buffer to this boundary is required in any event, meaning the line would need to be offset.

All of this also needs to be read alongside the narrowing of the site at the centre.

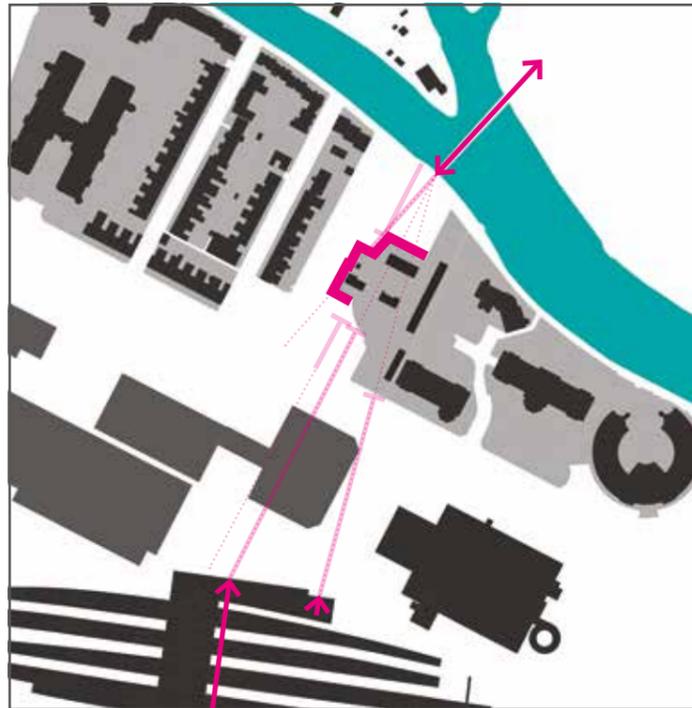


Figure 1.6
Creating an Arched Corridor between the Station and Bridge

Taking in to consideration all of the above constraints, the most direct route between the Bridge and Station would be a gently curved route which could widen on the approaches to the Bridge to open up views to the Meadow and River Thames, also providing some public amenity space at this point as envisaged within the RSAF.

A similar approach could be taken in the detailed design of the parcels to the south of Vastern Road on the approach to the Station.

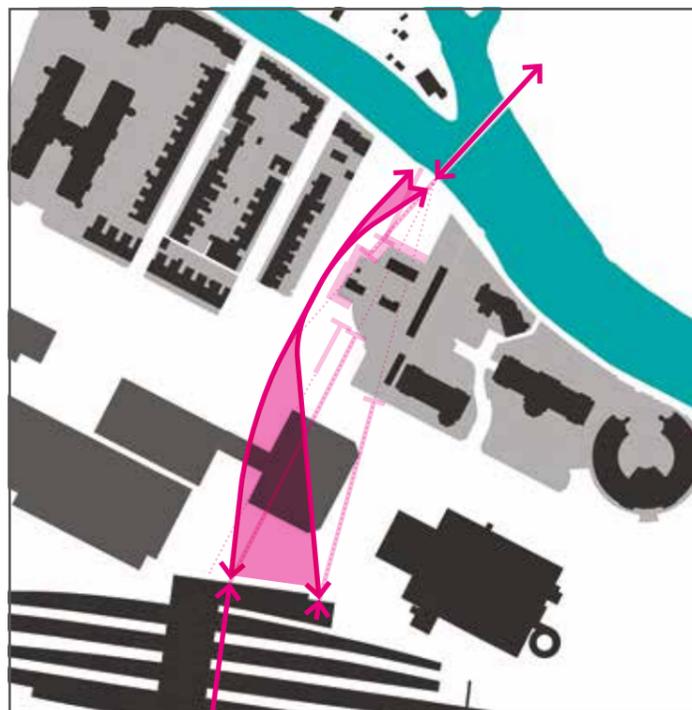


Figure 1.7
Split Routes to the Bridge and Towpath

The principles of the arched route in figure 1.6 allow for a slightly opened out route on to Vastern Road, allowing for routes either to the Station underpass or to the Station entrance.

Both of these routes will benefit from the proposed widening, providing public amenity space at the Station and on to the River.

The fanning out towards the River Thames also allows for one route to the Bridge, as well as a secondary route dropping down to the River Thames Towpath.

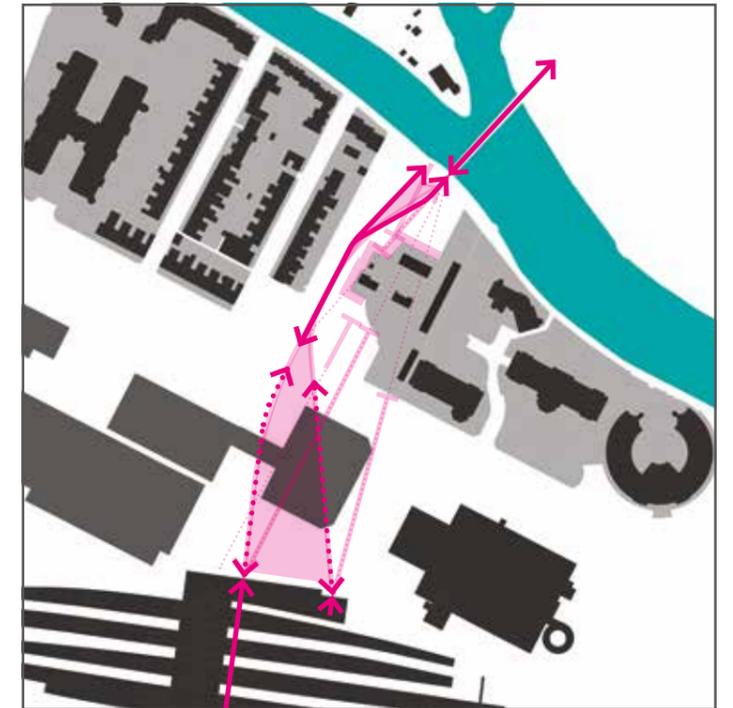
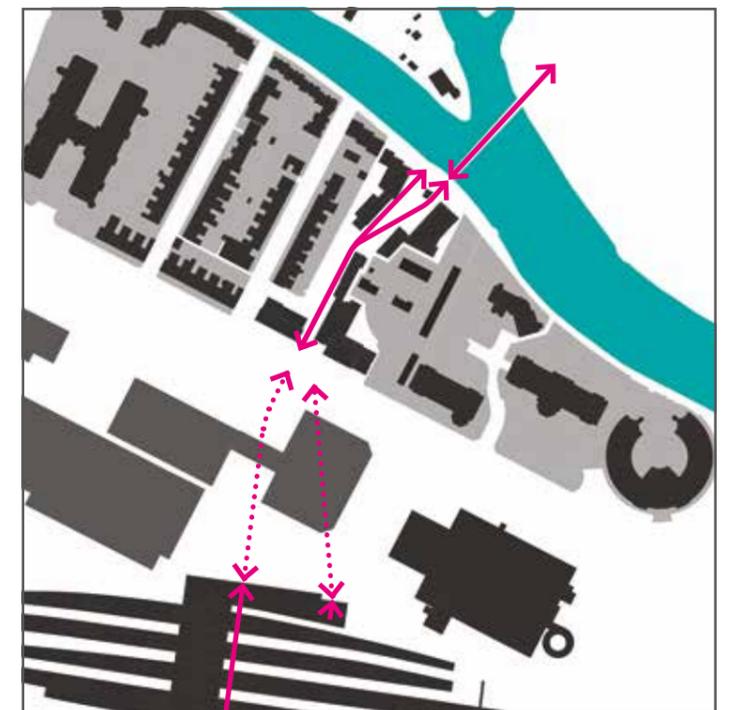


Figure 1.8
Using Buildings to Define the Route

With the route formed through a rational evolution and evaluation of the constraints and ambitions for this site, the buildings clearly align to provide positive frontage, natural overlooking and surveillance, and a well considered piece of urban design.



Part 3

Assessing the Route Against the RSAF and Policy Comments

Figure 1.9
Comparing Against
RSAF Plan 4.1

Planning Policy RC1, and the accompanying Illustrative Strategy Plan contained in RSAF Figure 4.1, illustrate that a route should be formed between the Station and Bridge.

As seen on this illustrative plan, the route to the bridge was not necessarily envisaged to be straight - this plan shows a curved route connecting the two points.

This follows the same strategy as our scheme (see figure 1.6 above).

(Note, the grey overlay of the SSE site demonstrates the illustrative route is not possible in this exact location).

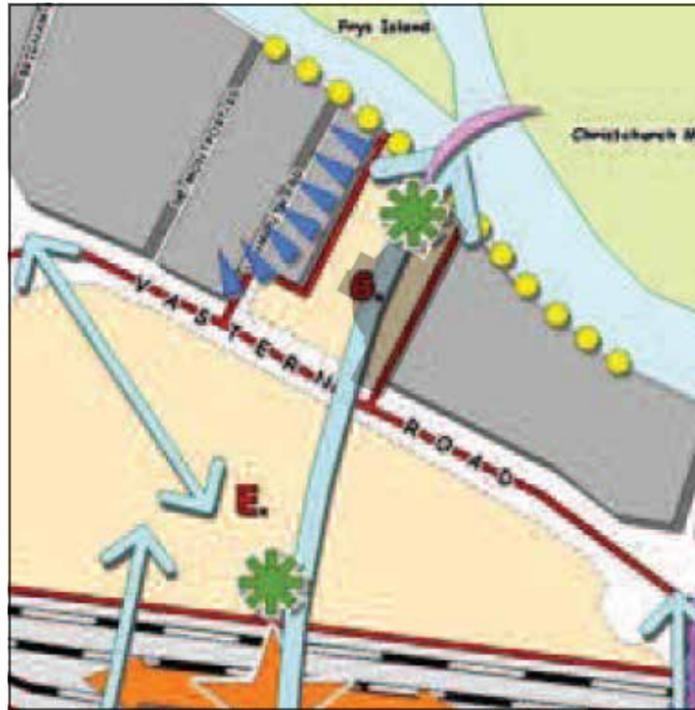


Figure 1.10
Comparing Against
RSAF Plan 11.11

RSAF Figure 11.11 shows the proposed cycleway infrastructure (red dashed lines) and how they would connect to the current infrastructure.

This plan demonstrates that a linear route is illustrated, but with two deflections to the route as it approaches the Bridge (highlighted by the pink circles), so not a "straight" route.

It is also worth noting on this plan, that the route as suggested would not be possible with the retained SSE equipment, and simply moving the route wider to the west would render the resultant site unviable and as such no such connection could come forward.



Figure 1.11
Reduction in Development

Of the feedback given to date, it was suggested within the response from Mark Worringham that the "main problem" with the directness is "the presence of the 'Goods Office' plot" and that "the extent of the Goods Warehouse also accentuates this issue".

As demonstrated within this figure, the loss of the Goods Office, and reduction of the Goods Warehouse buildings still result in a curve to the route and very little change to its connection to Vastern Road, perhaps only moving the route by ca. 3m.

This would also result in a loss of 20-21 dwellings.

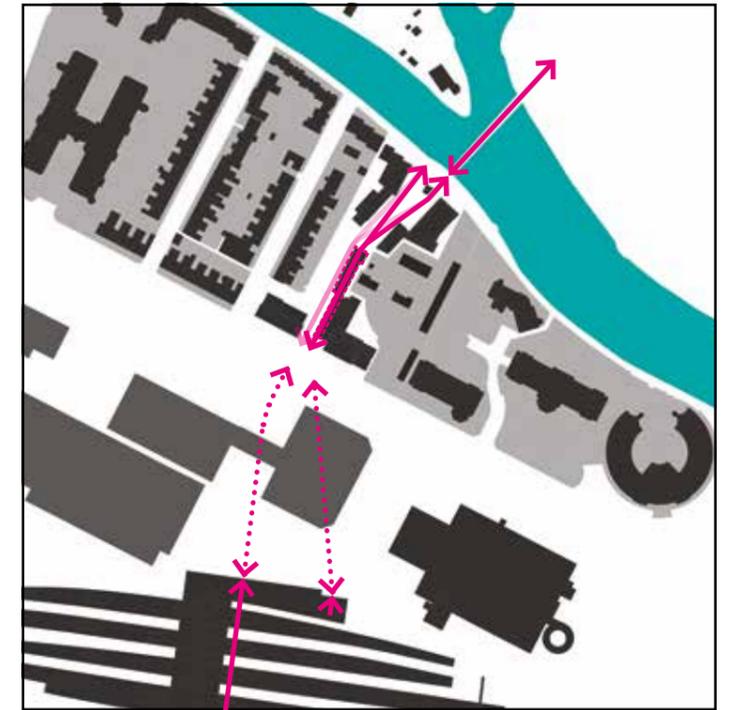
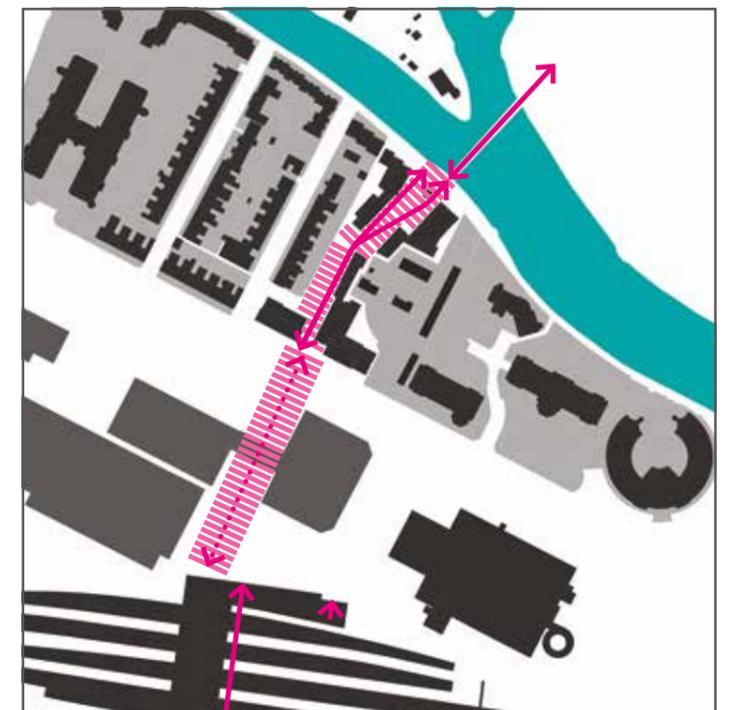


Figure 1.12
Maintaining a Route to the
Station and Bridge

The quality and width of the route has been questioned within the site, referencing pedestrianised town centre streets of 4m wide with Chain Street being only 2.7m wide at the approach.

Our proposal is a much wider street than the ones referenced, being 15-16m wide through the middle of the site, with a local narrowing to 9m towards Vastern Road, but opening out to 25m+ towards the River Thames.

The proposed foot / cycleway within these "streets" varies, but is no less than 3m wide on the route to and from the Bridge, in accordance with LTN 1/20 July 2020.



Part 4.1 Assessing Gradients and Widths

Figure 1.13
Submitted Scheme

In the correspondence received on 22 October 2020, the widths of the proposed foot / cycleway through the site have been questioned and suggested that they are not wide enough.

On the main route to and from the Bridge, as noted in figure 1.12 above, the foot / cycleway as proposed through the scheme is 3m in width as a minimum, increasing to 4m to the connection on to Christchurch Bridge and on changes in direction.

However, it should be noted that the widths of the streets within which the route sits is generally 15m wide, increasing to over 25m towards the River Thames. This route is no greater than 1:21, and as such the width and gradient is in accordance with the DfT guidance, as well as the requirements contained within CD195 Rev.1 - Cycle Route Design. It should also be noted that pre-application advice received 7 October 2019, and 12 December 2019 contained confirmation that the foot / cycleway route to the Bridge would be acceptable at 3m in width.

The second point regarding widths is in relation to the approach and gradient connecting to the Thames Towpath, stating that our route is too narrow (2m wide minimum) and gradient too steep (1:15 maximum).

Despite having been discussed in the Councils Traffic Management Sub-Committee on 14 June 2017, and given approval to apply to the Secretary of State for the

conversion of the towpath to a foot / cycleway, this does not appear to have materialised as yet, although we are advised it is under review / consultation at present. Within the objections, and Officers responses, it was accepted that the provision of a foot / cycleway of a reduced width was better than none, and that in accepting the Towpath along this stretch is only 2m wide (i.e. the same as our link to it) that the DfT documentation was guidance only (see paras 4.7-4.8 of the committee report).

It should be noted that gradients and subsequent landings on the Towpath route have been designed in accordance with Building Regulations.

As such, we maintain that this access is a benefit to the site, and is proposed to be in keeping with the Councils own advice on the towpath itself.

In summary;

- the foot / cycleway is designed to deliver a direct route to and from Christchurch Bridge, taking in to consideration site constraints, and at a width accepted during pre-application advice stage,
- the connection to the Towpath is at the same width as the towpath itself, with gradients in accordance with Building Regulations,
- high quality tree planting and other soft landscaping follow the route through the site,
- dwellings face the route throughout, providing natural surveillance and overlooking.

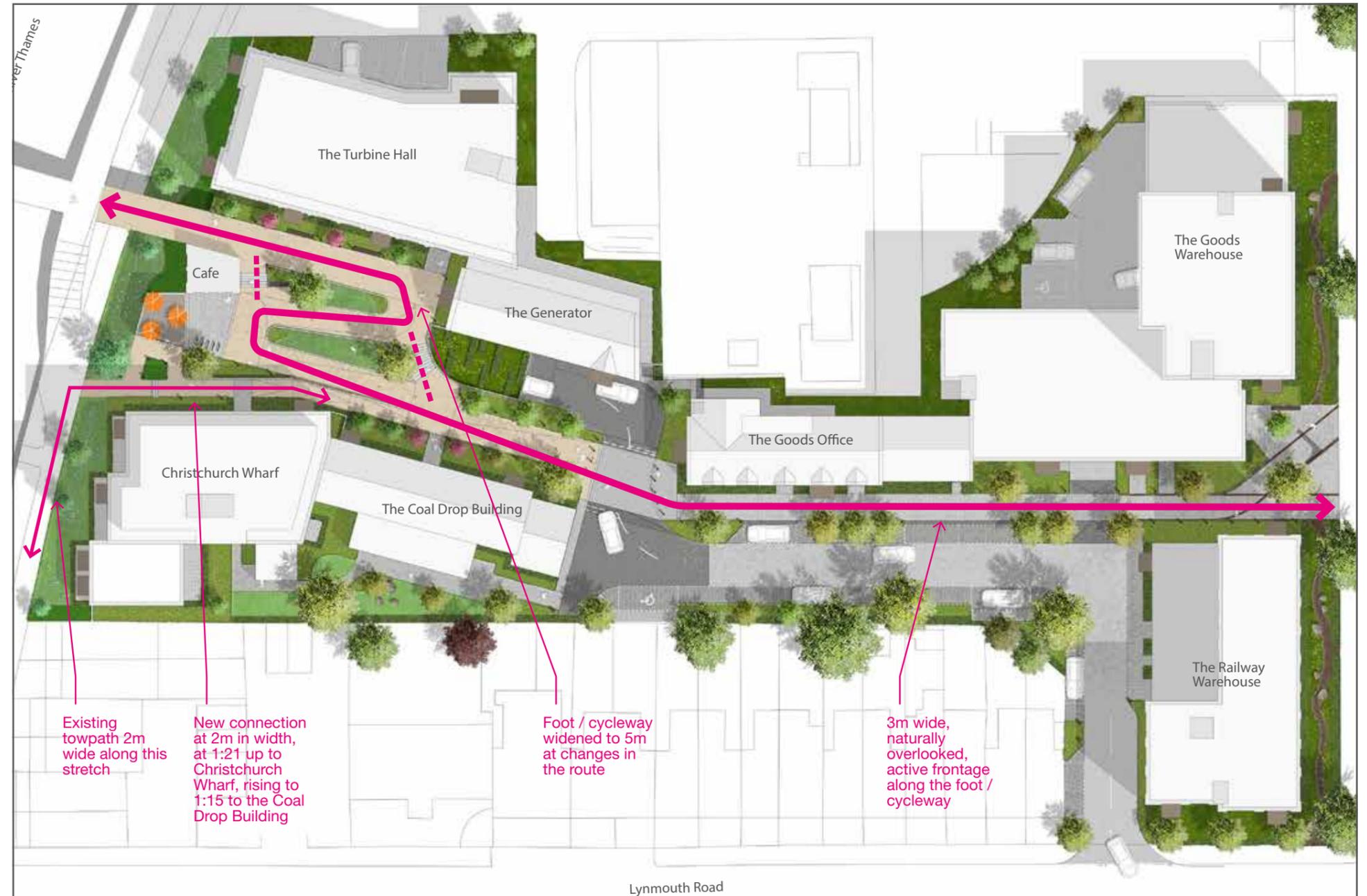


Figure 1.14
Alternate Route Option 1 -
Descend from Bridge

Finally, to address the comments in relation to exploring a straighter route, as demonstrated on the previous figures this is not achievable due to the retention of the SSE equipment.

However, in order to assess the impact on the development an illustrative scheme is set out below which removes the "switchbacks". For the purpose of this diagram, it is assumed that the response in figure 1.13 is accepted in relation to the width of the ramp to the towpath.

This proposal would see a single ramp from the bridge level, down towards the vehicular crossing point in to the northern undercroft parking area. The ramp would be 3m wide, increasing to 3.7m in width for the second part in order to allow fire appliance access to the Turbine Hall.

As this ramp would then meet the ramp from the Towpath further into the site, the Towpath route would also need to increase to 3.7m in width in part to allow fire appliance access to Christchurch Wharf.

Between the Generator and Coal Drop Buildings, this would see three hard surfaced ramps all at different angles alongside each other, increasing the extent of hardstanding to 13.5m in width (leaving only 1.5m for soft landscaping). This would leave the occupants of Christchurch Wharf and the Coal Drop Building facing out on to hardstanding and retaining walls of up to 2.8m in height (only ca. 2.5m from their windows), with

little scope to soften this with planting.

The extent of raised area would extend a further 31m south from its current position. This would require the road, crossing and turning area to be raised by 600-800mm, resulting in a loadbearing carriageway against the gardens of the properties along Lynmouth Road, and both the Coal Drop Building and Goods Office would need to be raised to the same amount in order to access the properties and refuse stores. We would also see a loss to the parking undercroft to the Turbine Hall due to the increase ramp.

In summary, removing the gentle bends to provide a "straighter" route impacts the proposals as follows;

- as the ramp is straightened, the ramp would then extend further towards Vastern Road,
- the carriageway and crossing would raise by 700mm impacting on the relationship with Lynmouth Road gardens, as well as requiring the Coal Drop Building and Goods Office to be raised by the same amount,
- the direct ramp would result in the loss of the Cafe, viewing deck, and usable soft landscaped areas,
- the point at which the Towpath connection meets the Bridge route would also move further south, resulting in little to no soft landscape between the Coal Drop Building and Generator
- straight ramp enables and encourages higher cycling speeds creating conflict.

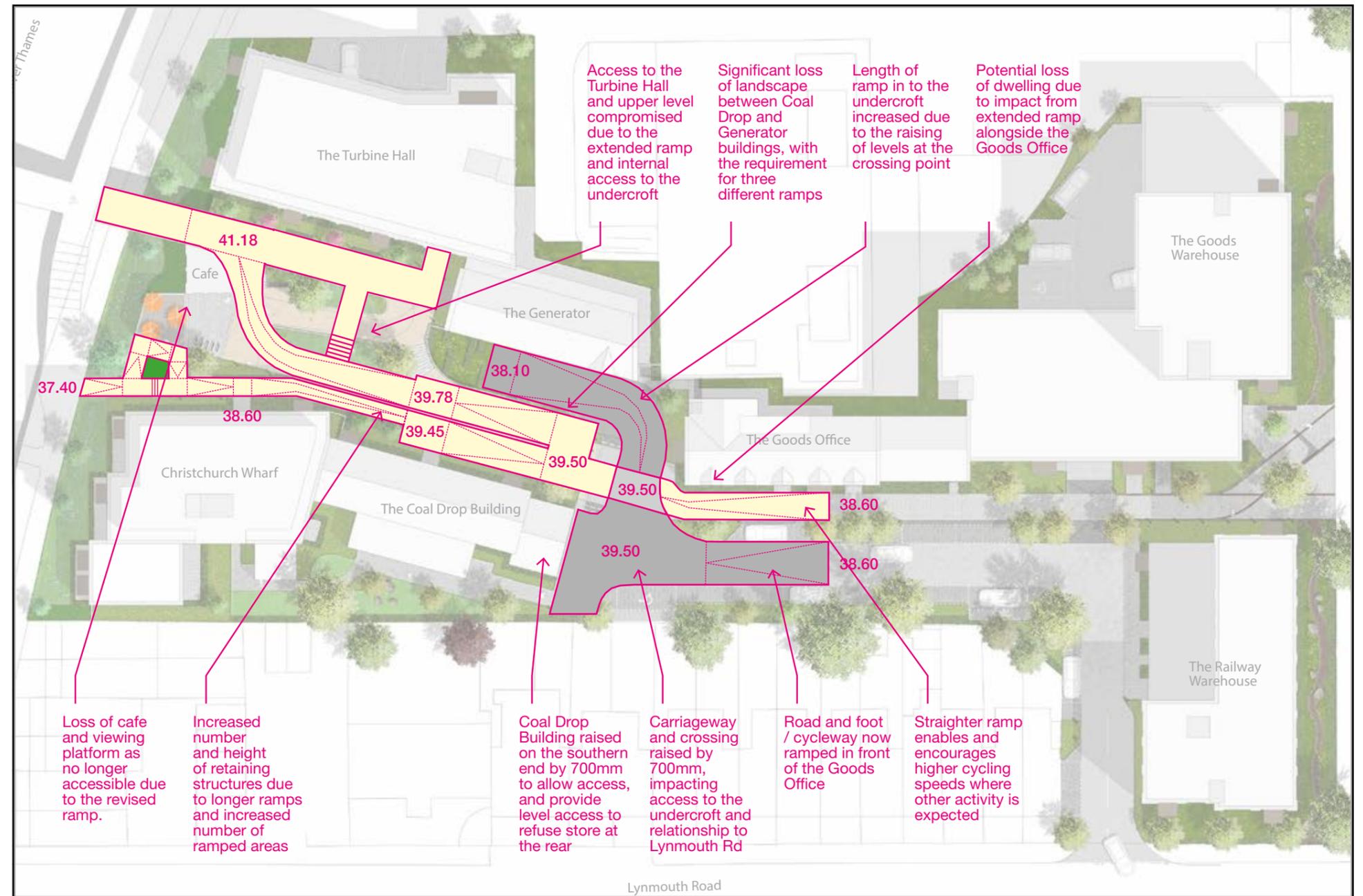


Figure 1.15
Alternate Route Option 2 –
Descend from Crossing

As an alternate option, a more linear route has also been investigated as follows. For the purpose of this sketch, it is assumed the Towpath connection is 2m and the Bridge connection is 3m.

From Vastern Road, the route would be at 5m in width, splitting in to a 2m route to the Towpath and a 3m route to the Bridge to the corner of the Railway Warehouse building.

The towpath route would remain alongside the road and parking at a level of 38.6m AOD up to the entrance of Christchurch Wharf. From this point the route would descend at 1:21 to the towpath, with a more direct stepped connection if required. This would result in the Coal Drop Building dropping in height by almost 1m due to the revised ground floor level to tie-in to the footpath. This lower route would still cross the vehicular entrance to the undercroft.

The Bridge route would begin climbing through the site much closer to Vastern Road, allowing the route to run over the vehicular entrance to the undercroft. From this point, the route would remain at 41.18m AOD through to the connection to the Bridge.

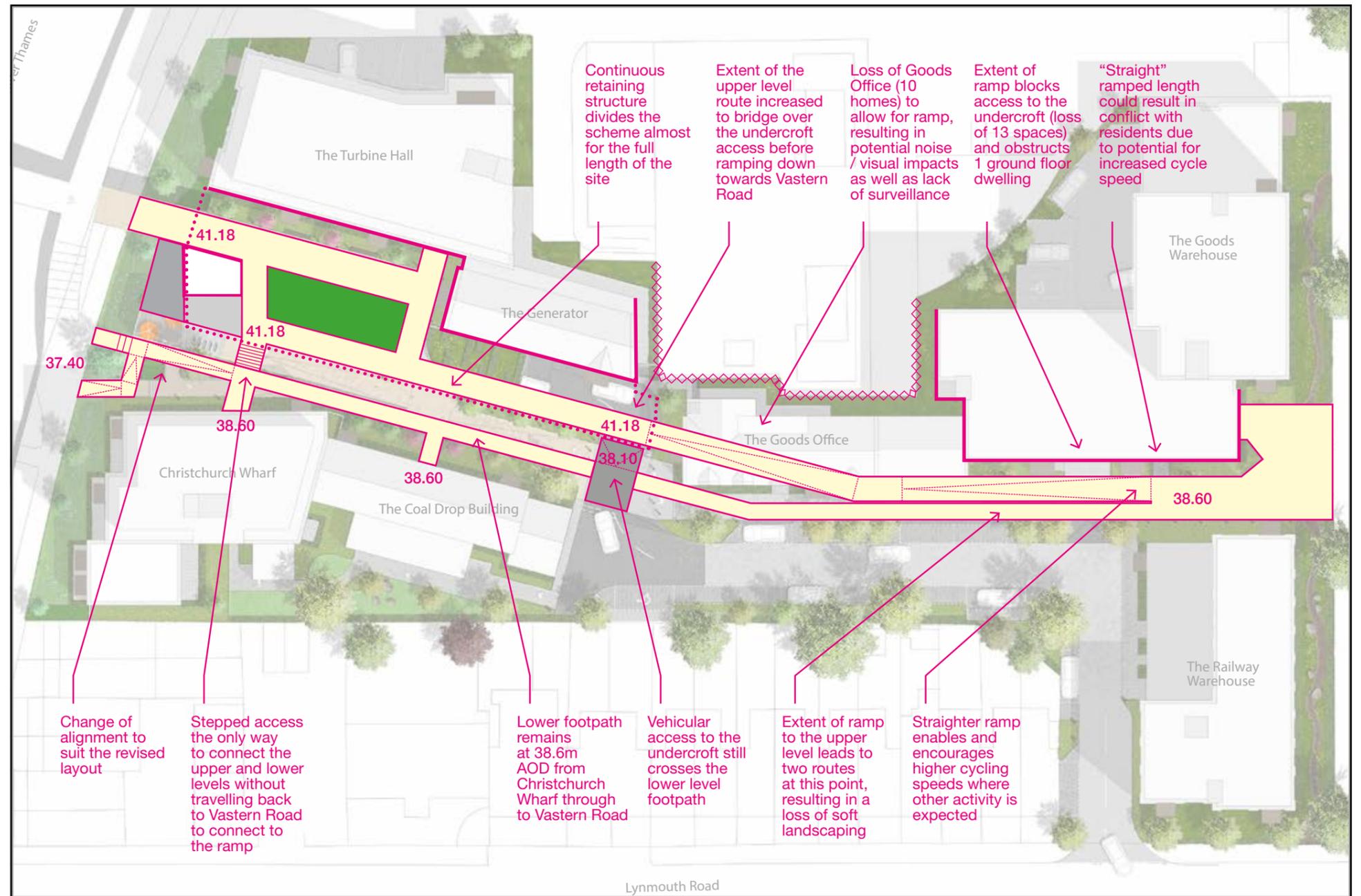
In this scenario the whole of the ground floor of Christchurch Wharf and Coal Drop Building would be facing on to a 3.7m high structure which would support the foot / cycleway, under which would be the undercroft.

An engineered fire solution would be required as a fire appliance would not be able

to access the Turbine Hall and Generator buildings. The Goods Office would need to be removed, resulting in a loss of 10 homes. Access to the undercroft on the Goods Warehouse would be blocked by the ramp, resulting in a loss of 13 parking spaces. This would also require the loss of 1 more home due to the ramp. A revised refuse strategy would also be required for this building. With no building to screen the SSE equipment, views and noise would then become an issue.

In summary, the straightest route (given SSE boundary constraints) would impact the scheme as follows;

- a loss of 11 homes (10 through the loss of the Goods Office due to the route alignment, 1 in the Goods Warehouse through being obscured by the ramp),
- a loss of 13 parking spaces due to being unable to access the undercroft to the Goods Warehouse,
- two routes running the whole length of the site creates a split site with permeability east-west within the site significantly reduced,
- lack of active frontage and natural surveillance between the Turbine Hall and Goods Warehouse,
- loss of the Goods Warehouse resulting in visual and noise impact on the route and residents,
- restricted servicing and delivery vehicle access,
- residents of Christchurch Wharf and Coal Drop building seeking step-free access to the Bridge would need to walk to Vastern Rd,
- straight ramp enables and encourages higher cycling speeds creating conflict.



Part 4.2.1 Assessing the Routes – Proposed Scheme (fig. 1.13)

Figure 1.16
Current Route to
Christchurch Bridge

The current proposed route linking through to Christchurch Bridge consists of a level route through the site (set at 38.60m AOD - the minimum level required in the Flood Risk Assessment) through to the crossing, just north of the Goods Office building. This section of the route consists of a 3.0m wide foot / cycleway, within a 15m wide landscaped street.

From this point, the levels gradually rise at a gradient of 1:21 to the point where the foot / cycleway splits to continue to the Bridge, or down to the Towpath (see Part 4.3). In order to allow fire appliance access, this part of the route increases to 3.7m in width, set within a landscaped route which is 15m in width.

The foot / cycleway then continues at 1:21 to the Cafe entrance / landing (40.41m AOD) before gently turning up to the upper (Bridge) level at 41.18m AOD. These sections are 3.0m in width on the straight, increasing to 5.0m in width where there is a change in direction. The changes in direction provide natural "landings" along the route.

In the submitted proposal, two additional sets of steps are introduced to provide alternative routes for pedestrians.



Figure 1.17
Current Route to the
Thames Towpath

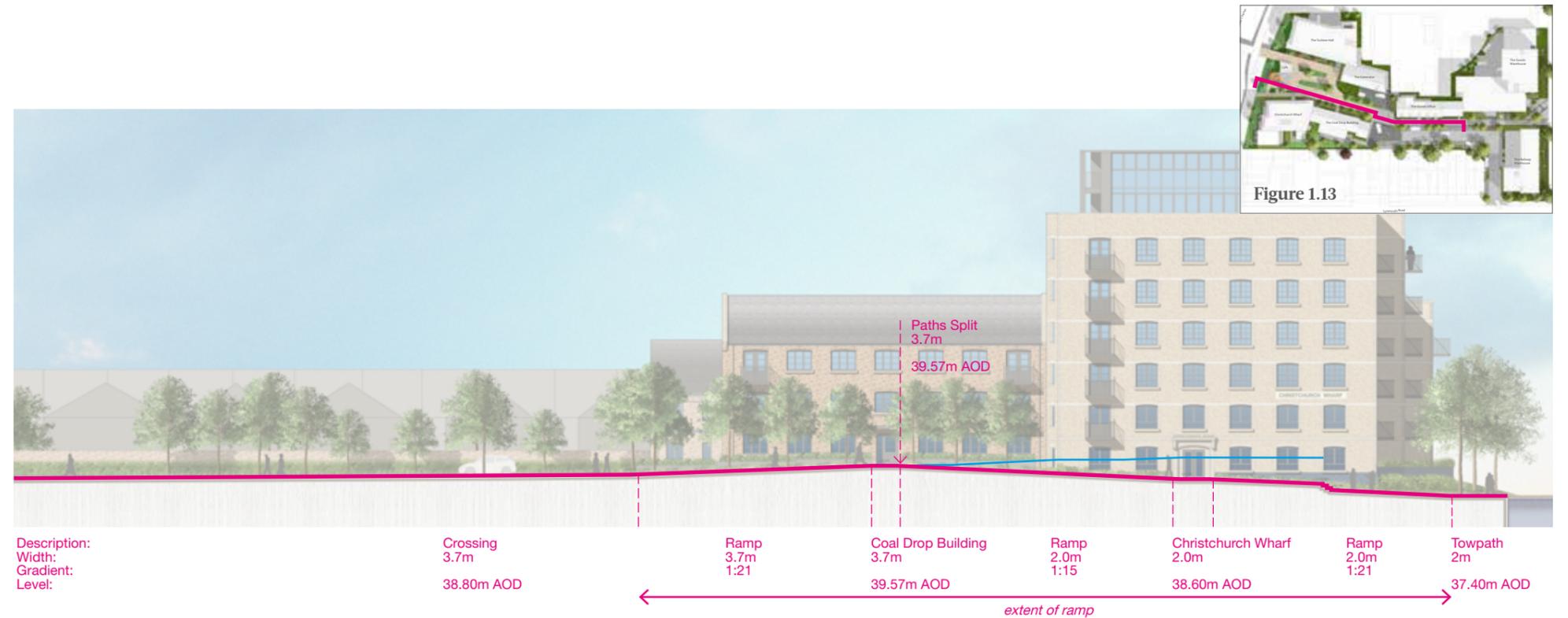
The current route linking through to Christchurch Bridge consists of a level route through the site (set at 38.60m AOD - the minimum level required in the Flood Risk Assessment) through to the crossing, just north of the Good Office building. This section of the route consists of a 3.0m wide foot / cycleway, within a 15m wide landscaped street.

From this point, the levels gradually rise at a gradient of 1:21 to the point where the foot / cycleway splits to continue to the Towpath, or up to the Bridge (see Part 4.2). In order to allow fire appliance access, this part of the route increases to 3.7m in width, set within a landscaped route which is 15m in width.

The foot / cycleway then drops at 1:15 to the entrance to Christchurch Wharf (set at 38.6m AOD in line with the Flood Risk Assessment levels) at a width of 2m. This section at 1:15 is driven by maintaining a 1:21 approach to the bridge and linking in to the FFL of Christchurch Wharf.

From here, levels reduce at 1:21 to the Towpath with a straight route by pedestrians or a slightly longer ramped route.

The blue line illustrates the ramp to the Bridge which these buildings will face. As demonstrated, only 5 windows would be partially affected, but these apartments have dual aspecting to principle rooms.



Part 4.2.2 Assessing the Routes – Alternative Route Option 1 (fig. 1.14)

Figure 1.18
Alternate Route 1 to
Christchurch Bridge

As discussed in Figure 1.14, an alternative approach has been requested to be demonstrated by the LPA, eliminating the “switchbacks”.

Taking this route in reverse from the Bridge, a level “landing” is provided at the upper level of 41.18m AOD before descending through the site at a gradient of 1:21. As the distance from start of ramp to where the next natural break occurs - where the paths split - is in excess of the guidance for a single ramp (30m), a landing must be introduced. The section from the upper level to first landing would be 3.0m wide.

From this point, the width increases to 3.7m to allow for

fire appliance access, and the gradient continues to the point where the path splits at 1:21.

As the foot / cycleway length has been stretched in this scenario to allow for the removal of the switchbacks, the ramp extends much further south. This in turn leads to the crossing area rising 0.7m, which in turn will raise the height of the Goods Office and the vehicular turning area and street against Lynmouth Road gardens by the same amount.

Access to the undercroft would also be affected, with the vehicular entrance moving back to suit an extended ramp from the crossing point leading to a reduction of 4no parking spaces.

Figure 1.19
Alternate Route 1 to
the Thames Towpath

As discussed in Figure 1.14, an alternative approach has been requested to be demonstrated by the LPA, eliminating the “switchbacks”.

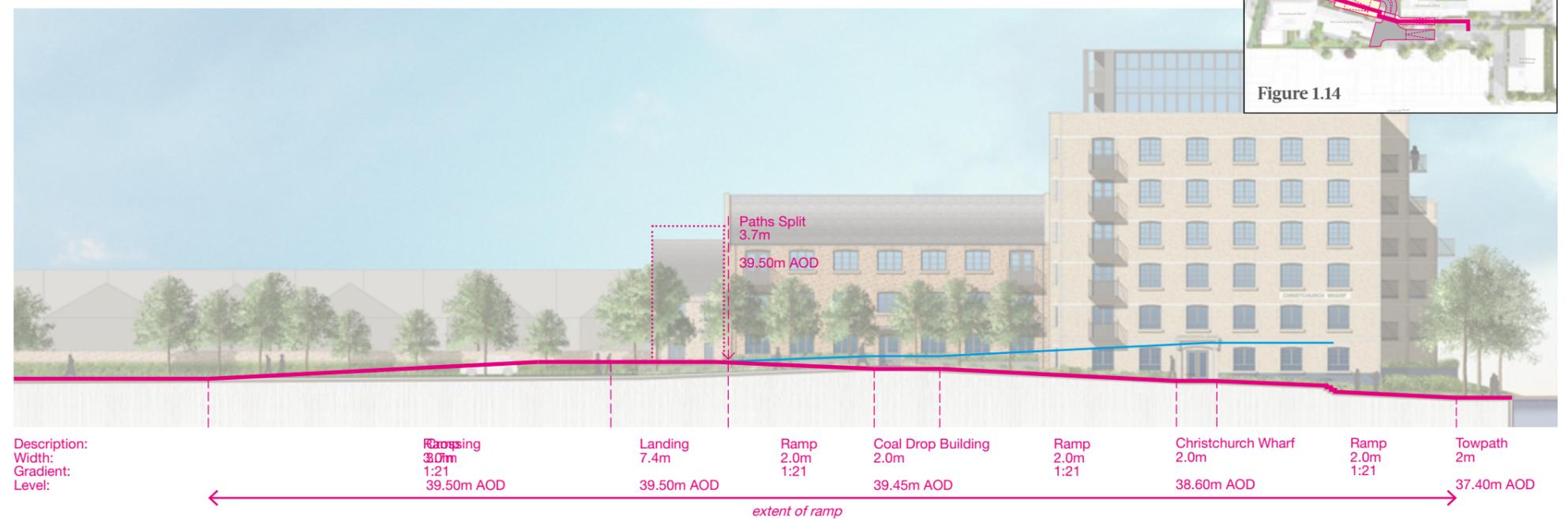
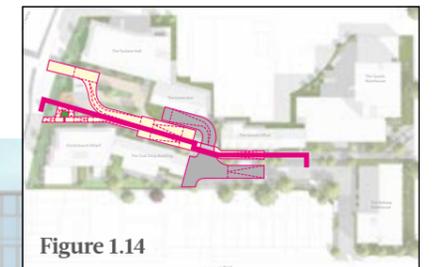
One of the impacts of this approach is that the length of the ramp pushes the point where the footpaths to the Bridge and Towpath diverge further south into the site. In addition, this point then leads to the raising of the route even further southwards through the site. This will result in increased heights and levels against the boundary to the Lynmouth Road properties.

The section from the split to Christchurch Wharf will be at 1:21 in this proposal owing to

the lengthened ramp section created by moving the path split further south.

The section between Christchurch Wharf and the Towpath remains as currently proposed as to introduce a straight ramp here at 1:21 would lower the entrance in to Christchurch Wharf below levels permissible in the Flood Risk Assessment.

The blue line illustrates the ramp to the Bridge. As demonstrated, the whole of the ground floor, including obscuring the entrance, of Christchurch Wharf would be fully obscured in this scenario, with 3 windows of the Coal Drop Building being partially obscured.



Part 4.2.3 Assessing the Routes – Alternative Route Option 2 (fig. 1.15)

Figure 1.18
Alternate Route 1 to
Christchurch Bridge

Introducing a straighter ramped option from the bridge landing toward Vastern Road, whilst still maintaining access to the undercroft parking area beneath the Turbine Hall and Generator buildings would result in the ramp extending much closer to Vastern Road.

This option results in the loss of the Goods Office building - due to a reduced distance between this ramp and the SSE boundary and associated restrictions - and the loss of one ground floor dwelling from the Goods Warehouse - the access would be blocked by the ramp.

In addition, the Goods Office provided natural surveillance of the central part of the scheme which would now be lost, and also provided a visual and acoustic screen to the SSE equipment.

Vehicular access to the undercroft parking area beneath the Goods Warehouse building would be blocked by the ramp resulting in a loss of 13 car parking spaces.

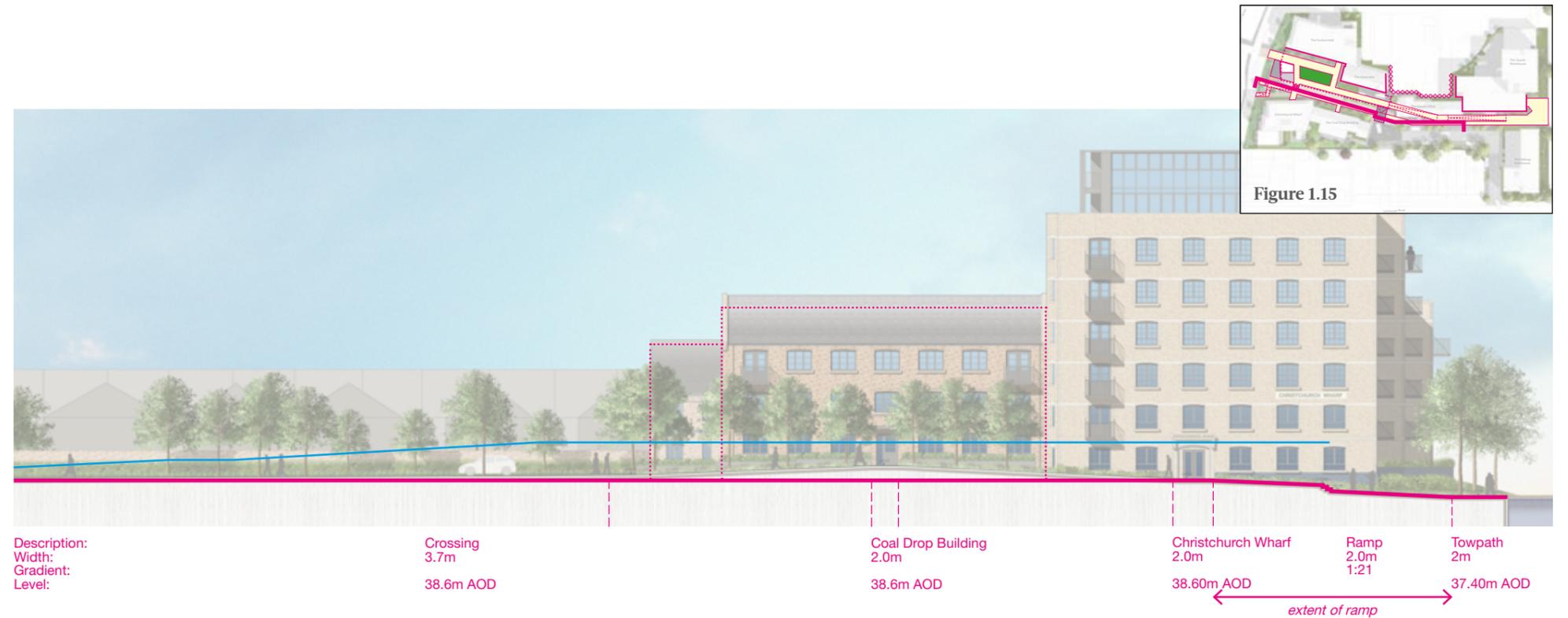
It is also worth noting that this option would result in residents of the Coal Drop Building and Christchurch Wharf only having stepped access to the landscaped upper level and Bridge unless they travelled almost back to Vastern Road to be able to double back on the ramp.



Figure 1.19
Alternate Route 1 to
the Thames Towpath

A benefit of this option is the more simple approach to the Towpath, with the level now being consistent from Vastern Road through to Christchurch Wharf before dropping at 1:21 to the Towpath. The Coal Drop Building would drop to reflect the lower site levels.

However, the result of the Bridge ramp beginning much further south is that all of the ground floor accommodation to these buildings would face on to a retaining wall at 3.7m high (including parapet) set between 5m and 8m from the face of the buildings.



Conclusion

This document has reviewed the assertions that the route within the proposed scheme isn't direct / could be more direct, as well as investigating the impact to the scheme, route and neighbouring dwellings of making the route straighter. A summary of the findings are as follows;

Providing a direct route

- Straight routes connecting the Bridge and Reading Station are not achievable due to the retention of the SSE equipment,
- With the site and SSE constraints, coupled with the fixed points of the Bridge and Reading Station, a direct route has been provided,
- With the constraints of the SSE equipment, loss of built form has negligible effect on the route, but would result in the loss of homes making the site more unviable and reducing natural surveillance / overlooking of the route.
- Other RSAF and Policy objectives relating to the route are achieved in our proposed scheme, including: strong place making; landscape and public realm; active frontages; the route is fully integrated in to the development and urban design solution.

Providing a straighter route

- Levels within the site could need to be raised significantly, either up to 700mm against the gardens of Lynmouth Road properties or through a significantly raised ramp,
- There would be a significant loss of soft landscaping and loss of potential for tree planting along the route,
- The outlook for several homes would be detrimentally impacted through the change in levels through the site,
- Building heights in the middle of the site would need to be increased to adapt to the revised levels. Alternatively it would be necessary to remove these buildings resulting in a loss of 11 homes.
- The straighter routes would enable and encourage higher cycling speeds in an area of public realm where other activity is expected. High approach speeds could then continue to Vastern Road where potential conflict arises with pedestrians, the main road and crossing.

The proposed scheme as submitted has been designed to deliver a well-balanced new community and 'place' within Reading which we hope residents and the wider community can enjoy and be proud of for years to come.

- A direct route has been provided through the site, flanked by areas of high-quality landscaping and opening up to the River Thames with publicly accessible hard and soft landscaped spaces for all to enjoy, coupled with the elevated viewing deck alongside Christchurch Cafe.
- Careful consideration of levels through the site ensure that the whole of the development is fronted by dwellings and doors to enliven the route and provide natural surveillance, and allow for softer changes in levels between parts of the site to ensure the scheme is as inviting and open as possible.

Appendix C Stantec TN003: Proposed Ramp Design Justification

Job Name: The Old Power Station Vastern Road
Job No: 47500
Note No: TN003
Date: 8th June 2020
Prepared By: Joe House / Dan Townsend
Subject: **Pedestrian and Cycle Connection to Christchurch Bridge**

Introduction

To support the planning application for the residential redevelopment of part of the former SSE site at 53-55 Vastern Road, Berkley Homes (Oxford and Chiltern) Limited have prepared a Cycle and Footway booklet to provide information in relation to the internal pedestrian and cycle connection between the site and Christchurch Bridge.

This Technical Note has been prepared by Stantec to supplement the information booklet and provides a descriptive review of the proposals regarding the design principles, constraints, and relevant policy and guidance.

Baseline Connections

Christchurch Bridge provides a traffic free connection over the River Thames between Caversham (via Christchurch Meadows) to the north and Reading to the south. The bridge opened in 2015 and forms part of the National Cycle Network (NCN) Route 5. The bridge provides a shared foot/cycle path with the average bridge deck width of c4.7m (excluding a minor allowance for the footprint of the mast and seating area), down to 3.5m at either end. The bridge is connected to the north via 3.0m wide shared foot/cycle paths across Christchurch Meadow and to the south via a shared foot/cycle towpath which was widened as part of the works associated with the bridge to a max width of 3.0m.

The current pedestrian and cycle connection to Vastern Road is via Norman Place approximately 110m to the east of the bridge landing. Users are faced with a 90 degree turn onto the access ramp to the widened 3.0m towpath and another turn in excess of 90 degrees onto Norman Place. The route through Norman Place is approximately 2.1m wide.

A Toucan crossing facility currently provides a pedestrian and cycle connection across Vastern Road from Norman Place towards the station, with the central island having a width of approximately 2.8m. The onward connection to the Town Centre is via the Northern Station interchange and sub-way under Reading Station (where cyclists currently have to dismount). Once through the subway at the southern end, for cyclists to continue their journey they have two options; firstly they can travel west and use Greyfriars Road to get to Friar Street, or secondly they dismount and use the access ramps provided at the station. All these areas are shared with pedestrians.

During the design consultation for the bridge it was agreed with Reading Borough Council (RBC) Officers and later endorsed by Members at planning committee that the associated connections and bridge would provide a shared pedestrian / cycle facility. This was to ensure that the route provided a free low speed connection suitable for all users, which reflected the sub-urban to urban environment which the bridge connects. Design rationale was to create a new piece of public realm with a traffic free connection suitable for all users, which reflected the wide range of people using the facility; from families with children and buggies, to wheelchair users and commuter pedestrians and cyclists. The introduce of a Café facility within the proposed development and greater landscaping enhancements would only add to the public realm benefits. As with all other sections of the route described above, it was designed to be an alternative to Reading and Caversham bridges. Connections at either end should logically accord with this design philosophy.

On the 18th May 2020 RBC policy committee approved a number of schemes which re-allocate road space for active travel following Government advice around social distance measures amid the COVID-19 pandemic. Under legalisation these schemes are temporary and can be in place for up to 18 months, however the schemes could be made permanent with minimal additional works. The approved schemes are:

- Gosbrook Road and Westfield Road: Due to narrowness of pavements, make Gosbrook Road (Westfield Road to Prospect Street) and Westfield Road (southbound) from Henley Road junction to Gosbrook Street one way, to increase capacity for walking and cycling.
- Sidmouth Street: One way (northbound) for all traffic and introduce a new contra-flow cycle lane in the current southbound lane to increase space for pedestrians and cycle lanes.
- **Reading Bridge: Remove inbound lane and existing hatching to create both northbound and southbound cycle lanes.**
- Oxford Road: New cycle and bus lanes.
- Whitley Street Local Centre: Remove one traffic lane outbound and reallocate it to cyclists, alongside other improvements for pedestrians.
- Southampton Street/Silver Street: Introduce cycle lanes through removal of existing road hatching.
- Redlands Road: Introduce southbound cycle lane (uphill) and cycle priority measures at Christchurch Green junction.

Clearly the Reading Bridge scheme provides an alternative direct route for high speed commuting cyclists to travel to / from the Town Centre and Reading Station. The scheme is due to be implemented in June 2020.

Christchurch Bridge was designed in accordance with the following standards:

- DMRB BD 29/04 (Footbridges), therefore meeting standards for all users.
- BD29/04 states minimum width of 2m for use with cycles and horses but should accord with LTN 2/86 (now LTN 1/12) where the bridge is part of a pedestrian and cycle route.
- LTN 1/12 gives a preferred minimum width of 3.0m (Table 7.5) with an additional 500mm each side to allow for vertical features above 600mm high (Table 7.4)
- LTN 1/12 states that it should be read in conjunction with LTN 2/08 and makes reference to a number of other relevant publications including the Sustrans report 'The merits of Segregated and Non-Segregated Traffic Free Paths' which reviews various standards/guidance/studies, one of which refers to research by Atkins that leads to the classification of widths relating to a range of separate flows for pedestrians and cyclists, and Inclusive Mobility amongst others.

In addition to the above Sustrans were consulted in the design process of Christchurch Bridge, advised of over 50 shared use bridges they have knowledge of, and where available have provided details of the width of these bridges. The vast majority (16 of 22) are 3.5m or less wide.

Proposed Connection Strategy

RBC's Reading Central Area Action Plan' (adopted in January 2009) identifies the connection between Christchurch Bridge and Vastern Road as a key movement corridor. The pedestrian and cycle strategy for the site has been carefully considered/developed in the context of the Plan including consultation with officers, members, key stakeholders and the general public during pre-application engagement.

The pedestrian and cycle strategy for the site has been developed to reflect and complement the existing Christchurch bridge design principles. Primarily this will create a safe, urban, 'traffic free' shared cycle pedestrian and cycle connection between the current bridge and Vastern Road that can benefit future site residents and existing Christchurch Bridge/tow path users. In summary the route provides:

- 3m minimum width to provide space for route to be shared by cyclists, pedestrians and wheelchair users consistent with the towpath and bridge approaches;
- Stepped sections are provided to create direct routes for pedestrians reducing number of pedestrians using ramped sections;
- Lengths of ramped sections are below the recommended maximum lengths of 30m for 5% gradients the ramped lengths are between 17m and 19m respectively;
- Ramped sections are supplemented by minimum 5m length flat sections to ease use for wheelchair users;
- Ramped section to directly feed to the southern River Thames towpath;
- Landscaping and curves to reduce speeds creating a safer environment for all users;
- Curves in ramp down from bridge naturally discourage high speed cycling at potential conflict points within public realm and Vastern Road;
- Route width widens at corners to ease cycle manoeuvring and ensure tandems/cycles with trailers can use ramp (these are currently unable to use the Christchurch bridge route so this is a significant benefit); and
- No hard barriers either side of the ramp to improve feeling of space available.
- High quality public realm allowing for integration of the public space around the elevated café terrace.

Ramp Design Standards / Principles

The design of the link between the site and the podium level connection at Christchurch Bridge has been at to forefront of the design development from the early stages of plan making to help promote sustainable travel in the local area.

The final design provides a minimum 3.0m wide shared use ramp at a maximum gradient of 1:21 which is suitable for all users including pedestrians, cyclists and wheelchair users, in accordance with the Department for Transport (DfT) 'Inclusive Mobility' guidance. To achieve the required drop in levels, the ramp has been designed as an 'S Bend' configuration and is confined to the northern area of the site to reduce the severance that would be created by an elevated structure and discourage high speed cycling through this area of public realm.

The proposed minimum ramp width of 3.0m with no hard obstacles either side is in accordance with standards and therefore appropriate for the location and expected users and demand.

RBC does not have a bespoke set of cycling standards. The London Cycling Design Standards (widely applicable to areas outside London and in town and city centres) outlines that a 3.0m wide shared use path will allow for safe and suitable opportunities for cyclists with a trailer to pass both pedestrians and wheelchair users.

Another key factor of an 'S Bend' ramp configuration is the radii and turning circles. The inner and outer radii of the proposed ramps are designed at 1.0m and 4.0m respectively. In comparison with the ramp configuration at the rail stations southern forecourt, the direction changes are less severe and the proposed width is greater.

The 'LTN2/08 Cycle Infrastructure Design' guidance sets out the minimum turning circles for cyclists in Table 2.4. For conventional bikes, which are expected to be the primary cycle type, a minimum inner radius of 0.85m and outer radius of 1.65m is required, and as such the ramp design proposals are in excess of the relevant standards.

For the less common cyclists that have rear trailers, they do require larger turning cycle radii of 1.5m (inner) and 2.65m (outer). This can clearly be accommodated within the available ramp width and therefore would comply with the LTN2/08 requirements.

Notwithstanding the above, the current designs are also a measure to help manage cycling speeds through the site when coming from Christchurch Bridge and approaching Vastern Road through an area of shared use public realm; reduced radii to control cycle speeds are referred to as an appropriate measure in the LTN 2/08 Cycle Infrastructure Design.

Creation of High-Quality Places

The latest National Planning Policy Framework (NPPF), which sets out the governments planning policies for England, outlines that sustainable and active travel should be promoted through the introduction of high-quality places and developed from an early planning stage. NPPF also sets out that developments should *"create places that are safe, inclusive and accessible and which promote health and well-being, with a high standard of amenity for existing and future users"*.

The walking and cycling improvements proposed by the development were widely discussed with RBC during the pre-application stage for the former SSE site pedestrian and cycle strategy and amended to reflect RBC officer comments. The final 'S Bend' ramp proposals allow for access for pedestrians, cyclists, buggy and wheelchair users with the ability to include high-quality landscaping around the bends and also allow for the integration of the public space around the elevated café terrace.

The proposed pedestrian / cycle strategy provides a high-quality link whilst creating a high-quality public space for all users including future residents. This strategy also accords with the adopted Reading Station Area Framework. This strategy has been developed for the emerging and submitted applications at the adjacent and neighbouring sites of Station Shopping Park, Royal Mail and Station Hill. These sites are connected by the planned shared pedestrian foot/cycle subway under the station and provide a clear and legible shared pedestrian/cycle route through the centre and beyond.

Summary

The proposed pedestrian and cycle strategy for the site has been developed to reflect RBC policy and the existing sub-urban to urban setting complementing the existing pedestrian / cycle infrastructure in the area.

The design provides a safe and direct route through the proposed development, connecting the station to Christchurch Bridge and beyond, as per RBC's aspirations, whilst incorporating the change in levels and adhering to all framework, legislation and guidance.

The proposed pedestrian and cycle connection to Christchurch bridge achieves the following:

- Provides a new direct route through the proposed development, with high quality landscaping providing enhanced public realm benefits in addition to the Bridge.
- Significant improvement to the current north-south route passing along the towpath via Norman Place.
- Opportunity to introduce landscaping and improvement to public realm and caters for all potential users of the space, enhancing the vision of the bridge.
- Minimum of 3.0m wide shared use path allowing for safe and suitable opportunities for cyclists with a trailer to pass both pedestrians and wheelchair users.
- A maximum gradient of 1:21 which is suitable for all users including pedestrians, cyclists and wheelchair users. Additional stepped routes for pedestrians have also be included to provide more direct access.
- Curves in ramp down from bridge naturally discourage high speed cycling and therefore creating an area of high-quality public realm and sense of place that will be in keeping with the local areas future vision.

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