

Active Travel Route: Biglis to Dinas Powys

Design & Access Statement

Vale of Glamorgan Council

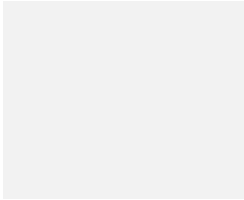
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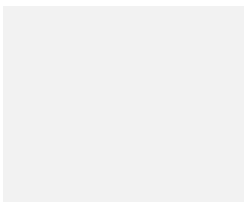
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This report dated 18 November 2024 has been prepared for Vale of Glamorgan Council (the "Client") in accordance with the terms and conditions of appointment between the Client and **Arcadis (UK) Limited** ("Arcadis") for the purposes specified in the Appointment. For avoidance of doubt, no other person(s) may use or rely upon this report or its contents, and Arcadis accepts no responsibility for any such use or reliance thereon by any other third party.

Contents

1	Introduction.....	1
2	Planning Policy Context.....	7
3	Design Objectives of the Proposal	12
4	Conclusions	21

1 Introduction

1.1 Proposed Development

- 1.1.1 Arcadis, on behalf of our client, the Vale of Glamorgan County Borough Council (VoG) (the 'Client'), has prepared a Design and Access Statement to accompany an application for planning consent under the Town and Country Planning Act 1990, as amended (the 1990 Act), for creating a new Active Travel Route (ATR), hereafter referred to as the 'Proposed Development' located between Biglis and Dinas Powys.
- 1.1.1 A detailed description of the Proposed Development is provided in Section 3.3 of this Design and Access Statement (DAS) in relation to the following works, as set-out within the planning application:
'The provision of a shared pedestrian and cycle route (Active Travel Route), footbridge, landscaping and associated works from Biglis to Dinas Powys'
- 1.1.2 Section 42 of the Planning and Compulsory Purchase Act 2004 substituted a new Section (62) into the Town and Country Planning Act 1990 requiring a DAS to be prepared to accompany certain types of development to explain the design principles and concepts that have informed the development and how access issues have been dealt with. These provisions were supplemented by amendments to the Development Management Procedures published by the Welsh Government in February 2016. The procedural changes require a DAS to be produced for the Proposed Development, classed as a 'major' development.
- 1.1.3 This DAS therefore accompanies the planning application given this proposal is deemed as 'major' owing to the site area and provides details of the design principles that have influenced the Proposed Development and the access issues associated with the development site. References made within this Statement to Drawing Numbers relate to those plans submitted in support of the planning application.

1.2 Purpose and Structure of the Statement

- 1.2.1 The purpose of this Design and Access Statement is to describe the Proposed Development for which planning permission is sought and to outline how the proposals respond to and comply with, relevant national and local planning policy to be weighed by the VoG, as the Local Planning Authority (LPA).
- 1.4.1 The structure of the Design and Access Statement is as follows:
- **Chapter 2** sets out the local and national planning policy context of relevance to the proposal.
 - **Chapter 3** sets out the design objectives for the scheme and describes in detail each of the components of the Proposed Development, as well as the accessibility principles associated with the proposals in line with the planning policy framework applicable to the proposals.
 - **Chapter 4** reaches conclusions on the overall compliance of the development proposals with planning policy.

1.3 The Site

- 1.3.1 The Proposed Development site encompasses an area of 10.9ha of which, 9.5 hectares encompasses the red line boundary, as indicated in red on the proposed Active Travel Route General Arrangement Overview Drawing (Ref: 10058585-ARC-XX-010-DR-C-00004 P01). The Proposed Development is located at approximate National Grid Reference (NGR) ST 15393 70215.

1.3.2 As presented on the Site Location Plan, the proposed route commences at the southeast of the roundabout where Cardiff Road (A4055), A4231, and Sully Moors Road (B4267) meet. The route moves in a northeast direction and runs parallel to the south (and then east) of Cardiff Road. It intersects with the junction of Cardiff Road and Green Lane before crossing over Green Road. A large field parcel has been included within the red line and forms part of the planning application boundary for compensatory flood mitigation as the proposals. Continuing with the route north, it merges back to the east of Cardiff Road and continues north until reaching a crossing at the entrance of Parc Bryn-y-Don. From there, it travels from the southeast to the northwest and into Heol Y Frenhines, reconnecting with Cardiff Road before utilising an existing signalised crossing to access St Cadoc's Avenue. The route then links with the existing shared route to the south of the abandoned railway. The boundary of the application site is depicted in the accompanying General Arrangements (10058585-ARC-XX-010-DR-C-00001-Sheet 1,2,3,4,5,6,7,8 and 9).

1.3.3 The site location and areas of Permitted Development are depicted below:

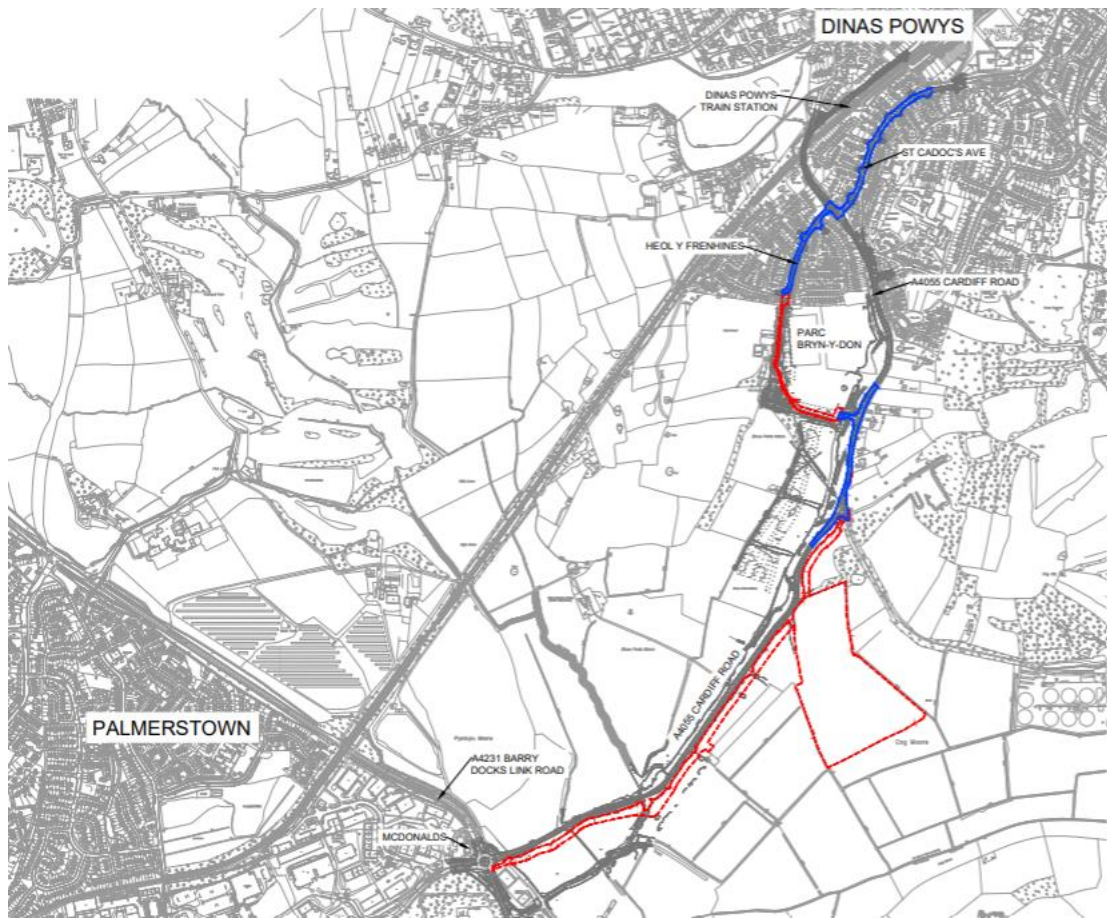


Figure 1: Site Location (Red Line Boundary)

1.3.4 The wider surroundings are characterised by agricultural land in all directions, with mixed residential and residential areas at retrospective ends of the proposed route, located to the south of Palmerstown (Biglis) and Dinas Powys. Dinas Powys Moors Site of Importance for Nature Conservation (SINC) is located to the southwest of the site, across from the section of Parc Bryn Y Don. There are also a number of Tree Preservation Order trees within or immediately adjacent to the Site. Public Right of Way S1/41/1 extends to the south of the application site, from Cog Road in Sully, then running alongside Cardiff Road, terminating at Cross Common Road.

1.3.5 In terms of the wider surrounds, Cog Moors Site of Special Scientific Interest (SSSI) occupies an area of 13ha, approximately 350m to the east of the Site. In addition, the Romano-British Farmstead

Scheduled Ancient Monument is located approximately 400m northwest from the Site. There are no other environmental designations crossing the site.

1.3.6 The following figures illustrate the existing viewpoints across the proposed route:

Figure 2: Viewpoint of A4055 Cardiff Road



Figure 3: Viewpoint Field Access off east of A4055 Cardiff Road



Figure 4: Viewpoint (north facing) of Cardiff Road prior to Green Lane



Figure 5: Viewpoint of Parc Bryn-Y-Don

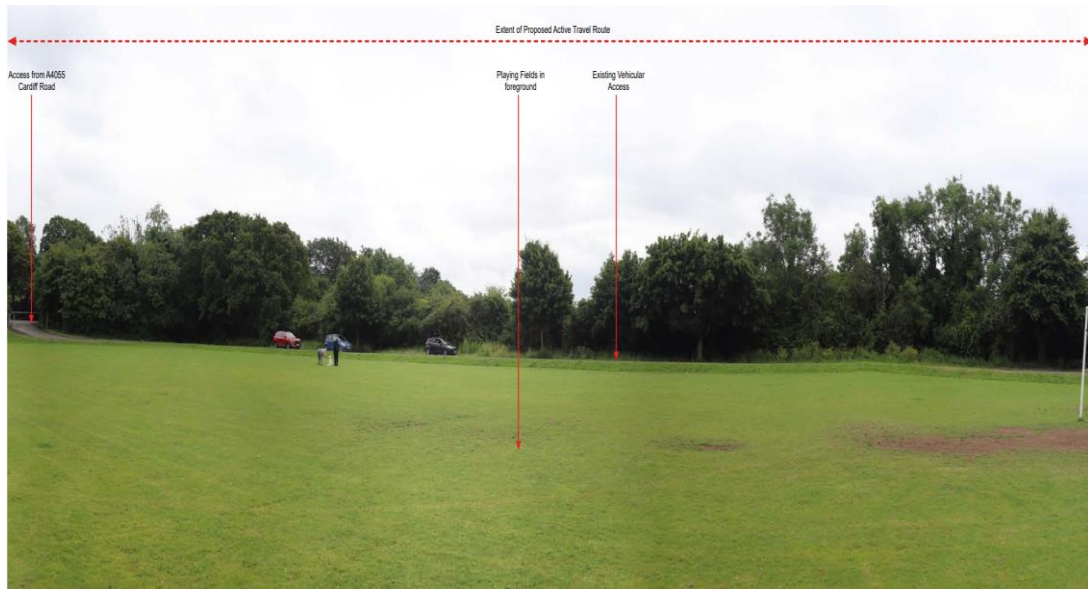


Figure 6: Viewpoint of Heol-Y-Frenhines (Permitted Development)



Figure 7: Viewpoint (Facing west) of St Cadoc's Avenue (Permitted Development)



1.4 Proposed Development

1.4.1 The Proposed Development, consisting of a shared footway and cycleway from Biglis to Dinas Powys, which will include the following works:

- **Dedicated cycle lanes:** Separate lanes for cyclists to provide a safe space from cars.
- **Pathways:** Pedestrian and cycle path creation through widening of existing paths.
- **Pedestrian crossings:** Safe crossing points for pedestrians at key intersections and crossings along the route, as well as the provision of tactile paving.
- **Signage and markings:** Clear signage, road markings, and signals to guide cyclists and pedestrians along the route.
- **Lighting:** Adequate lighting along the route to improve visibility, especially during darker hours.
- **Accessibility:** Ensuring the route is accessible for users of all abilities, including those with disabilities.
- **Pedestrian/ cycle bridge:** a new pedestrian/ cycle bridge is provided crossing Cadoxton River.
- **Means of enclosure:** Across the length of the ATR, the erection of a 1.2m high 3 timber post and rail Fencing will be in place with 0.9m bollards located at Heol-Y-Frenhines.

1.4.2 In order to comply with the requirements of the Active Travel (Wales) Act 2021, the shared footway and cycleway proposes:

- A 4m wide active travel route along the section passing within the fields adjacent to Cardiff Road.
- A minimum 3m wide shared footway/ cycleway width on primary routes (namely along the adopted highway), with a 0.5m verge width for routes with speed limits up to 40mph.
- The requirement for an increased verge width up to 1.5m and shared footway/cycleway up to 3m wide requires the removal of existing trees and vegetation. It will also require potential land purchase, earthworks, along with the widening and altering of the existing highway embankment.

1.4.3 In terms of proposed landscaping, existing vegetation will be retained, where possible. The landscape design seeks to complement the ATR with native species vegetation planting, providing visual mitigation and screening of proposed embankments, hard landscape works and lighting. Woodland and hedgerow planting is proposed adjacent to the Proposed Development to integrate the scheme into the surrounding landscape. Species will be a native mix of local provenance, including *prunus spinosa*, *Quercus palustris*, *acer campestre*, *Crataegus laevigata*. Seeding of species-rich grassland to verges and areas of embankment to provide additional habitat for pollinators. All areas of hard landscape have

been designed such that they are consistent with adjoining areas of existing highway infrastructure including tactile paving.

- 1.4.4 These infrastructure improvements will promote the proposed route as a sustainable mode of transportation, prioritise safety, and create a user-friendly environment that will encourage walking and cycling as a viable transport option between Biglis and Dinas Powys.

2 Planning Policy Context

- 2.1.1 This Chapter outlines the planning policy framework applicable to the design aspects of the Proposed Development providing an overview of the relevant national and local planning framework.
- 2.1.2 At a national level, Planning Policy Wales (PPW) provides relevant planning guidance informed by the Well Being Future Generations Act, together with the National Development Framework: Future Wales – The National Plan 2040, as well as The Environment (Wales) Act 2016 for the provision of green infrastructure and supporting Technical Advice Notes (TANs). The content of national guidance must be taken into account by local planning authorities when deciding planning applications.
- 2.1.3 In addition to the above, the Active Travel Act Guidance (ATAG) was published by Welsh Government in 2021. It supports local authorities in fulfilling their duties under the Active Travel (Wales) Act 2013 to plan and design networks of walking and cycling routes. The ATAG includes best practice on infrastructure design and gives guidance on related facilities such as cycle parking, which the proposals have had due regard to.

2.2 National Planning Policy

National Development Framework: Future Wales – The National Plan 2040

- 2.2.1 The National Development Framework (NDF): Future Wales represents the Welsh Government's primary national development framework, strategically addressing key national priorities through the planning system for the next two decades. These priorities encompass sustaining and enhancing a robust economy, achieving decarbonisation and climate resilience, fostering strong ecosystems, and enhancing the health and well-being of our communities.
- 2.2.2 This Framework operates as a spatial strategy, avoiding involvement in decisions better suited for regional or local authorities. Instead, it offers strategic guidance for planning at all scales and outlines policies and significant concerns to be pursued at the regional level. A primary goal of this document is to tackle issues that the Welsh Government deems high priority, with a particular emphasis on making positive contributions towards the national placemaking objectives for Wales.

Planning Policy Wales Edition 12 (February 2024)

- 2.1.1 PPW states that meeting the objectives of good design should be the aim of all those involved in the development process and applied to all development proposals. These objectives can be categorised into 5 key objectives of good design, shown as follows:
- Environment sustainability.
 - Movement.
 - Character.
 - Community Safety.
 - Access.
- 2.1.2 These and their associated explanations are presented in the following diagram:



Source: PPW, Edition 12 (February 2024) – Objectives of Good Design

- 2.2.3 PPW states clearly that the design principles and concepts that have been applied to development proposals should be reflected in the content of any DAS and are material considerations in the determination process.
- 2.2.4 PPW also considers that the visual appearance of the proposed development, its scale and relationship to its surroundings, and context are material planning considerations. Whilst noting that LPAs should reject poor building and contextual designs, guidance makes clear that LPAs should not attempt to impose a particular architectural taste or style arbitrarily and should avoid inhibiting opportunities for innovative design solutions.
- 2.2.5 In preparing a DAS, applicants are advised that an integrated and inclusive approach to sustainable design should be followed, proportionate to the scale and type of the development proposal.

Technical Advice Note 12: Design (March 2016)

- 2.2.6 Alongside PPW, Technical Advice Note (TAN) 12 'Design' is the principal source of design guidance for Wales in providing a broad framework with which to steer design standards and principles at the local level. It fully advocates those aspects of good design identified in PPW and presents a series of guidelines to deliver these elements.
- 2.2.7 TAN 12 offers guidance and details on various interconnected aspects, encompassing the definition of design for planning purposes, considerations of design in planning determinations, and design policy and advice for local planning authorities. Good design and placemaking sentiments lie at the heart of the document, advising that the successful delivery of development requires a holistic approach in achieving sustainable development.

Active Travel Act Guidance (July 2021)

- 2.2.8 The ATAG sets out design details for improvements to active travel infrastructure to help local

authorities meet their key duties under the Active Travel (Wales) Act, including:

- Making continuous improvements to active travel infrastructure.
- Enhancing provision for walkers and cyclists when constructing, improving or maintaining highways.
- Having regard to the needs of walkers and cyclists when putting in place traffic management arrangements.

2.2.9 To ensure that user needs are accommodated, the ATAG sets out the following design principles:

- Develop ideas collaboratively and in partnership with communities.
- Facilitate independent walking, cycling and wheeling for everyone, accommodating the needs of an unaccompanied child of secondary school age, someone pushing a double-buggy, an adapted cycle, or a less experienced cyclist.
- Design places that provide enjoyment, comfort and protection.
- Ensure access for all and equality of opportunity in public space.
- Ensure all proposals are developed in a way that is context-specific and evidence-led.
- Schemes should separate people walking, cycling and wheeling from motor vehicles or prioritise them.

2.3 Local Planning Policy

Vale of Glamorgan Local Development Plan

2.3.1 Section 38(6) of the Planning and Compulsory Purchase Act 2004 requires that an application for planning permission should be determined in accordance with the Development Plan, unless material considerations indicate otherwise.

2.3.2 The Development Plan material to the proposed Development is provided by the VoGC Local Development Plan (Adopted 2017). Other material planning policy considerations include VoGC's Supplementary Planning Guidance (SPG).

2.3.3 In providing the planning framework for the Proposed Development, the Adopted LDP contains a number of policies of relevance. These are referred to in full within the accompanying Planning Statement and not repeated here. However, those of relevance to the design and access aspects of the Proposed Development are referred to below:

Policy SP1 - Delivering the Strategy

'The strategy will seek to improve the living and working environment, promote enjoyment of the countryside and coast and manage important environmental assets. This will be achieved by:

1. *Providing a range and choice of housing to meet the needs of all sectors of the community.*
2. *Promoting a range of employment sites intended to meet the needs of the Vale of Glamorgan and the wider capital region.*
3. *Reinforcing the role of Barry, service centre settlements and primary settlements as providers of cultural, commercial and community services.*
4. *Promoting sustainable transport.*
5. *Delivering key infrastructure linked to the impacts of development.*
6. *Protecting and enhancing the built, natural and coastal environment.*
7. *Promoting opportunities for sustainable tourism and recreation.*
8. *Favouring development that promotes healthy living'.*

Policy SP10 – Built and Natural Environment

'Development proposals must preserve and where appropriate enhance the rich and diverse built and natural environment and heritage of the Vale of Glamorgan including:

- 1. The architectural and / or historic qualities of buildings or conservation areas, including locally listed buildings.*
- 2. Historic landscapes, parks and gardens.*
- 3. Special landscape areas.*
- 4. The Glamorgan Heritage Coast*
- 5. Sites designated for their local, national and European nature conservation importance.*
- 6. Important archaeological and geological features.*

Policy MD2 - Design of New Development

'In order to create high quality, healthy, sustainable and locally distinct places development proposals should:

- 1. Be of a high standard of design that positively contributes to the context and character of the surrounding natural and built environment and protects existing features of townscape or landscape interest.*
- 2. Respond appropriately to the local context and character of neighbouring buildings and uses in terms of use, type, form, scale, mix, and density.*
- 3. Where appropriate, provide new or enhanced areas of public realm particularly in key locations such as town centres, major routes and junctions.*
- 4. Promote the creation of healthy and active environments and reduce the opportunity for crime and anti-social behaviour. In the case of retail centres, developments should provide active street frontages to create attractive and safe urban environments.*
- 5. Provide a safe and accessible environment for all users, giving priority to pedestrians, cyclists and public transport users.*
- 6. Have no unacceptable impact on highway safety nor cause or exacerbate existing traffic congestion to an unacceptable degree.*
- 7. Where appropriate, conserve and enhance the quality of, and access to, existing open spaces and community facilities.*
- 8. Safeguard existing public and residential amenity, particularly with regard to privacy, overlooking, security, noise and disturbance.*
- 9. Provide public open space, private amenity space and car parking in accordance with the council's standards.*
- 10. Incorporate sensitive landscaping, including the retention and enhancement where appropriate of existing landscape features and biodiversity interests.*
- 11. Provide adequate facilities and space for the collection, composting and recycling of waste materials and explore opportunities to incorporate re-used or recyclable materials or products into new buildings or structures.*
- 12. Mitigate the causes of climate change by minimising carbon and other greenhouse gas emissions associated with their design, construction, use and eventual demolition, and include features that provide effective adaptation to, and resilience against, the current and predicted future effects of climate change'.*

Policy MD8 - Historic Environment

'Development proposals must protect the qualities of the built and historic environment of the Vale of Glamorgan, specifically: 1. Within conservation areas, development proposals must preserve or enhance the character or appearance of the area; 2. For listed and locally listed buildings, development proposals must preserve or enhance the building, its setting and any features of significance it possesses; 3. Within designated landscapes, historic parks and gardens, and battlefields, development proposals must respect the special historic character and quality of these areas, their settings or historic views or vistas; 4. For sites of archaeological interest, development proposals must preserve or enhance archaeological remains and where appropriate their settings'.

3 Design Objectives of the Proposal

3.1 Design Evolution

- 3.1.1 The design evolution process for the proposed route between Biglis to Powys Dinas has had regard throughout to the importance of site context and surrounding character as well as the operational requirements of the Proposed Development in meeting safety and accessibility requirements.
- 3.1.2 The proposal has been strongly influenced by site context, inclusive of the constraints from existing built form and sensitive visual receptors along the route, as well as being characterised by a generally low-lying landscape comprising of enclosed fields. At the same time, the scale and siting of the existing roads including Cardiff Road, Heol Y Frenhines and St Cadoc's Avenue largely defines its immediate environment, forming its own key feature for transport within the area.
- 3.1.3 From the initial designs for the scheme, the submitted proposals have incorporated a number of revisions following further site assessment work, as well as being in line with guidance provided by Welsh Government, contained within the Active Travel Act Guidance (July 2021). The current proposals have responded to a number of detailed site issues, resulting in revisions to the scheme layout, access and landscaping which are discussed in turn below.
- 3.1.4 As a result of these design iterations, the scheme proposals have achieved a sustainable, compliant ATR, informed by the findings of the various site studies undertaken, including ecology, hydrology and landscaping, thereby providing a scheme solution that is considered appropriate and acceptable within this area (as depicted below).



Figure 3.1: CGI Image

3.2 Design Proposal

- 3.2.1 The ATR route will comprise a number of key components, described below and shown on the

submitted Active Travel Route General Arrangement Overview (Drawing. 10058585-ARC-XX-010-DR-C-00004) and further detailed by the General Arrangements Plans (Sheets 1 – 9) (Ref. 10058585-ARC-XX-010-DR-C-00005, 00006, 00007, 00008, 00009, 00010, 00011, 00012 and 00013), accompanying the planning application.

3.2.2 The spatial arrangement of the scheme elements include the following, as described below:

- Landscaping
- Security / Lighting
- Drainage
- Materials
- Fencing
- Bollards
- Footbridge

3.3 Scheme Elements

3.3.1 The new ATR route has been designed to ensure safe travel and improve pedestrian and cycle access from Biglis to Dinas Powys. This includes designated pedestrian crossings, well-marked bike lanes, traffic calming measures, and adequate lighting to ensure the safety of active travellers, which are discussed in detail below.

Landscaping

3.3.2 The landscape design seeks to complement the ATR with native species vegetation planting, providing visual mitigation and screening of proposed embankments, hard landscape works and lighting. Woodland and hedgerow planting is proposed adjacent to the Proposed Development to integrate the scheme into the surrounding landscape. Species will be a native mix of local provenance, including prunus spinosa, Quercus palustris, acer campestre, Crataegus laevigata. Seeding of species-rich grassland to verges and areas of embankment to provide additional habitat for pollinators.

3.3.3 All areas of hard landscaping have been designed such that they are consistent with adjoining areas of existing highway infrastructure.

Security/Lighting

3.3.4 The proposed lighting has been designed in accordance with the following standards and has struck a balance between the needs of the user to safely navigate the cycleway, increase a sense of security and the impacts on key receptor including wildlife.

- BS5489-1 (Lighting of roads and public amenity areas, Code of practice)
- ILP PLG 23 - lighting for cycling infrastructure
- LTN 1-20 Cycle Infrastructure Design
- ILP GN01-20 guidance note 1 for the reduction of obtrusive light
- ILP GN08-08 23 Guidance note 8 bats and artificial lighting

3.3.5 Where the proposed cycleway is adjacent to existing illuminated highways current street lighting has been minimally adjusted to suit the proposed re-aligned carriageway, and to ensure lighting levels are compliant with relevant standards along Cardiff Road, Heol-Y-Frenhines and St Cadoc's Avenu, the existing column height and longitudinal positions have remained unchanged with the setback of the columns being updated to avoid being an obstacle for the cycleway users. This approach minimises the net gain in street lighting and increases in light spill and obtrusive lighting will be negligible compared

to the existing street lighting installations.

- 3.3.6 For the off-highway cycleway, the lighting is provided by luminaires mounted on 5m columns. The proposed lighting has a colour temperature of 3000K which reduces the impact of artificial lighting at night on most bat species. The luminaire pattern of lighting distribution has been selected to maximise the lighting falling on the route surface and minimises the light falling on the surrounding area, this helped reduce light spill. The lighting on the active travel route has been located in a single sided arrangement and have been position facing away from key receptors to reduce the visibility at night of the lighting columns from residential properties.

Drainage

- 3.3.7 The accompanying Surface Water Drainage Strategy demonstrates how surface water runoff from the Proposed Development will be managed sustainably, ensuring that flood risk is not increased on or off-site through an increase in surface water runoff. The Proposed Development will utilise permeable surfacing where it is located away from existing highways. Where the Proposed Development is adjacent to existing highways it will utilise existing drainage infrastructure, consisting of a traditional gully and chamber sewer setup, to handle runoff from the footway/cycleway.

Materials

- 3.3.8 Paving material will consist of two different types along the ATR. Along sections relevant to Highways, covered by Permitted Development, Cardiff Road, Parc Bryn-y-Don, Heol-Y-Frenhines and St Cadoc's Avenue paving will consist of Asphalt. Along the remaining ATR route, porous Asphalt will be used.
- 3.3.9 Across Cardiff Road, Parc Bryn-y-Don, Heol-Y-Frenhines and St Cadoc's Avenue, this proposed section of the ATR will consist of Asphalt. In most locations the existing material of the pathways is to be extended. Asphalt is durable paving material that can withstand heavy loads and traffic, making it ideal for high-traffic areas. Asphalt paving also benefits from quick installation when compared to other materials, minimising construction time and disruptions to traffic flow.
- 3.3.10 Along the remaining route, permeable Asphalt has been chosen as the preferred material choice due to the existing high flood risk in the area. As the space is likely to be flooded, the route will need to be able to quickly dry and become accessible to users.

Fencing

- 3.3.11 Between the 'the roundabout' where Cardiff Road (A4055), A4231, and Sully Moors Road (B4267) meet to the junction at Green Lane, the ATR route will feature 1.2m high Timber Fencing, as shown in Figure 3.2. Fencing is proposed to separate the ATR with the surrounding landscape to enhance safety. Timber fencing has been chosen to reflect that used in the area and to blend-in adhere to character with the existing landscape and is erected for safety purposes.

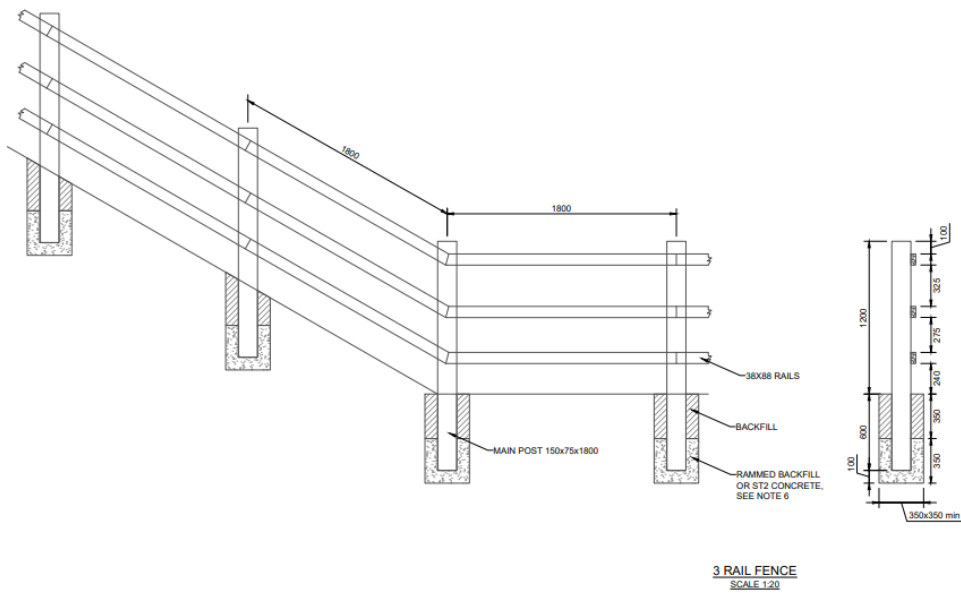


Figure 3.2: Fencing illustrations

Bollards

3.3.12 The scheme will also feature removable bollards located at Heol-Y-Fenhines for operational requirements. The bollards will be situated in a 'U' arrangement and will measure approx. 0.9m in height and will be spaced at an approximate 1.5m distance apart from each other. Bollards will comply with accessibility requirements that allow wheelchair access. The bollards will be comprised of a recyclable black plastic material as shown in Figure 3.3.

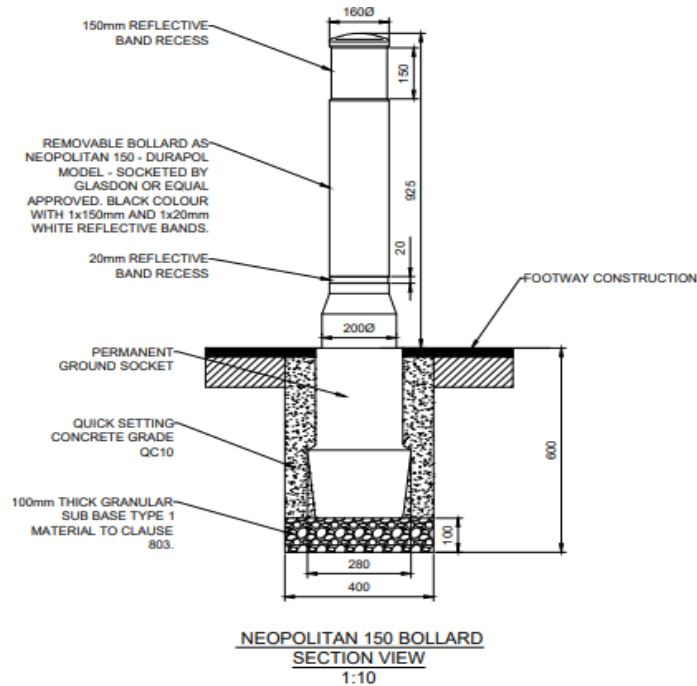


Figure 3.3: Bollard illustrations

Footbridge

3.3.13 The footbridge will be located on the new cycle path between Barry and Dinas Powys, approximately 1.3 km away from Dinas Powys and will be adjacent to Cardiff Road. The bridge will span over Cadoxton River, which runs parallel to the A4055 Cardiff Road and turns crossing under a bridge on Cardiff Road ending in Barry. The footbridge will comprise a concrete structure, with the use of vegetated wingwall systems. It is an integral RC structure that uses precast prestressed beams. The deck is approximately 550mm thick (in-situ concrete and prestressed beams), the bridge has a width of 5000mm from parapet to parapet and has a length of 13600mm. The use of materials for the construction of the footbridge has been used owing to concrete being a strong and durable material that can withstand heavy loads and harsh weather conditions, making it ideal for supporting pedestrian traffic over a long period of time. The bridge will be enclosed by the 3 timber 3 post rail. The elevations of the structure are depicted below.

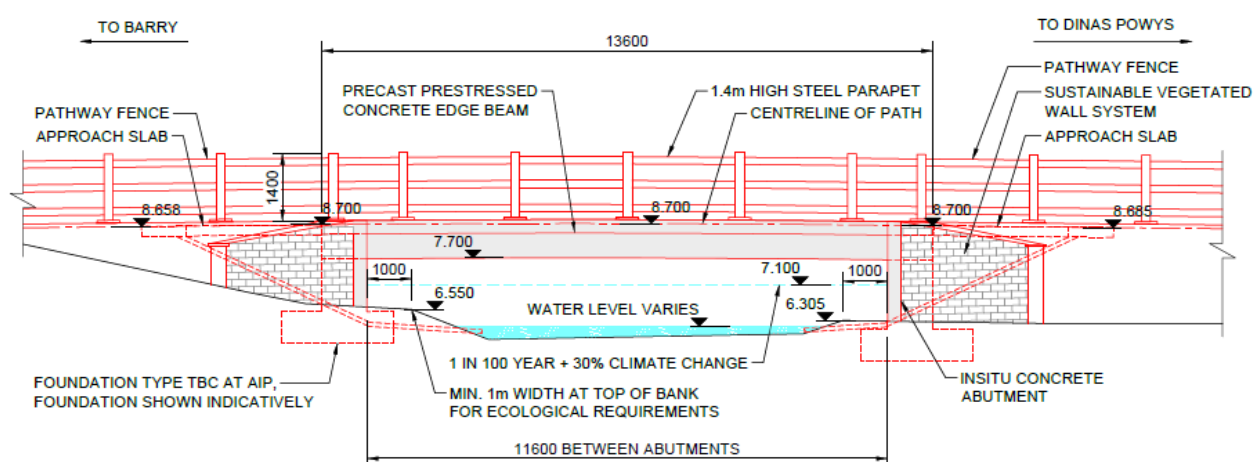


Figure 3.4: Footbridge illustrations

3.4 Design Approach

3.4.1 The structure of this section reflects the contributory elements to good design as set-out in TAN 12 as well as aiming to achieve placemaking sentiments set by PPW. Given the nature of the Proposed Development there is a limit on the extent to which the scheme design is able to fully respond to all aspects of the guidance provided, as set-out below, although each one has been considered in-turn:

- Character.
- Community Safety.
- Environmental Sustainability.
- Access.
- Movement.

Character

3.4.2 The following sub-sections address each of the character elements of the Proposed Development in-turn below.

Amount

3.4.3 The total site area measures approximately 10.9ha in size, of which 1.4ha for those sections which are

covered by Permitted Development. Those sections of the ATR requiring planning permission comprise an area of approximately 9.5 ha.

- 3.4.4 The ATR route will feature landscaping/ecological mitigation being provided in the form of hedgerow planting and trees (including prunus spinosa, Quercus palustris, acer campestre, Crataegus laevigata) to be planted around the perimeter of the site, together with a native hedge mix across points of the proposed route. Further compensation is provided through native planting in the areas to the northeast and southeast of the development site. Bird and bat boxes will also be provided along with onsite hibernaculum/habitat piles.
- 3.4.5 The Proposed Development is not considered to be detrimental to the immediate locality or surrounding landscape due to these chosen design parameters and having regard to the extent of land given over to environmental enhancements of the work.

Layout

- 3.4.6 The layout of the scheme proposals within the site boundary have made efficient use of the existing land available. Siting and layout are essential considerations in any development, affecting whether the proposals can be successfully integrated into their surroundings. The layout of the site has been influenced by the safety and accessibility requirements of pedestrian and cycle whist also incorporating environmental mitigation.
- 3.4.7 The layout of the Proposed Development is identified on the Active Travel Route General Arrangements Plans (Sheets 1 – 9) (Ref. 10058585-ARC-XX-010-DR-C-00005, 00006, 00007, 00008, 00009, 00010, 00011, 00012 and 00013), submitted in support of the planning application. This shows that those aspects of the site that are not covered by Permitted Development run parallel, to the south, of Cardiff Road. The siting of the proposed route will allow a ‘fit’ naturally within its rural setting, by revitalising the route for pedestrians and cyclists, the new ATR is in keeping in character with the existing movement in proximity of the ATR, albeit for pedestrians and cyclists.

Scale

- 3.4.8 The proposed structures comprise of carefully sited fencing, bollards, lighting and footbridge. The positioning and size of those features allow the ATR to meet accessibility and safety requirements whilst also keeping with the scale of existing built form from surrounding highways. The table below tabulates each of the structures:

Proposed Structure	Height, Width and Depth (approx)
Footbridge	13.6m span x 5.9m width
Timber fencing	1.2m X 1.8m (per panel) X 0.15m
Bollard	0.9m X 0.2m X 0.15m
Lighting column	1.1m

- 3.4.9 Furthermore, the scale of the Proposed Development has been limited to that which is necessary for the operation of the ATR. The scale of development is to be a generally a low-lying feature for the

landscape and as such will blend in with the existing floodplain / rural landscape. The route where appropriate will be effectively screened with existing and proposed landscape planting.

Appearance

- 3.4.10 The appearance of the proposed ATR consists of simple functional forms that respond, through consideration of external finishes and the use of sensitive colours that have allowed structures to blend in with their surroundings, thus reducing their overall impact on the surrounding countryside.
- 3.4.11 Well-designed fencing can enhance the overall appearance of the ATR, contributing to a more appealing and cohesive environment. Across the majority of the route, the timber fencing is a natural material choice that upholds the existing natural aesthetic of the area. Furthermore, the use of fencing for a low-lying route can help legitimise the space by creating a distinct area suit for purpose.
- 3.4.12 The material specifications for the other structural elements use a similar palette of materials, namely a mix of timber wood and Asphalt (which is typical paving for a footpath). The colour finishes predominantly replicate those used on existing structures within the surrounding highways, whilst also completing natural colour schemes found in the immediate vicinity through the use of timber fencing, which is favoured for this type of setting owing to the aesthetic appeal, and ability to create durable and low-maintenance pathways in a number of outdoor settings.
- 3.4.13 In terms of the use of materials for the footbridge, whilst concrete has been chosen owing to its strength and durability, concrete has been chosen so it can be finished in different ways to enhance the visual appeal of the footbridge, making it an attractive addition to the surrounding landscape. Furthermore, the use of a vegetated wingwall system has been used to blend the footbridge into its surrounds.
- 3.4.14 The design principles of minimising landscape and visual impacts whilst also responding to nature conservation has therefore been upheld in execution, providing a purpose-built solution appropriate to this location. The appearance of the proposed ATR consists of simple functional forms that respond, through consideration of external finishes and the use of sensitive colours that have allowed structures to blend in with their surroundings, to reducing their overall impact had on the surrounding countryside.
- 3.4.15 The material specifications for the main structural elements use a similar palette of materials, namely a mix of timber wood, asphalt paving and promotion of planting. The colour finishes predominantly replicate those used on existing structures within the surrounding highways, whilst also completing natural colour schemes found in the immediate vicinity.
- 3.4.16 Other design details, namely the external lighting has been designed and sited as sensitively as possible to avoid visual intrusion and light spillage.

Landscaping

- 3.4.17 The site currently benefits from being screened due to the existing vegetation planting from surrounding roads and existing overgrown vegetation. The accompanying Planting Strategy Plan shows those trees marked for removal form a parallel line of scattered trees (mainly hazel and hawthorn), that are the remains of two hedgerows. The trees are being removed to accommodate the proposed development.
- 3.4.18 The proposed landscaping planting strategy provides Native Woodland Mix (*Acer campestre*, *Betula pendula*, *Corylus avellana*, *Crataegus monogyna*, *Cytisus scoparius*, *Hedera helix*, *Ilex aquifolium*, *Malus sylvestris*, *Prunus avium*, *Prunus spinosa*, *Quercus robur*, *Salix caprea*, *Viburnum lantana*) to be

planted for habitat connectivity and visual screening, together with Specimen trees (*Acer campestre*, *Betula pendula*, *Prunus padus*, *Sorbus aucuparia*, *Sorbus aria*) in Parc Bryn-y-Don. Regarding grasses, Emorsgate - EG22 Strong Lawn Grass Mixture (for verges), Emorsgate - EM1 Basic General Purpose Meadow Mixture (for general meadow areas) and Emorsgate - EH1 Hedgerow Mixture (for shaded areas).

Community Safety

- 3.4.19 Ensuring the route is safe for all users, the proposals provide separate lanes for cyclists and pedestrians, signage, well-marked crossings, and lighting. Fencing is proposed in order to provide a physical barrier between the ATR and adjacent roads, reducing the risk of accidents and enhancing user safety. The proposed fencing will also act as a visual guide for users, delineating the boundaries of the route and helping them stay on the designated paths.
- 3.4.20 Under the Permitted Development section of the proposals, a toucan crossing is provided to create a designated space for cyclists and pedestrians to cross the road to gain access to the continuation of the ATR, reducing potential conflicts and improving overall safety for all road users.
- 3.4.21 The inclusion of the footbridge provides a safe and convenient way for pedestrians to cross the Cadoxton River, allowing for easier and quicker access between two points separated by the waterbody, as well as eliminating the risks associated with wading through or trying to cross the waterway.
- 3.4.22 To ensure community safety the scheme will incorporate lighting bollards across the length of the route. Its aim is to deter potential criminal activity, provide improve visibility and add to the readability and navigability of the route.

Environmental Sustainability

- 3.4.23 The design principles adopted for the scheme have been underpinned by good practice in environmental sustainability. Landscaping proposals as highlighted above, incorporate green infrastructure, such as trees and native planting, contributing to overall sustainability goals. The choice of hard materials include Asphalt as surface treatments, which allow for a high degree of permeability, ensuring that surrounding trees and plants will receive rainwater. It is also proposed to use environmentally sustainable bollards, made of recyclable plastic bollards.
- 3.4.24 The proposed landscaping and ecological mitigation play a key role in securing the environmental sustainability of the scheme. These measures will not only enhance the aesthetic appearance of the site but also contribute significantly to the preservation and restoration of natural ecosystems. By incorporating these sustainability principles, the scheme has sought to promote a balanced coexistence between the development needs of the site and its environmental qualities.

Access

- 3.4.25 The existing speed across Cardiff Road is 40mph, this is proposed to be reduced to 30mph. The reduction in speed intends to improve road safety for all users, including pedestrians and cyclists. The reduction in speed limits is intended to create a safer and more pedestrian-friendly environment, reducing the risk of accidents and increasing the overall quality of life in the community.
- 3.4.26 The construction of a Toucan crossing plays a significant role in slowing down vehicle speeds in the area. Toucan crossings are designed to accommodate both pedestrians and cyclists, allowing them to

cross the road safely and efficiently. By providing a designated crossing point for pedestrians and cyclists, the Toucan crossing encourages drivers to slow down, increasing awareness and promoting safer driving behaviour.

- 3.4.27 The combination of lowering the speed limit and introducing a Toucan crossing not only promotes road safety but also enhances the overall accessibility and connectivity of the area, making it more pedestrian and cyclist friendly. Such measures contribute to creating a more sustainable and inclusive transportation infrastructure that prioritises the safety and well-being of all road users.

Movement

- 3.4.28 The arrangement of the route has provided an effective and efficient layout occupying an area of some 9.5ha. It provides multiple advantages to the general public, primarily through the general public with a safe passage between Barry to Dinas Powys, which is very much needed. The route itself will become a conduit of connection, linking Biglis to Dinas Powys, as well as communities, in a sustainable manner.
- 3.4.29 Furthermore, the ATR encourages physical activity and offers alternatives to personal vehicles, this also assists in alleviating traffic congestion by offering alternative modes of transportation which will allow ease of movement on these existing networks. It creates a more pedestrian-friendly environment, enhancing the overall quality of urban spaces, leading to more inclusive and community driven environments.

4 Conclusions

- 4.1.1 This Design and Access Statement supports a full planning application on behalf of VoG for permission to provide an ATR between Biglis and Dinas Powys. This Statement has covered the pertinent design and access aspects of this development, offering a comprehensive explanation of how the proposals align with both national and planning design policies.
- 4.1.2 Regarding design principles, the proposal complies with policy requirements at a local and national level by providing a site layout that meets safety and accessibility requirements and is appropriate to its setting and local character. Additionally, the proposals include landscaping and biodiversity enhancement, to integrate the development within the surrounding landscape context.
- 4.1.3 The spatial arrangement of uses within the site is deemed the most efficient utilisation of the space, integrating the development, in terms its scale and appearance within the site through the design principles adopted. It is therefore considered that the proposals will provide a high-quality ATR to complement the wider area and provides a functional, safe, and pleasant environment for active travel participants.

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