



Western Bridge & Link Road – Phase 2

**RESERVED MATTERS PLANNING APPLICATION
BURGESS HILL NORTHERN ARC**

Design and Access Statement



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PROJECT NO. 62301157

OUR REF. NO. WBLR-WSP-GEN-04-RP-T-0159

DATE: APRIL 2025

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BURGESS HILL NORTHERN ARC**

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QUALITY CONTROL

Issue/revision	First issue	Revision 1	Revision 2	Revision 3
Remarks	S0-P01, First issue, for Planning	S0-P02, Updated to reflect policy		
Date	March 2024	January 2025		
Prepared by	Ruth Jones	Ruth Jones		
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Project number	ED100377 \ 62301157			
Report number	WBLR-WSP-GEN-04-RP-T-0159			





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1 INTRODUCTION

1.1 OVERVIEW

- 1.1.1. This Design and Access Statement has been prepared by WSP in support of a reserved matters application by Homes England / RegenCo ('the Applicant') for the construction of Phase 2 of the Western Bridge & Link Road north-west of the town of Burgess Hill ('the scheme').
- 1.1.2. A Site Location Plan has been submitted in support of the reserved matters application (reference WBLR-WSP-HPN-04-DR-C-0220 S0. The boundary of Phase 2 is indicated in red. The wider Northern Arc development is shown in the blue line. The layout and location of the Phase 1 WBLR are also indicated on the site location plan.

1.2 PROJECT BACKGROUND

- 1.2.1. The Western Bridge & Link Road (hereafter referred to as 'WBLR') is an essential piece of infrastructure required to support the development of the Northern Arc Strategic Allocation Area, as allocated in Policy DP9 of the Mid Sussex District Plan.
- 1.2.2. The wider development area for 3,040 homes was granted outline planning approval in October 2019 (application reference DM/18/5114). Permission was granted under Section 73 (application reference DM/21/3279) in December 2022. This application is pursuant to application reference DM/21/3279.

- 1.2.3. The northern link road was stipulated in Policy DP9, with further detail set out within the approved documents of the outline planning application, extract from the Design and Access Statement below:

A new highway connection will be provided between the A273 Jane Murray Way and A2300 in the west and the A273 and Maple Drive in the east. This corridor will carry all modes with formal pedestrian, cycle and vehicular provision proposed along its length.

- 1.2.4. This reserved matters application is in respect of the second phase of the WBLR. The first phase was granted approval by Mid-Sussex District Council in July 2020 (reserved matters application reference DM/20/0254).
- 1.2.5. The Applicant has set out their commitment to good design throughout the development of the Northern Arc at Burgess Hill, responding to the environment and landscape setting in which it is to be situated.

This Design and Access Statement is part of a suite of documents and drawings prepared as part of the planning application for the proposed scheme. Further details of the supporting documents and assessments have been set out in full in the Covering Letter.

1.3 PROJECT OBJECTIVES / PROJECT-WIDE DESIGN PRINCIPLES

1.3.1. The overarching vision for the Northern Arc is set out below:

“The Northern Arc will combine the best of town and country to offer vibrant local centres, excellent community facilities and well-designed residential neighbourhoods set within a highly attractive landscape of existing mature woodlands, river valleys and extensive natural areas to provide a great place to live, work and visit. It will provide up to 3,500 new homes, local employment, education, health, leisure, sports, recreation and community.”

1.3.2. The WBLR (also referred to as the Northern Arc Avenue) is the spine road which provides the main access into the site and connects the neighbourhoods of the Northern Arc to each other. The Design Guide approved through the outline planning application states the following:

The avenue will function as a public transport corridor and bus stops would be provided on street (no lay-bys will be provided). All the intersections with the tertiary and secondary roads along the avenue must be priority junctions with the priority given to the cyclist and pedestrians travelling along the avenue. Pedestrian and cycle crossing points on the avenue should be provided along the key pedestrian and cycle desire routes.

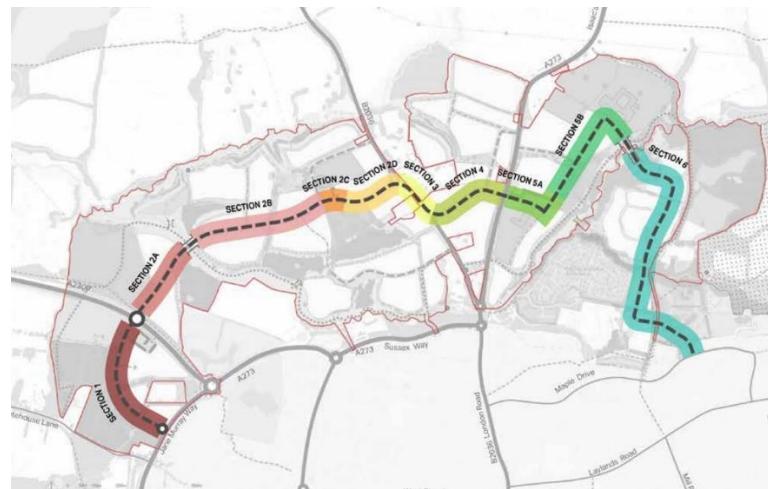


Figure 1 – Northern Arc Avenue with Phasing (Extract from SDAM)

1.3.3. Figure 100 of the approved Design Guide shows the sections of the Northern Arc Avenue. This reserved matters application relates to Section 2a (A2300 to Western Bridge) as shown on the figure, including the bridge over the River Adur and 60m of carriageway on the eastern side of the river crossing.

1.3.4. The design of the scheme has been developed building upon the principles of Policy DP9 and approved in the outline planning application.

1.4 THE IMPORTANCE OF GOOD DESIGN

- 1.4.1. The applicant is committed to delivering good design for the Proposed Scheme, to ensure that it responds to its setting, is long-lasting, and that wider benefits are realised beyond the scheme's primary function as a new link road and public transport corridor. This commitment was embedded from the outset of the scheme and maintained by all involved in the development of the scheme.
- 1.4.2. Good design is not just about how something looks as an aesthetically pleasing architectural form, but about the process taken to developing the solution and the benefits it can offer for the environment, placemaking for people, and whole life value.

1.5 STRUCTURE OF THIS DOCUMENT

- 1.5.1. This Design and Access Statement is structured as follows:
 - Section 2 describes the Site and its surroundings and Planning History;
 - Section 3 sets out the context of the Outline Planning consent for the wider Northern Arc development;
 - Section 4 outlines the relevant planning policy for good design;
 - Section 5 describes the Proposed Design of the proposed scheme;
 - Section 6 showcases the proposed landscape design;
 - Section 7 provides a summary.

2 SITE AND SURROUNDINGS

2.1 SITE DESCRIPTION

2.1.1. The Application Site (the 'Site') is shown on the Site Plan (reference WBLR-WSP-HPN-04-DR-C-0220) submitted with the Application.

2.1.2. The Site is located within Burgess Hill, approximately 2km north-west of the town centre, within the administrative area of Mid Sussex District Council.

2.1.3. The Northern Arc Strategic Allocation Area comprises a strategic site of approximately 200 hectares, situated between Bedelands Nature Reserve to the east of Burgess hill and the Goddards Green Waste Water Treatment Works to the west.

2.1.4. The Phase 2 WBLR site lies north-east of Phase 1, crossing over the A2300, continuing in a north-east direction for approximately 460m. The layout of the first phase is indicated on the Site Location Plan submitted in support of this reserved matters application.

2.1.5. The River Adur is the watercourse over which the proposed scheme will cross on a bridge. The watercourse runs perpendicular to the scheme, approximately 360m north-east of the junction at the existing A2300.

2.1.6. The proposed scheme will pass between two areas of Ancient Woodland; Six Acre Shaw to the north, and Jane Murray Way Shaw to the south. The proposed scheme falls outside the boundary of the woodland.

2.1.7. The key landscape characteristics of the area surrounding the site include:

- Low ridges;
- Small to medium scale, irregular shaped field sizes;
- Pattern of mature woodlands, woodland shaws and hedgerows with hedgerow trees defining field boundaries and settlement fringes;
- Small ponds, streams, meadow and wetland interspersed between mixed agricultural land and woodland;

2.1.8. The site contains varying areas of grassland, hedgerows, natural watercourses and veteran/mature trees. A Phase 1 Habitat Survey undertaken by AECOM in August 2018 has identified that the wider Northern Arc Application Site includes a network of habitats including ancient woodland, species-rich hedgerows, semi-improved grassland, watercourses, ponds, extensive arable land.

2.1.9. Desk study analysis, including a review of ecological survey work previously undertaken within the site, has confirmed that the site supports (or has potential to support) hazel dormouse, great crested newt, foraging, commuting and roosting bats, breeding bird species, invertebrate species and badgers.

2.1.10. The previous studies and surveys have been reviewed and updated where appropriate as part of this planning submission within the Further Information Report Phase 2, WBLR-WSP-EXX-04-RP-L-0065. This report explains in detail which elements are present within the Site and the expected impact of the proposed works.

3 OUTLINE PLANNING CONTEXT

- 3.1.1. In December 2018, Homes England submitted an Outline Planning Application for a comprehensive mixed-use scheme including 3,040 dwellings, extra care accommodation, permanent gypsy and traveller pitches, neighbourhood centres, including retail and leisure facilities, two primary school campuses and a secondary school campus, healthcare facilities, public open space, employment land, recreation areas, play areas, pedestrian and cycle routes, roads, car parking.
- 3.1.2. The outline planning application submission includes a set of Parameter Plans submitted for approval setting the framework and parameters for development within the Northern Arc site. The Parameter Plans include Land Use, Green Infrastructure, Building Heights, Density, Demolition, Phasing, and Access & Movement.
- 3.1.3. Planning consent was granted under Section 73 (application reference DM/21/3279). This consent sought alterations to conditions 5 (approved parameter plans), 6 (accordance with Design Guide), 7 (requirement for a Design Principles Statement), 11 (archaeological investigation), 22 (sustainable drainage) and 35 (restriction of development within 15m of ancient woodland), removal of conditions 50 (public transport strategy) and 51 (phase public transport strategy), addition of new conditions relating to public art on planning permission DM/18/5114, to allow amendments to site boundary, densities and heights, parameters of road layout, proposed land uses,

right of way improvements & drainage outfalls, require general accordance with the Street Design and Adoption Manual, allow phased submission of details for archaeology and drainage details and require a public transport strategy and financial contributions towards the public transport strategy to be secured in the legal agreement.

- 3.1.4. Figure 2 below shows the updated Masterplan (dated 22/10/2021) for the Northern Arc. The overarching vision for the Northern Arc is translated into spatial and development proposals through 24 Strategic Development Principles (SDP), these are divided into five key topic areas that were detailed in the Masterplan Report. These have been applied in the design development of the WBLR, the following SDPs in particular are pertinent to the design consideration of the scheme.



Figure 2 – Northern Arc Masterplan (Extract from SDAM)

Access and Movement

SDP 1 Access and Strategic Movement – The new community at the Northern Arc will have a permeable layout that integrates and makes best use of the surrounding highway network, with access achieved from a number of points on it, and which maximises sustainable patterns of movement.

SDP 2 Northern Arc Avenue - In accordance with Local Plan policy, the development of the Northern Arc will include the provision of a link road between the A273 Isaac's Lane and the A2300 as described in SDP 1. This new link will be provided by the Northern Arc Avenue and will serve both as a through route (alongside the A273 Sussex Way/Jane Murray Way) and as a development access road.

SDP 4 Pedestrian and Cycle Links - Alongside the Green Circle and the Green Super Highway, a network of secondary pedestrian and cycle links will be provided throughout the Northern Arc linking the area to the wider town. These will provide attractive, convenient and safe routes to facilitate sustainable movement, stitching together land uses while also improving health and well-being.

Built Form

SDP 5 Centres and Walkable Neighbourhoods - The Masterplan proposes that the Northern Arc will have three neighbourhood centres, connected to each other by the

Northern Arc Avenue. These centres will be conveniently located so people can walk to local facilities and services within 5 to 10 minutes of their home, as well as being accessible by cycle, public transport and car.

SDP 7 Place-Making Objectives - The Northern Arc will exemplify high standards of urban, landscape and architectural design to create a distinctive and attractive place with a high-quality public realm where people will want to live, work and visit for generations to come.

SDP 8 Northern Arc Design Guide - The place-making objectives will be given effect through the Northern Arc Design Guide. Submitted in support of the Outline Planning Application, this will set out the key urban design, public realm and place-making principles that will be applied across the whole of the new community.

Landscape & Infrastructure

SDP 14 Landscape and green infrastructure - The development of the Northern Arc will preserve and enhance the established framework of woodlands, trees and hedgerows as part of the commitment to creating a high quality and distinctive place. Together with the meandering water courses these will define the character of the new community and frame its development.

SDP 18 Topography - The development will work with the Northern Arc's undulating topography to respect and build on the existing sense of place, as well as reducing the amount of earthworks and levelling required.

SDP 19 Visibility - The Masterplan seeks to minimise the visual impact effects of development on the South Downs National Park (approximately 4km to the southeast) and the High Weald Area of Outstanding Natural Beauty (approximately 2.5km to the northwest).

SDP 20 Existing Utility Infrastructure - The development will respond positively to a number of significant infrastructure features in the area.

Sustainability

SDP 22 Low Carbon Energy - Development at the Northern Arc will promote low carbon energy technologies, meeting criterion 1 of Part L of Building Regulations through passive design and embracing the transition to electric vehicles.

3.1.5. **SDP 24 Construction and Material Use** - The development will take into consideration the whole life cost and embodied carbon of all building materials to encourage innovative and sustainable use of natural resources.

4 PLANNING POLICY FOR GOOD DESIGN

4.1 INTRODUCTION

- 4.1.1. This section sets out an overview of the relevant planning policy context for the Proposed Scheme.

4.2 NATIONAL PLANNING POLICY

- 4.2.1. As stated in paragraph 1, the National Planning Policy Framework (NPPF, December 2024) sets out the Government's planning policies for England and how these should be applied. The purpose of the planning system is to contribute to the achievement of sustainable development (paragraph 7). The objective of sustainable development can be summarised as 'meeting the needs of the present without compromising the ability of future generations to meet their own needs' (paragraph 7). In order to achieve this objective, at the heart of the NPPF is a presumption in favour of sustainable development (paragraph 11) which includes approving development proposals that accord with an up-to-date development plan without delay.

NATIONAL PLANNING POLICY FRAMEWORK (DECEMBER 2024)

- 4.2.2. The need for good design in development is prevalent in the National Planning Policy Framework (NPPF). Paragraph 131 explains:

"...Good design is a key aspect of sustainable development, creates better places in which to live and work and helps make development acceptable to communities."

- 4.2.3. The NPPF goes on to explain the importance of design quality, stakeholder engagement as part of the process and design review panels to achieve well-designed places.

NATIONAL POLICY STATEMENT FOR NATIONAL NETWORKS

- 4.2.4. Whilst this policy is applicable to Nationally Significant Infrastructure Projects (NSIPs) through the Planning Act 2008, it is of relevance for the design of roads.
- 4.2.5. It sets out a 'Criteria for 'good design' for national network infrastructure', in which Paragraph 4.27 explains:

"Applying "good design" to national network projects should therefore produce sustainable infrastructure sensitive to place, efficient in the use of natural resources and energy used in their construction, matched by an appearance that demonstrates good aesthetics as far as possible."

5 THE PROPOSED DESIGN

5.1 INTRODUCTION

5.1.1. This section presents the scheme design for which planning consent is sought. It provides an overview of the design for the Proposed Scheme, then describes the design principles for each component of the design, and how these have been applied.

The design has been developed in accordance with the design principles set out in the Street Design Adoption Manual that was submitted and agreed as part of the OPA submission whilst adhering to the safety requirements set out in the relevant highway design standards.

5.2 OVERVIEW OF THE SCHEME DESIGN

5.2.1. The key features of the scheme include:

- A two-lane single carriageway road, 30mph speed limit with raised tables at the junctions to aid self-enforcement of traffic speeds;
- New pedestrian and cycle crossing points;
- Provision of off-carriageway footpath/cycleway;
- Continuous green verges;
- Provide access to future residential area;
- Western Bridge spanning the River Adur and associated floodplain.
- Localised ground raising at the NW and SE corners of the bridge to facilitate future pedestrian access to the

development plots and down to the river via future steps.

5.3 ENVIRONMENTAL CONSTRAINTS

5.3.1. The Scheme design responds to the outcomes of environmental surveys and assessments undertaken, and environmental constraints – of particular importance for the design solution include:

- Biodiversity and habitats
- Ancient Woodland
- River Adur and associated floodplain

5.4 DESIGN COMPONENTS

5.4.1. This section describes each of the design components explaining the design principles that apply and how the design has responded to them.

5.4.2. For ease of explanation, the scheme is presented in two key parts, as shown in the figure 3 overleaf:

- Western section, comprising new highway from roundabout with A2300, connecting with the proposed Western Bridge, approximately 260m in length;
- Eastern section, comprising the proposed Western Bridge spanning 71m, which carries the highway and cycleway/footway over the River Adur and flood plain, connecting with future phases at the eastern extent. This section is approximately 130m in length (inclusive of bridge span).

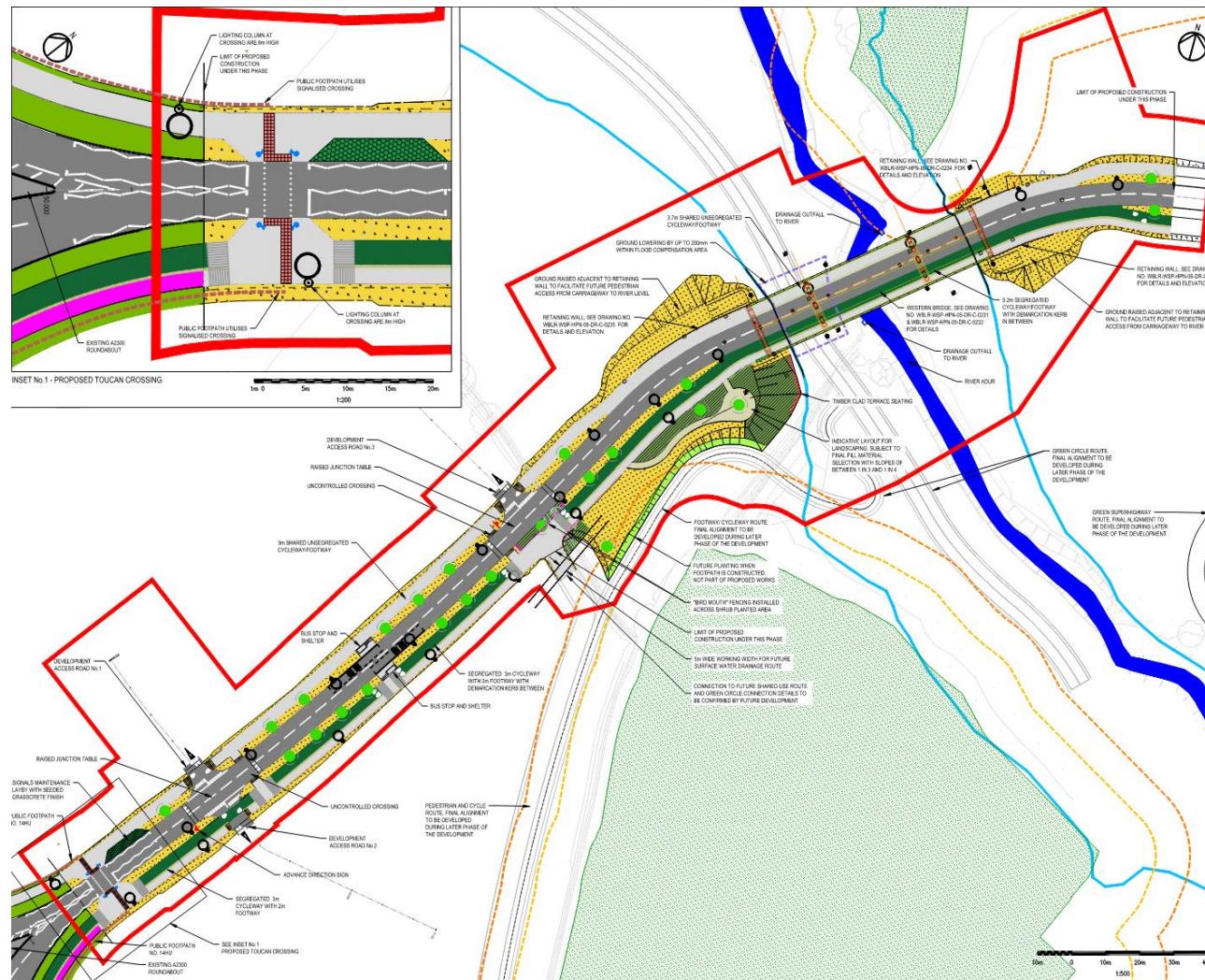


Figure 3 – General Plan Layout - see drawing WBLR-WSP-HPN-04-DR-C-0223

Western Section

5.4.3. The western section of the Phase 2 scheme connects to the existing roundabout at the A2300, to which the Phase 1 scheme also connects, extending further west.

5.4.4. The highway extends in a north-easterly direction for approximately 260m in length. The alignment turns towards east-north-east as it approaches the proposed Western Bridge (further details in the relevant section below).

5.4.5. The link road is a two-lane single carriageway 6.5m wide. There is provision for a 3m shared surface (cyclist/pedestrian) on the west side of the highway, which is separated from the carriageway by a 2.75m wider verge. On the east side a segregated 5m cycleway/footway is to be provided, which is separated from the carriageway by a 2.75m wider verge. The verge will be seeded with a wildflower grass mix and specimen trees planted at regular intervals.

5.4.6. Details of the features of the Proposed Scheme have been set out at the paragraphs below. The order of the description follows the alignment of the scheme in a north-easterly direction. The layout of the scheme is illustrated on the General Arrangement drawing submitted as part of the reserved matters application (reference WBLR-WSP-HPN-04-DR-C-0223).

5.4.7. A pedestrian crossing is provided at the connection with the A2300 roundabout (chainage 77), enabling safe crossing of pedestrians and cyclists using the shared surface. This will also provide a crossing point for the existing Public Footpath No. 14HU. Further detail of the crossing point and the layout of the rights of way is shown at the inset on the General Arrangement drawing (reference WBLR-WSP-HPN-04-DR-C-0223), submitted in support of this planning application.

5.4.8. A crossroad junction (at chainage 120) provides access to the future residential development. The shared cycleway/footway will continue in parallel with the proposed scheme, and users will have priority across these junctions. A raised table has been incorporated across the entire crossroad feature to reduce traffic speeds and increase pedestrian and cyclist safety. An uncontrolled crossing point has been provided immediately north of the crossroads, within the raised table detail.

5.4.9. Bus stops and shelters are provided on both sides of the carriageway.

5.4.10. A third development access road is provided on the north-western side of the carriageway. A raised table has been included at the junction across the link road giving consistency between the junction designs within this link and increasing pedestrian and cyclist safety. The shared surface has priority across the side road junction and an uncontrolled crossing is located immediately south of the junction, within the raised table detail.

5.4.11. The Green Superhighway is a strategic pedestrian and cycle link which runs through the Northern Arc. In line with the strategic development principles for the wider development, in addition to the strategic green

connections a network of secondary pedestrian and cycle links will be provided. This will create links to the area and the wider town and will facilitate sustainable movement. In accordance with the OPA Revised Parameter Plan (sheet 4, issue 10) a 5m segregated cycleway (3m)/footway (2m) will run along the eastern side of the carriageway behind the 2.75m verge.

5.4.12. A connection point to the proposed pedestrian and cycle route, which extends to the A2300 in the south and the riverside Green Circle to the north, is included as part of the Phase 2 scheme.

Eastern Section and Western Bridge

5.4.13. The single carriageway highway turns towards an east-north-east direction at chainage 300.

5.4.14. The proposed Western Bridge spans the flood plain and the River Adur. Provision for the Green Circle Route for pedestrians, cyclists and equestrians to pass underneath the west side span has been made but these routes will be part of a future reserved matters submission.

5.4.15. Provision has been made for a connection between the Green Circle Route and the link road to enable users to pass over the bridge. At the junction a section of the verge will be planted with a native shrub mix to guide users round the junction and prevent accidental entry onto the carriageway. (Figure 3)

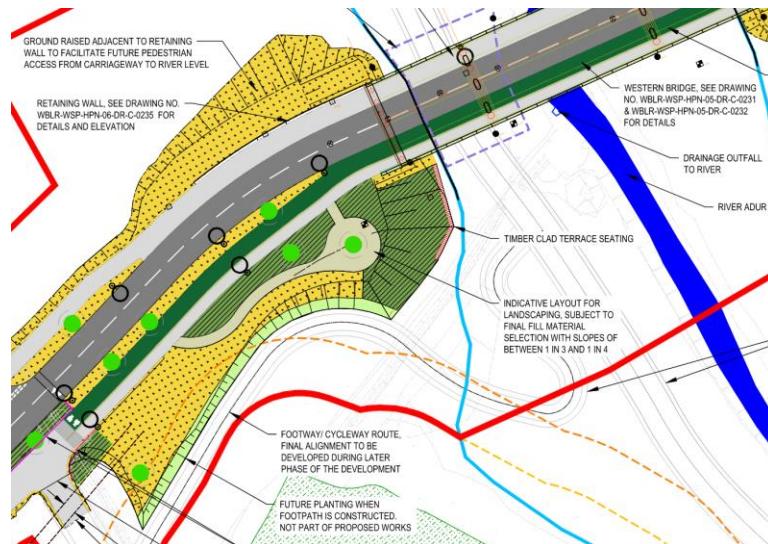


Figure 4 – Link to Green Circle Route & A2300

5.4.16. Localised ground raising will be carried out at the NW and SE corners of the bridge to facilitate future pedestrian access to the development plots and down to the river via future steps.

5.4.17. The two-lane 6.5m wide single carriageway highway continues across the bridge. There is a 3.7m wide shared use cycle/footpath at the north verge and 5.2m wide segregated cycle/footway lane at the south verge. The additional widths provide clearance to the adjacent kerb (0.2m) for all users and clearance to the bridge parapet for cyclists (0.5m) so maintaining an effective width of 3 and 5m respectively.

- 5.4.18. The structure of the proposed bridge will be a three span, fully integral composite bridge comprising of precast prestressed beam with insitu reinforced concrete deck slab.
- 5.4.19. The bridge is to be designed to span over the 100 years plus 105% climate change fluvial flood event, defined by a level of 17.620m. The bridge abutments and approach embankments are to be designed to remain outside the design flood plain, however it is considered acceptable to locate the piers within the flood plain as these have insignificant impact. Flood modelling has been carried out and the EA have approved this approach. The details of the flood plain volume compensation have also been submitted to the EA and accepted.
- 5.4.20. The bridge will be supported on reinforced concrete intermediate circular piers and bank-site abutments.
- 5.4.21. The overall width of the bridge will be 16.4m with span lengths of 18m (west span), 33m (centre span) and 20m (east span). The watercourse passes underneath the central span.
- 5.4.22. Three out of the four approach embankment sides (NE, SE, NW) will be fully retained by reinforced concrete cantilever retaining walls. The fourth embankment side (SW) will slope down to the existing ground level (with an additional landscaping bund so to enhance the final appearance), with a 4m long “elephant ear” type wing wall cantilevering out of abutment. The gradient of the slope is dictated by the need to keep the toe of the batter out of the floodplain.
- 5.4.23. The final extent of the retaining walls will be confirmed during the detailed design in conjunction with the raised ground for future access and agreement on access and maintenance requirements for the walls with WSCC.
- 5.4.24. The landscaped bund is proposed to include an informal path and seating area and be planted with a mix of wildflower grass and native shrubs.
- 5.4.25. The retaining walls will start directly behind the abutments and run parallel to the alignment of the carriageway. The retaining height of the walls will vary between a minimum of 1.0m to a maximum of 3.0m at the crest of the embankment. There will be expansion joints between retaining walls and abutments. Through the sections that are retained and over the bridge there is no verge between the carriageway and the footway/cycleway.
- 5.4.26. It is proposed that there will be ground fill in front of the abutments (under the bridge deck) that will slope down to the existing ground level with 2:1 gradient. Even though there are no bearings for inspection, as a good practice a minimum 1m of vertical clearance is proposed between the beams and the finished ground level.
- 5.4.27. A minimum vertical clearance of 3.65m shall be provided between the bridge underside and surface of the Green Circle Route (pedestrian, cycle and equestrian route) passing beneath the western span. Minor local lowering of the existing ground in this area will be required. This ground lowering will provide the required clearance and floodplain compensation for the concrete piers that are located within the floodplain.

5.4.28. The lighting columns will be present on the bridge and approach retaining walls. Due to the aesthetics, on the bridge, the columns will be aligned with the piers. It is proposed that the lighting columns will be located within the shyness area inside of the parapets. The main reason for that is to enable better maintenance/inspection access to the columns and mitigate the risk of working at height which would be the case if having the columns on the outside of the parapets.

5.4.29. Consideration has been afforded to environment and sustainability through selection of the following options:

5.4.30. Employment of precast sections (including precast beams and parapet plinths) improves durability and avoids the use of excessive quantities of temporary formwork and falsework.

5.4.31. Use of smaller prestressed beams (Y4/YE4) is optimised to bridge the shorter side spans and reduces carbon footprint.

5.4.32. Provision of cement replacement materials such as PFA/GGBS shall be considered in mix specification.

5.4.33. Integral construction reduces requirement for future maintenance due to absence of bridge bearings at both abutments and intermediate supports as well as absence of any expansion joints in the deck which are prone to leaking.

5.4.34. Water management around the bridge protects the river from contamination – discharging the drainage into the highway's drainage system.

5.4.35. A minimum clearance is to be maintained between the footprint of highway works from the site of ancient woodland to the north-east of the bridge, as outlined in the Construction Environmental Management Plan (CEMP).

Landscaping

5.4.36. The landscape design for the scheme has been developed in order to integrate into the landscape with earthworks and planting. As with the whole scheme design, the landscaping proposed is in line with the overarching vision for the Northern Arc and the placemaking principles which have been approved with the Masterplan. The landscaping proposed for the WBLR Phase 2 sits within the wider “attractive landscape of existing mature woodlands, river valleys and extensive natural areas to provide a great place to live, work and visit”.

5.4.37. This section provides further detail of the landscaping proposed across the scheme. Landscaping plans have been submitted as part of this Reserved Matters application, Drawing No. WBLR-WSP-HPN-04-DR-L-0226.

5.4.38. The verges will be seeded with a wildflower grass mix and specimen trees will be planted at regular intervals, as shown on the General Arrangement drawings submitted as part of this Reserved Matters application. The number of trees has been maximised whilst maintaining the required visibility splays at the junctions to enable safe entry and exit and clearances to the lighting columns and bus stops.

5.4.39. A key landscape feature proposed as part of the scheme is the development of a parklet, located west of the proposed bridge, on the southern side of the carriageway.

5.4.40. The parklet will comprise of a meadow-like park with a looped pathway which allows users to enter or exist at two points along the existing pavement. This area has multiple purposes; as an ecological habitat, a stop-off or pleasant transitional space for pedestrians and cyclists; and a visibly attractive 'soft' edge to the adjacent infrastructure.

The pathway surfacing is proposed as natural stone or concrete slabs which will distinguish between the pedestrian and cycle paths made of asphalt.

Seating will be provided within the central space. These will consist of curved wooden modular benches with backs and arm rests to allow a more diverse audience who may suffer with mobility issues to fully utilise the space.

The central space will also include a native tree with the option of a wraparound bench. This will make a natural feature a focal point of the space further enhancing the enjoyment of the area.

Lighting

5.4.41. In line with the Street Design Adoption Manual the Phase 2 road is to be lit. 6m columns are proposed in accordance with WSCC current lighting design guide for this type of road. Carriageway columns will be located in the 2.75m verge with a minimum lateral clearance of 10m from the verge trees, this will minimise the level of

maintenance (tree pruning) required to ensure the highway is lit to the correct levels.

5.4.42. Additional 6m high columns are to be provided at the back of the segregated footway/cycleway as it is not possible to provide the correct levels of illumination to both surfaces from a single luminaire.

5.4.43. Columns have been positioned to clearly define the junctions, crossing points and bus stops. The luminaires have been chosen to minimise light spill away from the carriageway and segregated surface, minimising the impact on the natural environment and any future developments.

Drainage

5.4.44. Due to the gradient of the site, it has not been possible to incorporate swales or filter drains to collect the carriageway run off. A traditional kerb and gully system is therefore being proposed. The water will pass through a petrol interceptor to remove silt and any buoyant pollutants before passing through an attenuation tank and discharging into the river at the agreed greenfield run off rate. There is one interceptor, attenuation tank and outfall on each side of the river.

The details of the headwalls to the river will be agreed with the EA and WSCC but it is proposed to use a bagwork headwall detail that will 'green up' over time to give as natural a solution as possible while managing the risk of bank erosion.

6 CONCLUSION

- 6.1.1. The objective of the Proposed Scheme is a part of the creation of a new spine road to serve the new development at the Northern Arc, providing access and connections between the future neighbourhoods. A bridge will span across River Adur and the floodplain.
- 6.1.2. The approved Northern Arc Masterplan and Outline Planning Application proposals provided a foundation and framework for the WBLR Phase 2 design to develop. The design of Phase 2 has followed on from the approval of the Phase 1 design located to the south of the site.



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