



Homes
England

The Housing and Regeneration Agency

Brookleigh: Northern Arc avenue Central Section Design and Access Statement

Reserved Matters Application

February 2025



AECOM

Quality information

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1. Introduction



1. Introduction

Securing the delivery of the Central Section presents a crucial step in enabling the development of Brookleigh, a key strategic site to support the growth of Mid-Sussex.

This section will describe and provide context for the proposed development, and for the planning application.

1.1. Background & Site Description

This Design and Access Statement (DAS) accompanies the Reserved Matters planning application (the Application) submitted on behalf of Homes England for the development of the Central Section of the Northern Arc avenue.

Brookleigh comprises a strategic site to the north of Burgess Hill, lying between Bedelands Nature Reserve on the east side of Burgess Hill and the Goddards Green Waste Water Treatment Works to the west. The site is located approximately 1.5 miles to the north of Burgess Hill town centre and lies in the District of Mid-Sussex in West Sussex. Burgess Hill is Mid-Sussex District's second largest town after Haywards Heath.

The Application Site is located north of Burgess Hill as part of the allocated strategic site for Brookleigh, which was granted outline planning consent (DM/18/5114) in 2019. This application relates to the delivery of the Central Section of the Northern Arc avenue, connecting the Eastern Bridge Link Road (EBLR) and the Western Bridge Link Road (WBLR), designed as the primary access route of the future sustainable urban extension of Brookleigh. As shown on Figure 1, the route spans westward from the existing Isaac's lane up to the proposed 'Western Bridge', travelling via Cuckfield Road, and connecting the proposed Central Neighbourhood Centre of Brookleigh.

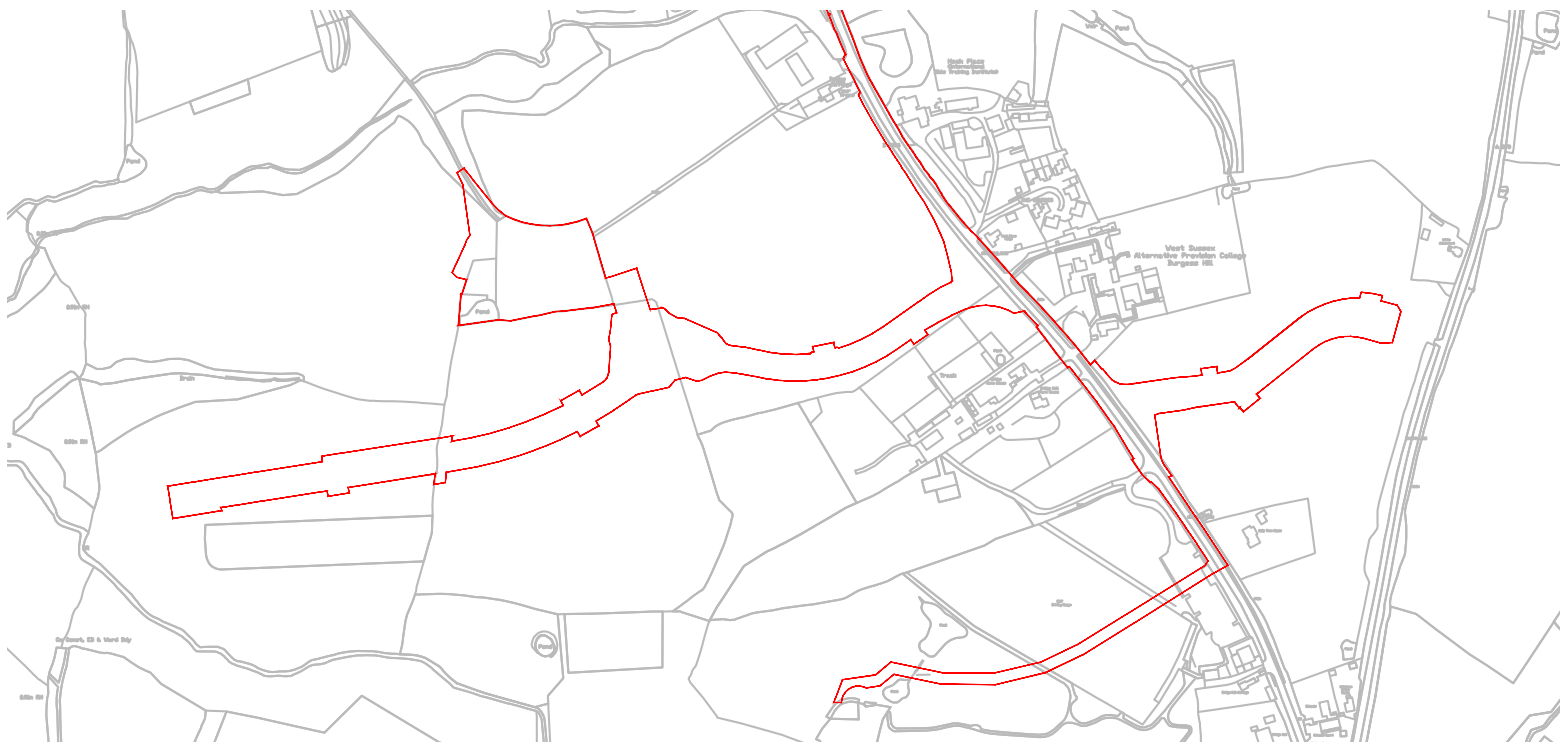
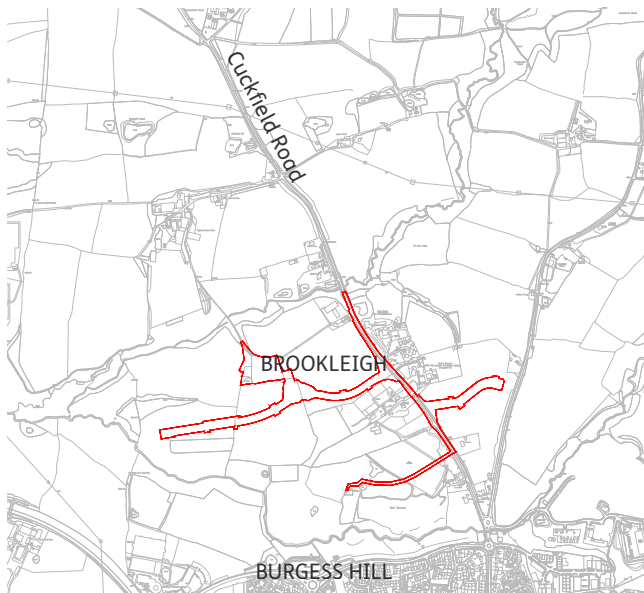


Figure 1. Application boundary

1.2. Purpose of the DAS

The Reserved Matters Application (RMA) should consider access, appearance, landscaping, layout, and scale, as defined in article 2 of the Town and Country Planning (Development Management Procedure) (England) Order 2015.

This Design and Access Statement has been prepared in accordance with the requirements set out in The Town and Country Planning (Development Management Procedure) (England) Order 2015, where section 9 explains:

(3) A design and access statement must—

(a) explain the design principles and concepts that have been applied to the development;

(b) demonstrate the steps taken to appraise the context of the development and how the design of the development takes that context into account;

(c) explain the policy adopted as to access, and how policies relating to access in relevant local development documents have been taken into account;

(d) state what, if any, consultation has been undertaken on issues relating to access to the development and what account has been taken of the outcome of any such consultation; and

(e) explain how any specific issues which might affect access to the development have been addressed.

1.3. Structure of DAS

Based on the statutory requirement, the structure of this DAS is as follows:

1. Introduction
2. Policy Context and Design Guidance
3. Northern Arc Masterplan
4. Central Section Design Process and Engagement
5. Central Section Design Strategy
6. Central Section Character Areas
7. Conclusion

2. Policy Context and Design Guidance



2. Policy Context and Design Guidance

This section summarises the relevant planning policy for the Proposed Development at national, regional, and local levels, and considers the Statutory Development Plan policies against which the Proposed Development should be considered, as well as other material considerations.

The policy context is set out below under the following headings:

- Statutory Development Plan policy
- Material Planning Considerations

Sections 19(2)(a) and 38(6) of the Planning and Compulsory Purchase Act 2004 and section 70(2) of the Town and Country Planning Act 1990 requires the Council to determine any application in accordance with the Statutory Development Plan unless material considerations indicate otherwise.

2.1. Statutory Development Plan Policy

The Town and Country Planning Act 1990 (referred to as ‘the act’), the Planning and Compulsory Purchase Act 2004 and the Localism Act 2011 are the principal statutory considerations for town planning in England. Collectively the three acts create a plan led system which requires local planning authorities to determine planning applications in accordance with an adopted statutory development plan unless there are material considerations which indicate otherwise (section 38(6) of the 2004 Act as amended by the Localism Act).

2.2. MSDC District Plan 2014-2031 (adopted 2018)¹

In this instance, the statutory development comprises the Mid Sussex District Plan 2014-2031. The Submission District Plan 2021-2039 was published for Regulation 19 consultation between the 12th January and the 23rd February 2024. The District Plan 2021 – 2039 was submitted for Examination on 8th July 2024. Policies of relevance from the statutory development documents are shown within Table 1.

On adoption of the District Plan most of the policies in the Mid Sussex District Plan (2018) will be replaced by the new District Plan, this includes policies listed in Table 1 as follows: DP20 to be replaced by DPI1, DP21 to be replaced by DPT1, DP22 to be replaced by DPT2, DP28 to be replaced by DPH12, DP29 to be replaced by DPN7 and DPN8, DP37 to be replaced by DPN4, DP38 to be replaced by DPN, DP39 to be replaced by DPS2, DP41 to be replaced by DPS4, DP42 to be replaced by DPN6 and DPI7. Policies DP7 and DP9 will be saved on adoption of the new Local Plan.

¹ Available at <https://www.midsussex.gov.uk/planning-building/mid-sussex-district-plan/>

MSDC District Plan	Key principles to consider for the Northern Arc avenue central section
Policy DP7: General Principles for Strategic Development at Burgess Hill	Be designed in a way that integrates it into the existing town providing connectivity with all relevant services and facilities; Improve public transport, walking and cycling infrastructure and access to Burgess Hill and Wivelsfield railway stations and Burgess Hill Town Centre, including the provision of, or contributions to, enhancing transport interchanges; Provide necessary transport improvements that take account of the wider impact of the development on the surrounding area; Provide highway improvements in and around Burgess Hill including addressing the limitations of the A2300 link road and its junction with the A23 and east-west traffic movements across Burgess Hill and, where necessary, improvements across the highway authority boundary in East Sussex; Provide new and/or improved and well connected sports, recreation and open space in and around Burgess Hill, including the continuation of the existing 'Green Circle' of linked areas of informal open space and multi functional paths, and links into the town centre; Identify and respond to environmental, landscape and ecological constraints and deliver opportunities to enhance local biodiversity and contribution to the delivery of green infrastructure in and around the town.
Policy DP9: Strategic allocation to the north and north- west of Burgess Hill	A new Northern Link Road connecting through the Strategic Allocation Area from the A2300 to the A273 Jane Murray Way should be provided as a highly attractive and functional route. New junctions will be provided on the A2300 and A273. Strategic mixed-use development in this location will progress in accordance with an allocation-wide Masterplan, Infrastructure Delivery Strategy, Phasing Strategy and Financial Appraisal which will have been submitted to and approved by the local planning authority. Each planning application to be determined should accord with such approved documents unless otherwise agreed by the local planning authority.
Policy DP20: Securing Infrastructure	This policy outlines the Council's expectations for developers to provide, or contribute towards, infrastructure and mitigation measures made necessary by their development proposals. This is achieved through appropriate on-site mitigation and infrastructure provision, the use of planning obligations (S106 agreements) and the Community Infrastructure Levy (when it is in place).
Policy DP21: Transport	This policy seeks to ensure development provides a high quality transport network, a resilient transport network that complements the built and natural environment, access to services, employment and housing, and a transport network that feels safer and healthier to use. The policy puts emphasis on facilitating alternative means of transport to the private car. In particular highlighting good access to safe and convenient routes for walking, cycling and public transport with appropriate secure cycle parking facilities. Furthermore, adequate car parking should be accommodated, which takes into account accessibility, type and mix of use of the development. The development should be designed to adoptable standards giving consideration to appropriate road sizes. In addition, the scheme should protect the safety of road users and pedestrians should be designed in a way that avoids and mitigates severe additional traffic congestion.

MSDC District Plan	Key principles to consider for the Northern Arc avenue central section
Policy DP22: Rights of Way and other Recreational Routes	This policy protects existing rights of way, Sustrans national cycle routes and recreational routes unless a new route is provide of at least an equivalent value and not sever important routes.
Policy DP28: Accessibility	Requires all development to meet and maintain high levels of accessibility so that all users can use them safely and easily.
Policy DP29 Noise, Air and Light Pollution	This policy seeks to ensure protection from unacceptable levels of noise, light and air pollution and to minimise the impact on landscapes, areas of nature conservation, wildlife habitats and the quality of people's lives.
Policy DP37: Trees, Woodland and Hedgerow	Development that involves the protection and enhancement of trees, woodland and hedgerows and encourages new planting will be supported.
Policy DP38 Biodiversity	This policy underlines that biodiversity will be protected and enhanced by ensuring development contributes and takes opportunities to improve; enhance, manage and restore and biodiversity and green infrastructure so that there is a net gain in biodiversity; protects existing biodiversity; minimises habitat and species fragmentations and maximises opportunities to enhance and restore ecological corridors; and protects locally designated Sites of Nature Conservation Importance, Local Nature Reserves and Ancient Woodland.
Policy DP39 Sustainable Design and Construction	This policy requires all new development proposals to seek to improve the sustainability of development and should incorporate the following measures: minimise energy use through the design and layout of the scheme; explore opportunities for efficient energy supply through the use of communal heating networks where viable; use renewable sources of energy; maximise efficient use of resources, including minimising waste and maximising recycling/re-use materials through both construction and operation.
Policy DP41 Flood Risk and Drainage	This policy requires proposals for development to follow a sequential risk-based approach, and to ensure development does not increase the risk of flood elsewhere and is safe across its lifetime. Sustainable Drainage Systems (SuDS) should be implemented in all new major development unless demonstrated to be inappropriate.
Policy DP42: Water Infrastructure and Water Environment	Requires new development to be in accordance with the objectives of the Water Framework Directive and findings of the Gatwick Sub Region Water Cycle Study with respect to water quality, water supply and wastewater treatment.

Table 1. Key principles for the Northern Arc avenue central section in response to the Mid Sussex District Plan 2014-2031

2.3. National Planning Policy Framework (revised 2024)²

The National Planning Policy Framework was revised on 12 December 2024 and sets out the government's planning policies for England and how these are expected to be applied. The presumption in favour of sustainable development is at the heart of the Framework. Paragraph 9 states that planning policies and decisions should play an active role in guiding development towards sustainable solutions, but in doing so should take local circumstances into account, to reflect the character, needs and opportunities of each area.

Section 12 of the NPPF addresses the importance of achieving 'well designed places' that support sustainable development. To ensure that this is achieved, paragraph 134 suggests the use of design guides and codes to support the development of distinctive places.

Paragraph 135 states that developments should be visually attractive as a result of good architecture, layout and appropriate effective landscaping.

Paragraph 137 emphasises the importance of early engagement between the local planning authority and local community about the design and style of emerging schemes as the design evolves.

2.4. Other relevant documents

2.4.1. West Sussex Transport Plan 2022 to 2036³

The West Sussex Transport Plan (WSTP) is West Sussex County Council's (WSCC) main policy on transport and supports delivery of WSCC and its priorities. The WSTP sets out how WSCC intends to address key challenges by improving, maintaining and managing the transport network in the period to 2036.

The main objectives of the plan are shown in Table 2.

Strategies within the transport plan of relevance to Brookleigh are as follow:

- Improve the performance of the A22, A23, A264, A272 and A2300;
- Prioritise active travel modes in the towns as development takes place;
- Increase space for active travel through infrastructure improvements on priority routes such as between Haywards Heath and Burgess Hill;
- Use on-street parking and traffic management techniques to manage demand, particularly in Burgess Hill, East Grinstead and Haywards Heath; and
- Use behavioural initiatives to tackle inappropriate speed and use of unsuitable rural routes.

² <https://www.gov.uk/guidance/national-planning-policy-framework>

³ <https://www.westsussex.gov.uk/about-the-council/policies-and-reports/roads-and-travel-policy-and-reports/west-sussex-transport-plan/>

Table 2. West Sussex Transport Plan 2022 to 2036 key objectives

West Sussex Transport Plan 2022 to 2036

Objective 1	Support sustainable economic prosperity across the County by enabling recovery from the COVID-19 pandemic and levelling-up underperforming areas.
Objective 2	Support development and regeneration plans across the County by enabling local living and through strategic investments, particularly in sustainable modes of transport, at the right time and place to ensure the transport network is fit for the future.
Objective 3	Accommodate the needs of an ageing population that is expected to grow most in existing settlements in the Gatwick Diamond and Coastal West Sussex areas.
Objective 4	Avoid where possible and minimise air, noise and light pollution from use of the transport network to minimise impacts on public health and well-being.
Objective 5	Ensure the transport network allows residents and visitors (including people with disabilities) to live healthy lifestyles with good access to green and blue spaces, particularly the West Sussex coast and the protected South Downs, High Weald and Chichester Harbour.
Objective 6	Ensure rural communities can live locally by accessing local services or nearby towns.
Objective 7	Enable the transport network to achieve net zero carbon emissions by 2050.
Objective 8	Avoid where possible and minimise the impacts of the transport network on natural resources and on the natural, built and historic environment.
Objective 9	Improve the transport network whilst conserving and enhancing biodiversity.
Objective 10	To monitor and adapt infrastructure to the effects of climate change.
Objective 11	Reduce the need to travel by car by enabling local living.
Objective 12	Improve the efficiency of the County Strategic Road Network, particularly east-west routes including the A27, through targeted improvements to address congestion, pollution, rat-running and road safety issues on strategic or local routes.
Objective 13	Minimise the impacts on the transport network of surface access to Gatwick Airport by passengers and employees and ensure transport network improvements take the needs of other users and communities that share these routes into account.
Objective 14	Ensure the rail network is an attractive option for travel between West Sussex towns and to surrounding cities by improving the speed and quality of West Coastway and Arun Valley Line services, capacity on the Brighton Main Line and integration with other modes of transport.
Objective 15	Improve bus network efficiency and integration by reducing the effects of congestion into and within West Sussex towns, particularly where there are gaps in the rail network.
Objective 16	Ensure the bus network is customer focussed and integrated with other modes of transport to provide an attractive option for journeys to nearby towns.
Objective 17:	Extend and improve the network of active travel facilities so it is coherent and high quality enough to make active travel an attractive, safe option for short distance trips and to transport interchanges.

2.5. Design Guidance

2.5.1. National Design Guide

The National Design Guide explains how well-designed places that are beautiful, healthy, greener, enduring and successful can be achieved in practice. It forms part of the Government's collection of planning practice guidance, alongside the separate planning practice guidance on design process and tools. The National Design Guide identifies ten characteristics of well-designed places:

- Context – enhances the surroundings.
- Identity – attractive and distinctive.
- Built form – a coherent pattern of development.
- Movement – accessible and easy to move around.
- Nature – enhanced and optimised.
- Public spaces – safe, social and inclusive.
- Uses – mixed and integrated.
- Homes and buildings – functional, healthy and sustainable.
- Resources – efficient and resilient.
- Lifespan – made to last

These ten characteristics have been embedded within the design development of the Northern Arc avenue Central Section as highlighted in Chapter 5. While not all are directly relevant to this application, consideration has been given to future contextual development in relation to the avenue.

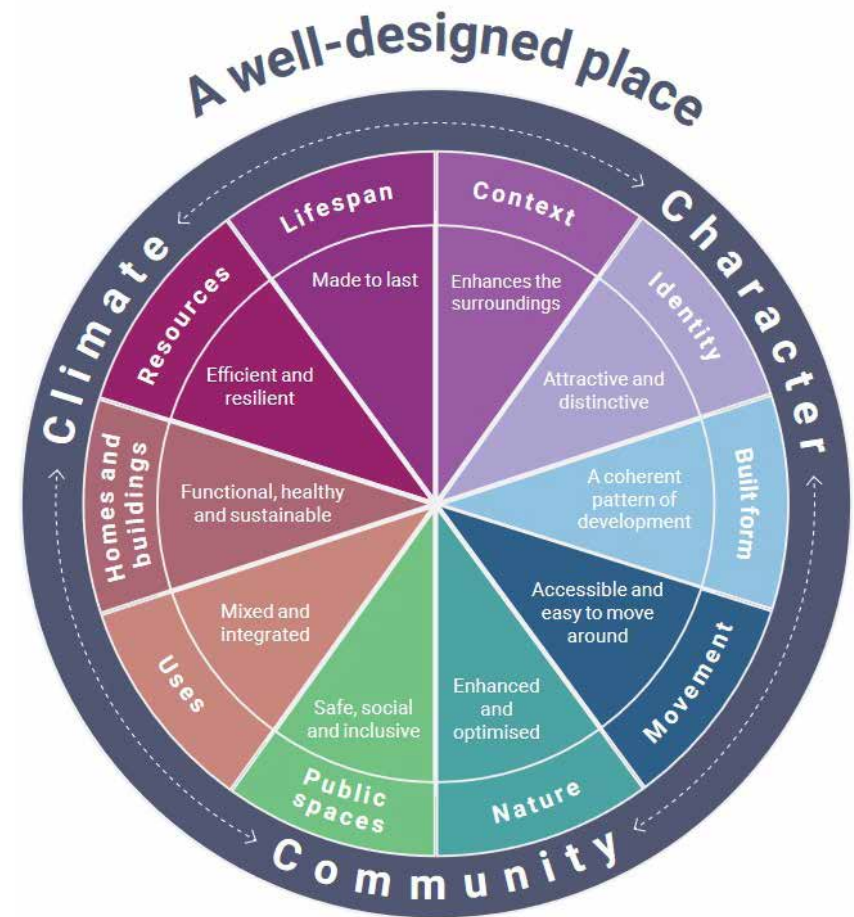


Figure 2. National Design Guide 10 Characteristics



2.5.2. Building for a Healthy Life & Streets for a Healthy Life

The Building for a Healthy Life is a Design Code to help people improve the design of new and growing neighbourhoods. The 12 considerations capture the areas of design and placemaking that need most attention but are often the most overlooked. These provide the building blocks to create integrated neighbourhoods, distinctive places, and streets for all.

Homes England uses Building for a Healthy Life as its toolkit to guide the design of our schemes, and this document should help us, and our partners, achieve the healthy streets envisaged by the toolkit.

The Building for a Healthy Life and Healthy Streets principles have been embedded within the development of Brookleigh through elements including:

- The placemaking strategies within the Design Guide & SDAM, emphasising the role of streets for people. This has been implemented through character areas, focal points, legibility, and materials, in addition to the integration of active travel and a reduced vehicular design speed.
- Retention and enhancement of green & blue infrastructure, safeguarding of ecology & biodiversity.
- Well-connected movement network with public transport and filtered permeability that will support active travel.
- Segregated recreational and commuter routes for active travel that connect to and enhance the existing network.
- Walkable neighbourhoods with access to local facilities including green spaces, sports facilities and formal play.
- Integrated approach along the avenue to lighting, street tree & parking provision.

Manual For Streets	Building For A Healthy Life
Place	• Facilities and services • Distinctive Places • A memorable character • Well defined streets and spaces • Easy to find your way round • Healthy streets • Green and blue infrastructure • Back of pavement front of home
Movement	• Natural connections • Walking, cycling and public transport • Easy to find your way round • Healthy Streets
Access	• Natural connections • Walking, cycling and public transport • Healthy Streets • Back of pavement front of home
Parking	• Cycle and car parking
Drainage, utilities & street lighting	• Healthy Streets • Green and blue infrastructure

Figure 3. Functions of Streets table from Streets for a Healthy Life

3. Northern Arc Masterplan



3. Northern Arc Masterplan

This section provides a summary of the Northern Arc Masterplan and the other documents that must be read in conjunction with the Central Section Design and Access Statement.

3.1. Masterplan Framework

Approved Masterplan

The Northern Arc Masterplan, approved by Mid Sussex District Council (MSDC) in 2018, establishes a vision and Strategic Development Principles (SDP) for the Northern Arc. It shows the location of main land uses, the access points, routes of the primary and secondary roads, pedestrian and cycle routes, as well as the location of key infrastructure (centres, schools and utilities), and green infrastructure.

The Approved Masterplan, shown in Figure 4 on the following page, sets the initial proposed alignment of the Northern Arc avenue through the site (shown on the key as the Proposed primary road), providing a basis on which to refine alignments through more detailed work. In Figure 5, the plan shows how the different parts of Northern Arc Avenue fit together.

Vision

The summary of the overarching vision for the Northern Arc is as follows:

“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.”

The key features of the Masterplan include the provision of:

- Approximately 3,500 homes
- Two primary schools
- A secondary school
- Three mixed use neighbourhood centres with two standalone community facilities
- A Northern Arc avenue providing a highway link between the A273 Jane Murray Way and Maple Drive, intersecting A2300, B2036 and A273 Isaacs Lane
- Leisure and community uses
- Health provision
- Significant formal and informal recreational space, and landscaped areas
- A Centre for Community Sports
- Employment opportunities including an employment site and within mixed-use neighbourhood centres
- A network of pedestrian and cycling routes
- A public transport corridor
- Thirteen permanent Gypsy and Traveller's pitches

Figure 4. Approved Outline Masterplan for Brookleigh



KEY

Site boundary	Woodland	Grassland	Vehicular bridge	Cycle and pedestrian route	Water main (400mm)
Residential area	Ancient woodland veteran tree buffer	Flood zone - maximum extend	Pedestrian bridge	Green Circle (GC)	Gas main (250mm)
Gypsy and traveller's facility	Parkland	Local nature reserve	Proposed primary road	Green Super Highway (GSH)	Primary school with an indicative layout
Employment area	Centre for Community Sports	Veteran trees	Proposed secondary road	Public Rights of Way	Secondary school with an indicative layout
Ancient woodland (hatched)	Natural green space	Indicative layout of neighbourhood centre	Proposed tertiary road	Mitigated odour contour	

3.2. Design Guide

The Northern Arc Design Guide sets out the key urban design, public realm and place-making principles that will be applied across the site to create a distinctive and attractive place where people will want to live, work, and visit for generations to come.

The Design Guide was approved and conditioned as part of the Northern Arc's Outline Planning Permission. It supplements the Approved Masterplan to support the delivery of three SDPs relating to placemaking and design quality. It provides the necessary guidance on how these placemaking principles can be developed and applied across the Northern Arc to support the delivery of the overall vision. It sets out the design principles that should be applied in relation to key elements of the Masterplan and by providing guidance on how the character of different parts of the Northern Arc should be developed in order to create distinctive places defined by their landscape and built form.

The Design Guide seeks to provide clear guidance on the over-arching design and place-making principles that are to be applied across the Northern Arc and in individual phases of development. These principles should normally be followed unless there is clear and compelling justification that a different approach would be more acceptable in design terms. It is expected that Design and Access Statements supporting RMAs will set out how the design proposals apply the principles set out in the Design Guide and meet the requirements of Building for a Healthy Life.

3.3. Street Design and Adoption Manual (SDAM)

The SDAM sets out the approaches to street design and details at an early stage so that all parties can have certainty on what will be built, delivered, and adopted. The design criteria for tree-lined streets, built-in traffic calming, bespoke design details and quality materials, for example, are set and agreed in the document for developers, design teams, contractors, and the local authorities. The SDAM seeks to put the pedestrian, cyclist, and public transport user at the heart of the design and aims to deliver high-quality, beautiful streets that will endure and support low-carbon mobility.

In common with the Design Guide, it is expected that the proposals for future phases of development for the Northern Arc will follow the street design and public realm principles set out in this document unless there is a clear and compelling justification that a different approach will be more acceptable in design and placemaking terms.

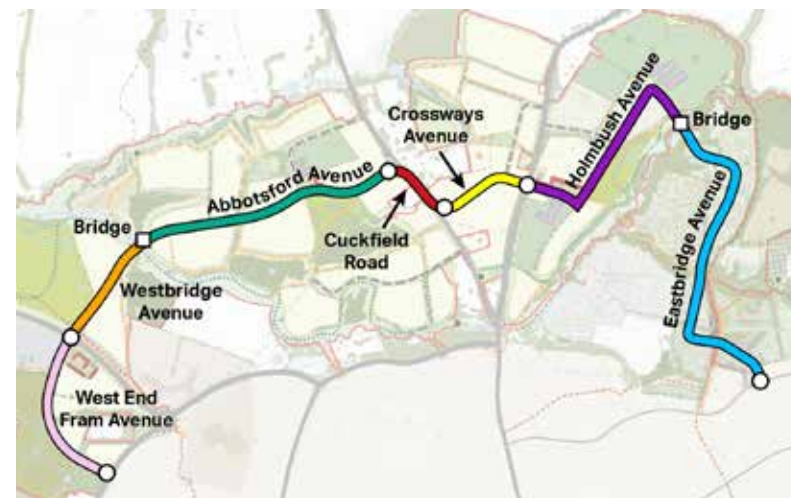


Figure 5. Approved Northern Arc naming plan

4. Central Section Design Process and Engagement



4. Central Section Design Process and Engagement

This section provides the context for the design proposals developed as part of the reserved matters application. Design iteration informed by stakeholder engagement is key to developing and refining robust design outputs. The Central Section Design builds on the parameters and principles as set out within the outline application which included community engagement events.



Figure 6. Stakeholder Site Visit

4.1. Multidisciplinary Design Workshops

Stakeholder design workshops were held at two key points within the design process. These were held bringing together the technical teams within AECOM and with Andrew Cameron & Associates (ACA). This resulted in the optimisation of the Central Section through the testing of design options, while considering the technical requirements across disciplines.

4.2. Stakeholder Engagement

Round table meetings were held on two occasions in the form of workshops with the stakeholders listed below. The first was held in person and the second was online. Where this was in person, a site visit took place to facilitate the discussions.

- West Sussex County Council (WSCC)
- Mid Sussex District Council (MSDC)
- Andrew Cameron & Associates (ACA)
- Homes England
- AECOM

4.3. Wider community communications

Further to the engagement outlined in sections 4.1 and 4.2, at submission of the planning application all local elected representatives across Parish, District and County Council will be advised of the submission. Upon validation of the planning application by the Local Authority, AECOM Stakeholder Engagement, Consultation and Communications Team will issue a letter and an accompanying visual to local residents, businesses and elected representatives showing the scope of the Spine Road Central Section and will share details on how to view the plans and proposals via the Mid Sussex District Council Planning Portal. This letter will be distributed to a wider area than that contacted as part of the Local Authority formal planning consultation and maximises visibility of the submitted plans.

Through the design development stage, the project team has undertaken one to one engagement with the Alternative Provision College (APC) as a local education institution which will be affected by the new road due to its location and proximity. Meetings have been held with the College management team in April 2023 and again in November 2024 and feedback has been positive and constructive. The college team inputted on the form of landscaping local to

the college entrance. The project team has also held further discussions with West Sussex County Council in relation to the impacts of the road on the school entrances and exits. Some design changes have been made further to this engagement in order to maintain accessibility to the College site.

4.4. Design Evolution

The consented outline masterplan provided the starting point for the design of the Northern Arc avenue Central Section. The masterplan sets out the proposed context the avenue should relate to and an illustrative street alignment. This was further refined through workshops and design iterations. Key points raised among discussions on technical considerations:

WORKSHOP 1 (WITH MSDC AND WSCC)

- Exploration of options for the interface of the avenue with the existing Cuckfield road seeking to improve pedestrian use, land efficiency, and to allow for a stronger sense of enclosure within further designs.
- Extension of the 20mph design speed to this area of the avenue.
- Consideration of roundels as an option to create a more pedestrian friendly approach through intuitive traffic calming, reduced clutter from signage and more direct active travel routes. However, highways tracking for larger vehicles did not support the roundels in these locations.
- Proposal for the tree-planted refuge island west of Central Neighbourhood Centre.

- Discussions on green ways, edgelanes and the delivery of additional paths.
- Indicative access points from the avenue to future development parcels designed to be staggered.
- Confirmation of the use of four-way (Cross road) junctions being acceptable by WSCC.

WORKSHOP 2 - ONLINE (WITH MSDC AND WSCC)

- Fixing of access points from the avenue to future development parcels with discussions on the principle of forming cross junctions at residential access points. These support more direct through routes for pedestrians, can be integrated with raised tables to enhance traffic calming and legibility, and provide better integration and design for street trees, street parking and lighting.
- Design changes to proposed Central Neighbourhood Centre.
- Additional refinements to design speed at Cuckfield road, access to the Alternative Provision College, and the badger tunnel.

PRE-APPLICATION MEETING - (WITH MSDC)

- Further refinement of the Cuckfield Road junctions with further reduced radii to the avenue. This reduces the land take of highways infrastructure, improves opportunities for future built form fronting onto the avenue, and creates a better environment for active travel.
- Subsequent designs integrated further pedestrian crossings and bus stops.



Figure 7. Concept Plan for Workshop 1



Figure 9. Concept Plan for Workshop 2



Figure 8. Roundel Concept for Workshop 1



Figure 10. Illustrative Masterplan for the pre-application and DRP meetings

DESIGN REVIEW PANEL

In January 2024, a Design Review Panel was held by MSDC as part of the planning application process. The key points raised during the panel led to updates in the application layout, as outlined below

Cuckfield Road junctions

The sweeping curves at both junctions of Cuckfield Road were identified as favoring vehicles, potentially encouraging higher speeds and allowing the road to dominate the space. It was recommended that the radii of the curves be tightened and alternative junction arrangements explored for these locations.. In response to these comments:

- The northern junction has been further tightened within the limits of the physical constraints. Additionally, a green verge and street trees have been introduced along the northern section of the Northern Arc avenue to enhance its character and address the concerns raised.
- The southern junction has been updated to establish a more defined urban character. This has been achieved by incorporating continuous building lines, green verges, street trees, and simplified junction arrangements.

Cuckfield Road and green island

The panel noted that the triangle of green space at the northern Cuckfield Road junction does not effectively contribute to creating a sense of place. In response, the design layout has been refined by tightening the space where possible and updating the landscape arrangement. This ensures clearer routes along key desire lines, particularly for users of the Alternative Provision College.

Landscape

In response to the panel's suggestion, trees have been introduced along the northern side of Northern Arc avenue, near the junction with Cuckfield Road. These trees continue up Cuckfield Road, providing shade, visual interest, and marking the transition into the urban area.

Illustrative layout

Following the panel's feedback, the pedestrian and cycle permeability has been further enhanced and highlighted on the illustrative layout to support the residential plot junction locations.

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5. Central Section Design Strategy



5. Central Section Design Strategy

The Central Section road layout has been considered within the context of the wider masterplan and site context, and the design has been developed through a collaborative interdisciplinary approach.

5.1. Central Section Vision and Overarching Principles

The Brookleigh Vision sets out the Northern Arc avenue as a key new link. The relevant Strategic Development Principles (SDP) to this work stage are as follows:

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 3 Strategic green connections - The Northern Arc provides two strategic pedestrian and cycle links: enhancing the existing Green Circle (GC); and a new Green Super Highway (GSH).

SDP 4 Pedestrian and cycle links - Alongside the GC and the GSH, 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 wellbeing.

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 10 Integration with established communities - The Northern Arc will seek to maximise integration with the existing communities of Burgess Hill and the established facilities and services of the town and the wider District. The new community will complement and add to these facilities, providing existing and new residents with access to a wider range of housing, employment, education, recreation and leisure opportunities.

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

“The vision for the Central Section is to create an inviting and people-focused street at the heart of the Brookleigh Community, providing an important connection across the northern part of Burgess Hill. The proposals aim to deliver a safe and welcoming environment where residents can walk, cycle, and use public transport with ease. Families will feel confident walking children to school along a calm, tree-lined street. Generous street trees and planting will enhance the street’s character, act as a buffer from vehicles, and support local ecology. Distinct character areas along the route will strengthen the sense of place and improve its overall legibility.”

Central Section Design Principles

1. The proposals will be developed in accordance with the Street Design and Adoption Manual (SDAM) and the Revised Design Guide.
2. The Northern Arc avenue will support the placemaking ambitions set out for Brookleigh.
3. The Northern Arc avenue will make best use of the surrounding highway network, with access achieved from the most advantageous points on it, and which maximises sustainable patterns of movement.
4. Design speeds will be appropriate to context and contribute to placemaking.
5. Active travel will be promoted by achieving qualities including: accessibility; continuity of routes; directness of travel; reduction of friction between modal users; and connectivity across and beyond the avenue.
6. Integrated landscape, utilities, drainage and lighting design, helping to achieve placemaking goals, and provision of street trees.



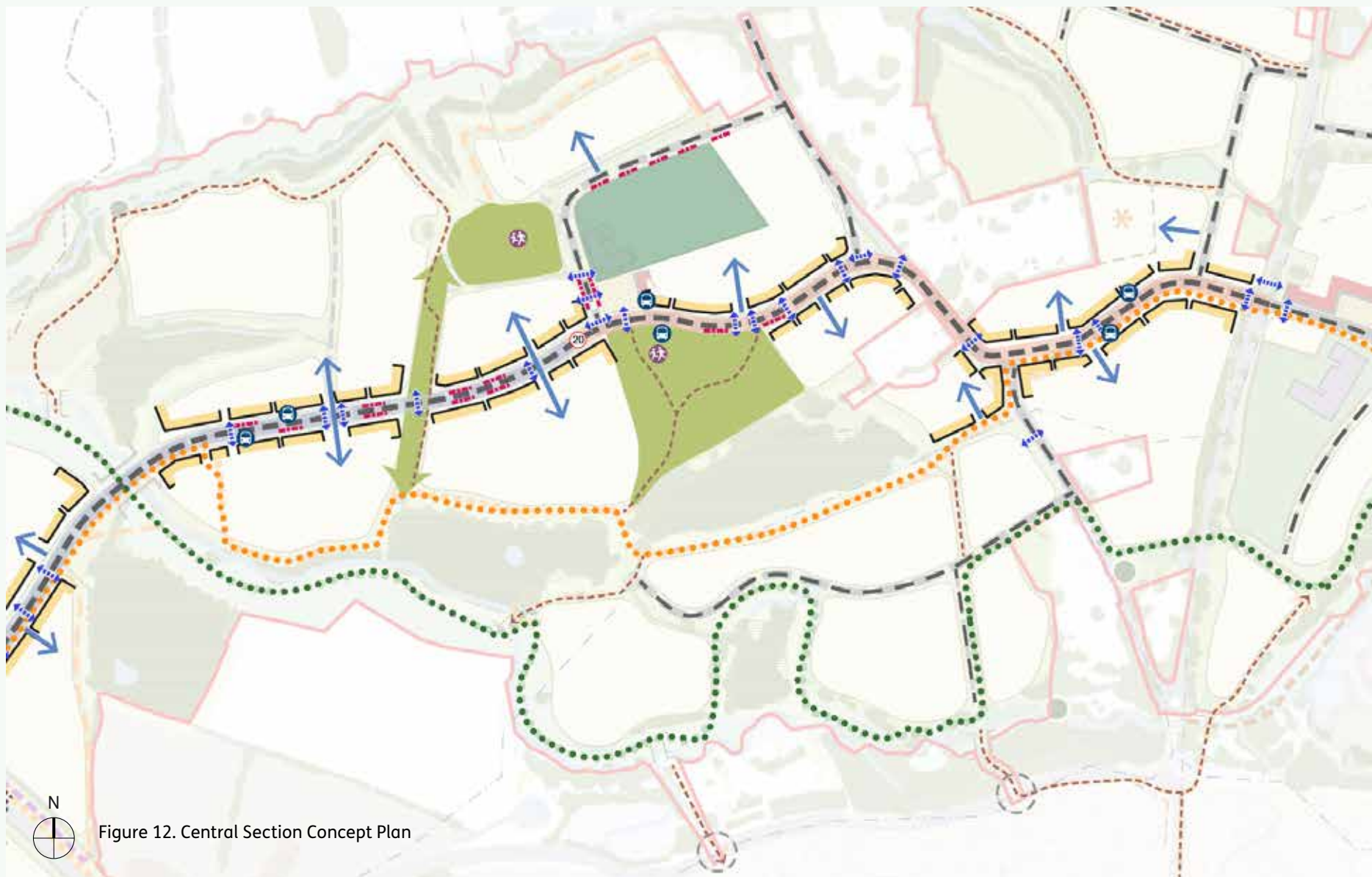


Figure 12. Central Section Concept Plan

KEY

--- Primary route	--- Pedestrian and cycle routes	20 Speed limit	→ Green connection	School grounds
--- Secondary route	--- Car parking	Bus stop	... Green Circle	Public square
30mph speed limit	→ Access to residential parcels	Play space	... Green Super Highway	Landmark building (flexible retail use)
20mph speed limit	→ Pedestrian priority crossing point	Frontages	Green openspace	Indicative school building

5.2. Movement Context of Central Section

The Northern Arc avenue is proposed to enable the delivery of the wider strategic site. Thus the existing and future contexts must be embedded in the design of the Central Section.

As part of the consented outline application, the wider movement routes were developed to reflect the physical site requirements and the Strategic Development Principles. The contextual assessment was carried out in relation to the physical site constraints and opportunities. Based on these, key connection points have been identified within the scheme and beyond the outline site boundary in relation to existing and proposed amenities, and a wider strategic movement strategy. These elements have been progressed within the remit of the Central Section.

The Central Section will deliver pedestrian footways and cycleways throughout the avenue along with connection points to the next development stages. As such, the avenue is integrated within the wider movement network to fully benefit active travel use. Notably, parts of the Green Super Highway (GSH) active travel route have been included within the Central Section design. Central Section footways and shared cycleways will interconnect with the GSH and the Green Circle within the wider development.

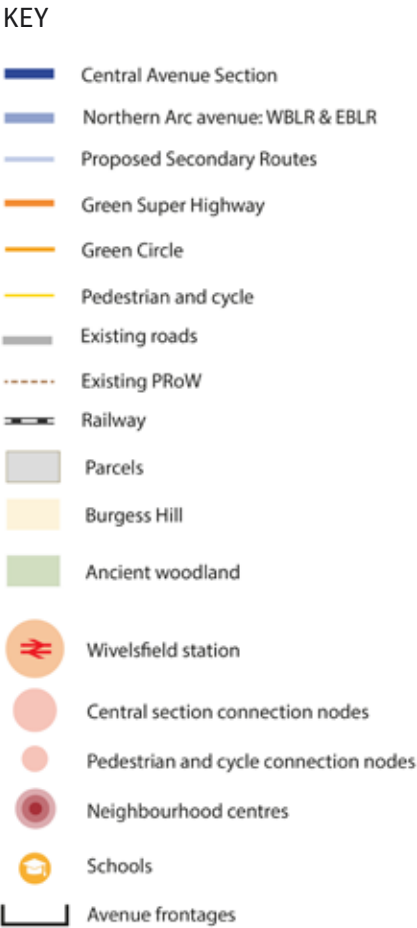
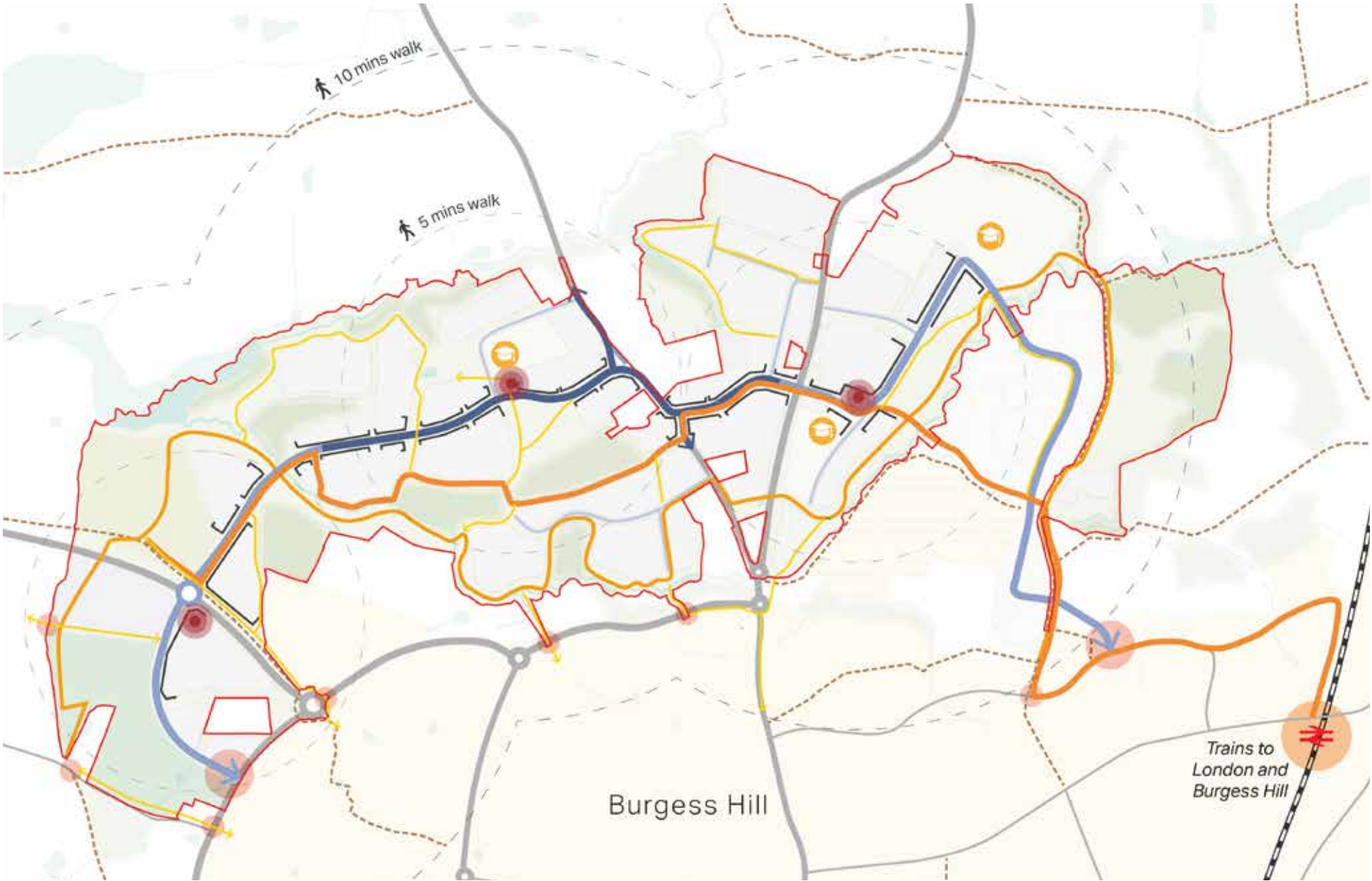


Figure 13. Movement Strategy



5.3. Highway Specifications

5.3.1. Road Design

In accordance with the Design Guide, the Proposed Development has been designed as a 'primary road' in accordance with the identified Street Hierarchy. This provides the link between the adjoining Eastern and Western Neighbourhoods and schools as well as a thoroughfare for movement. While providing betterment to Cuckfield Road and aspiration to re-identify the area as a new neighbourhood.

The Central Section has also been designed to accord with the key principles of the Northern Arc avenue:

- Ensuring that it strikes the optimum balance between its placemaking role at the heart of the community and its role as a supporting through route.
- The quality of the public realm must be of a high standard and consistent throughout the whole avenue.
- No residential parking access should be provided.

The Proposed Development will provide a two-directional single carriageway road with a verge separating the carriageway from the footways / cycleways in places. The road is proposed to be 6.5m wide with a design speed of 30mph with raised tables and local narrowings to aide speed compliance. A section of the road will be sign posted as 20mph. In addition Cuckfield Road will be redesigned in such a way to promote lower speeds as set out in the Speed Management Strategy.

5.3.2. Gradients

The proposed road design would provide a minimum longitudinal gradient (no flatter than) of 1:80. Crossfalls provided for both carriageways and foot/ cycleways would be a minimum of 1:40 and a maximum (no steeper than) of 1:20. Any embankments required to tie into the existing topography would have a maximum gradient of 1:3.

A number of crossing points provided across the Central Section would be on a raised table which would be either flush with the footway or with an upstand no greater than 6mm. Crossing points across the Central Section away from raised table will require the footway to be ramped to locally meet the carriageway level at a maximum gradient (no steeper than) of 1 in 12 for 1.5m before returning to the footway crossfall of 1 in 40 along the main footway.

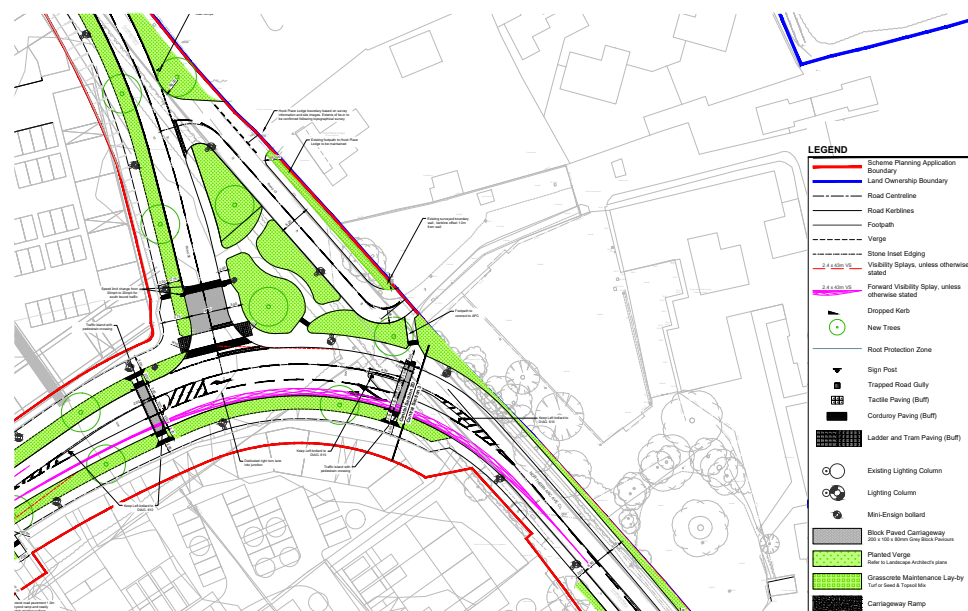


Figure 14. General Arrangement Plan - Sheet 5

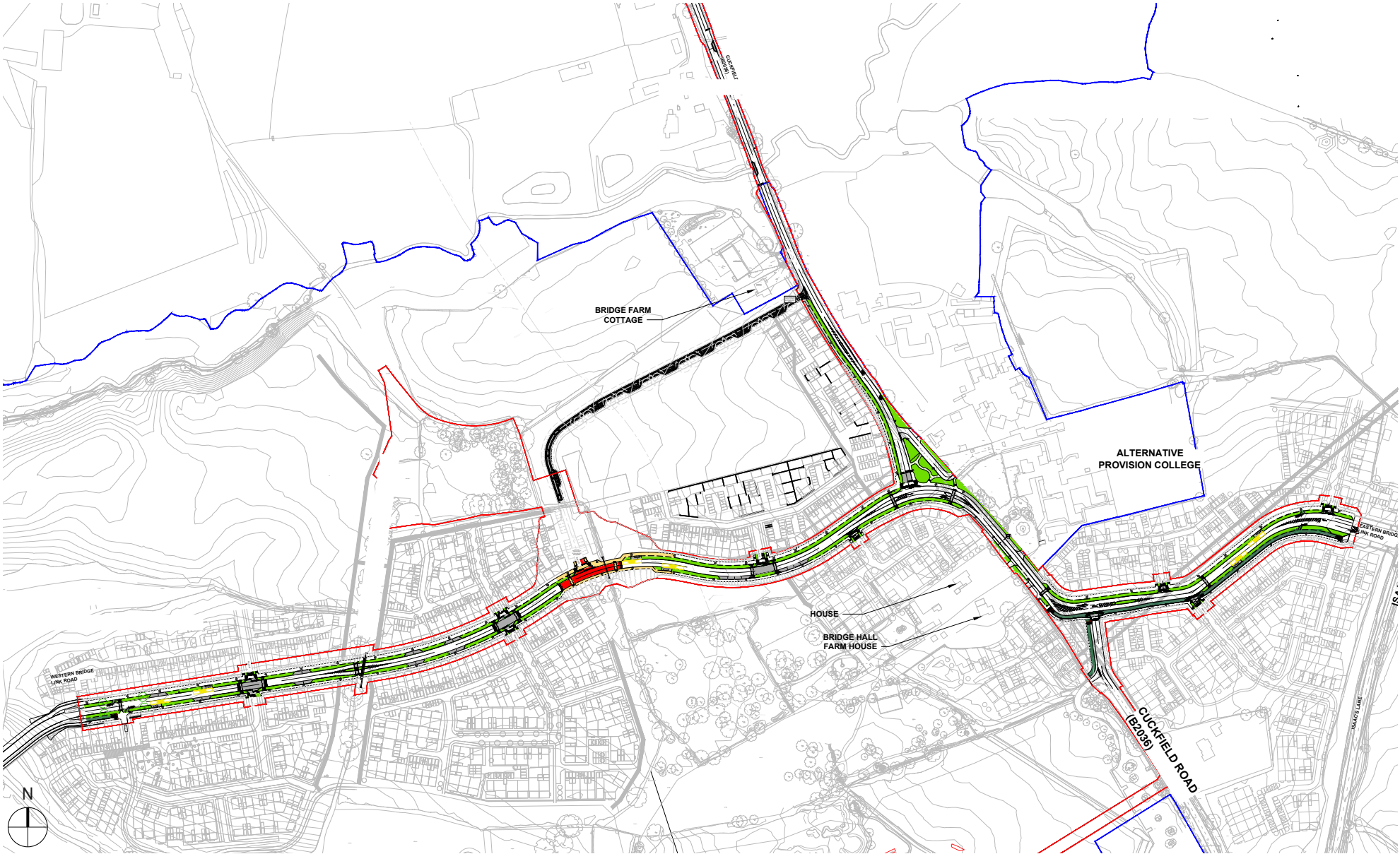


Figure 15. Overall General Arrangement Plan

5.3.3. Pedestrian and Cycle Access

A continuous 3m wide shared footway and cycleway is incorporated on the northern side of the avenue continuing from WBLR to EBLR. On the southern side, a 2m wide footway is extended from WBLR to B2036 Cuckfield Road, connecting to the Green Super Highway between B2036 Cuckfield Road and A273 Isaac's Lane.

Low traffic flows and more direct pedestrian and cycle routes to local facilities should encourage movement by these sustainable modes. It will therefore be important that this is recognised in the street design and that priority is given to pedestrian and cycle movements. It is for this reason that the design has given priority to Pedestrians and Cyclists at all the priority junctions where side roads meet the Central Section.

There is a national desire to reduce car borne trips and encourage travel by sustainable modes and highway design is evolving to accommodate this.

The crossings parallel to the Central Section are designated by an area of footway material which from the pedestrians' perspective maintains the route across the crossing area.

The point of exit from the Central Section will be identified by a short initial length of corner radii.

The crossing is at a raised level from the carriageway, at a height of 100mm. This is the dimension for a standard ramp, for example to a raised table, this would be used as a speed control measure along the channel of the road and provide vertical deflection to vehicles as the turn-in commences and reducing speed before turning into the side road. The ramping will be at a gradient of 1:15 for a distance of 1,5m which again would be as for a raised table. The footway levels will be adjusted locally at crossing points to cater for any difference between full height kerbing and the 100mm raised level.

The plateau on either side of the ramps will be a minimum of 6m to ensure buses can maintain a smooth transition between the ramped sections, longitudinal to Northern Arc avenue. A minimum upstand of 25mm will be maintained through these raised tables to ensure surface water drainage stays within the road channel. The full height kerb is reduced to 6mm to complement the raised table and minimise the change in level for pedestrians. Visually the route is continuing, and priority is clear, reducing the likelihood of pedestrian hesitation that may have indicated to a driver that the pedestrian was yielding. For the visually impaired the flush arrangement will not provide a kerb to navigate around, and the continuous route will provide a seamless experience, tactile paving is provided. While a kerb is proposed, it features a 6mm drop.

5.3.4. Public Transport

The Proposed Development would constitute a key bus corridor given it would provide a through route between WBLR and EBLR. A comprehensive Public Transport Strategy is included within the Northern Arc Allocation outline planning application which has been developed in conjunction with bus operators.

Swept Path Analysis (See drawings 60610807-ACM-CS-ZZ-DR-HW-00-3003 and 60610807-ACM-CS-ZZ-DR-HW-00-3004) of two buses travelling in opposite directions is included within the Transport Assessment which accompanies the planning application to demonstrate that this provision would be sufficient to allow two buses to pass each other. In addition, in accordance with established guidance, traffic calming features proposed largely include measures such as street trees, build outs, on-street parking and surface treatment. A total of six bus stops are proposed along the proposed Central Section. These are spaced out in 3 locations to allow for good pedestrian accessibility, as shown in the Bus Stop Location Plan.

The provision of bus stops with locally raised kerbs to 160mm upstand to bring the footway level to the bus and enable pedestrians to board or alight. Bus stops along the Central Section are to be provided with cage markings, bus shelters, and bus stop flags as per the Local Authority specification.

Bus stops and access to public transport are in compliance with DDA standards to enable inclusive mobility.



Figure 16. Bus Stop Location Plan





Figure 17. Map of existing speed limits



Figure 18. Map of proposed speed limits



- LEGEND**
- Red line: National Speed Limit
 - Orange line: Speed Limit 50mph
 - Yellow line: Speed Limit 40mph
 - Green line: Speed Limit 30mph
 - Blue line: Speed Limit 20mph

5.3.5. Traffic Speed

The Northern Arc avenue has been designed for slower speeds to reflect the surrounding proposed residential uses. The Central Section starts at a speed of 30mph to the west and is downgraded to 20mph ahead of the green corridor. From here on, the Central Section design speed is continuous to create the feeling of continuity for road users, and to create an environment that supports active travel. Regular traffic calming features are integrated along the avenue to remind drivers to reduce speeds, and to pay attention to their surroundings. These include raised tables at junctions and landscaped refuge islands. Elements within the wider masterplan will also contribute to this such as feature buildings and the spatial configuration of frontages around key intersections.

Traffic speeds have been designed to slow traffic on existing routes coming into Burgess Hill, ahead of the arrival onto the newly configured intersections with the Northern Arc avenue. The section of Cuckfield Road that is re-engineered as part of the Northern Arc avenue is proposed at 20mph to emphasise the change in character of the street, to create a sense of continuity, and to integrate the development either side of the route. This also contributes in creating a good environment for people to walk along the avenue to local centres.

5.3.6. Car parking

Car parking provision on the Central Section is proposed in the form of unallocated parking bays intermittently within the verge. These will serve as parking for visitors and for access to proposed local services such as the local centre, and the central neighbourhood park. These have been positioned with consideration to various constraints including visibility, street trees and lighting requirements. The inclusion of parking bays will help to minimise parking in verges and other unsafe locations. The visual impact of the parking provision has notably been considered, with the landscape proposals and street trees playing a key role to reduce the dominance of cars within the streetscene. A total of approximately 24 parking bays are proposed in total.

5.4. Tree Strategy

Street tree planting along the Northern Arc avenue will provide both placemaking and biodiversity benefits. Single species groups of 4 and 2 trees are positioned at regular intervals and repeated throughout to create rhythm and a sense of continuity to the wider streetscape. When viewed along the extent of the road, it forms a species-resilient mixed avenue of trees with variations of profile and appearance. These variations respond to the rural edge character of the development, avoiding long sections of uniformity reflective of a more urban context.

Where it is not possible to plant trees both sides of the carriageway, such as Cuckfield Road, a mixed species row, either single or in pairs, is proposed. This complements existing specimen trees on the opposite site of the road or defines the edge of the street-scape denoting a change of character along the Northern Arc avenue.

Tree positions have been co-ordinated with on-street visitor parking bays and lighting columns to ensure soil volumes of at least 30m³ / tree (or 24m³ for linked tree pits) are provided. Tree pits have been designed to assist with surface water drainage and filtration; an integral feature to the wider SuDS strategy as illustrated in Appendix 2: Proposed Tree Pit Details (inset detail 01 and 02) of the Street Design and Adoption Manual.

Feature trees are proposed intermittently along the Northern Arc avenue, to define gateways, as focal points to internal vistas or to complement existing habitat corridors. Species of feature trees will be selected from the same planting palette as the avenue trees.

Feature trees / Street Trees



Carpinus betulus (source: © A.Gray commons.wikimedia.org (CC BY-SA 3.0))



Acer buergerianum (source: © Nishiguchi, Masahiro. commons.wikimedia.org (CC BY-SA 3.0))



Liriodendron tulipifera (source: © Ladislav Luppá. commons.wikimedia.org (CC BY-SA 3.0))



Tilia cordata (source: © Andreas Rockstein. www.flickr.com (CC BY-2.0))



Ulmus 'New Horizon' (source: Revised Design Guide Document)



Zelkova serrata (source: © David J Stang commons.wikimedia.org (CC BY-SA-4.0))



Ginkgo biloba (source: © Crusier. commons.wikimedia.org (CC BY-SA 3.0))



Quercus frainetto (source: © Tim Sheerman-Chase. commons.wikimedia.org (CC BY 2.0))

Street trees



Figure 19. Map of proposed Northern Arc avenue tree species

Key:

Feature trees / street trees:	Street Trees:
Carpinus betulus	Tilia cordata
Acer buergerianum	Ulmus 'New Horizon'
Liriodendron tulipifera	Zelkova serrata
	Ginkgo biloba
	Quercus frainetto

N Not to scale

For proposed verge planting types refer to colour coded images on the following page.

5.5. Street planting strategy

To compliment the proposed the Northern Arc avenue tree planting strategy, verge planting is proposed to enhance biodiversity and strengthen the character of the place. Verge planting is split into three types:

1. Species rich grassland / wildflower planting, located in verges beneath avenue trees to the west and centre of the Northern Arc avenue and along Cuckfield Road.
2. Groundcover verge planting, located beneath feature trees throughout the Northern Arc avenue to enhance the aesthetic of the street, and create year-round interest.
3. Wetland / Rain Garden Mix, located in verges beneath avenue trees to east of Cuckfield Road, with locally sourced boulders and moisture tolerant planting to create a naturalised green-blue feature whilst deterring unwanted parking.

Species-rich Grassland / Wildflower Mix



Grassland meadow mix verge planting. (Eddington, Cambridge. Source: James Dee / AECOM 2023)



Wildflower / herbaceous verge planting. (JJ Thompson Ave, Cambridge. Source: James Dee / AECOM 2023)

Groundcover Verge Planting



Groundcover verge planting with grasses, perennials and evergreen shrubs. (Eddington, Cambridge. Source: James Dee / AECOM 2023)



Groundcover verge planting with grasses, perennials and evergreen shrubs. (Marleigh, Cambridge. Source: James Dee / AECOM 2023)

Wetland / Rain Garden Mix



Rain garden along the building edge. (source: © DASonnenfeld commons.wikimedia.org (CC BY-SA 4.0))



Wetland planting with crushed aggregate and boulders along roadside. (Cambridge North Station Source: James Dee / AECOM 2023)



Figure 20. Map of proposed Northern Arc avenue street planting types

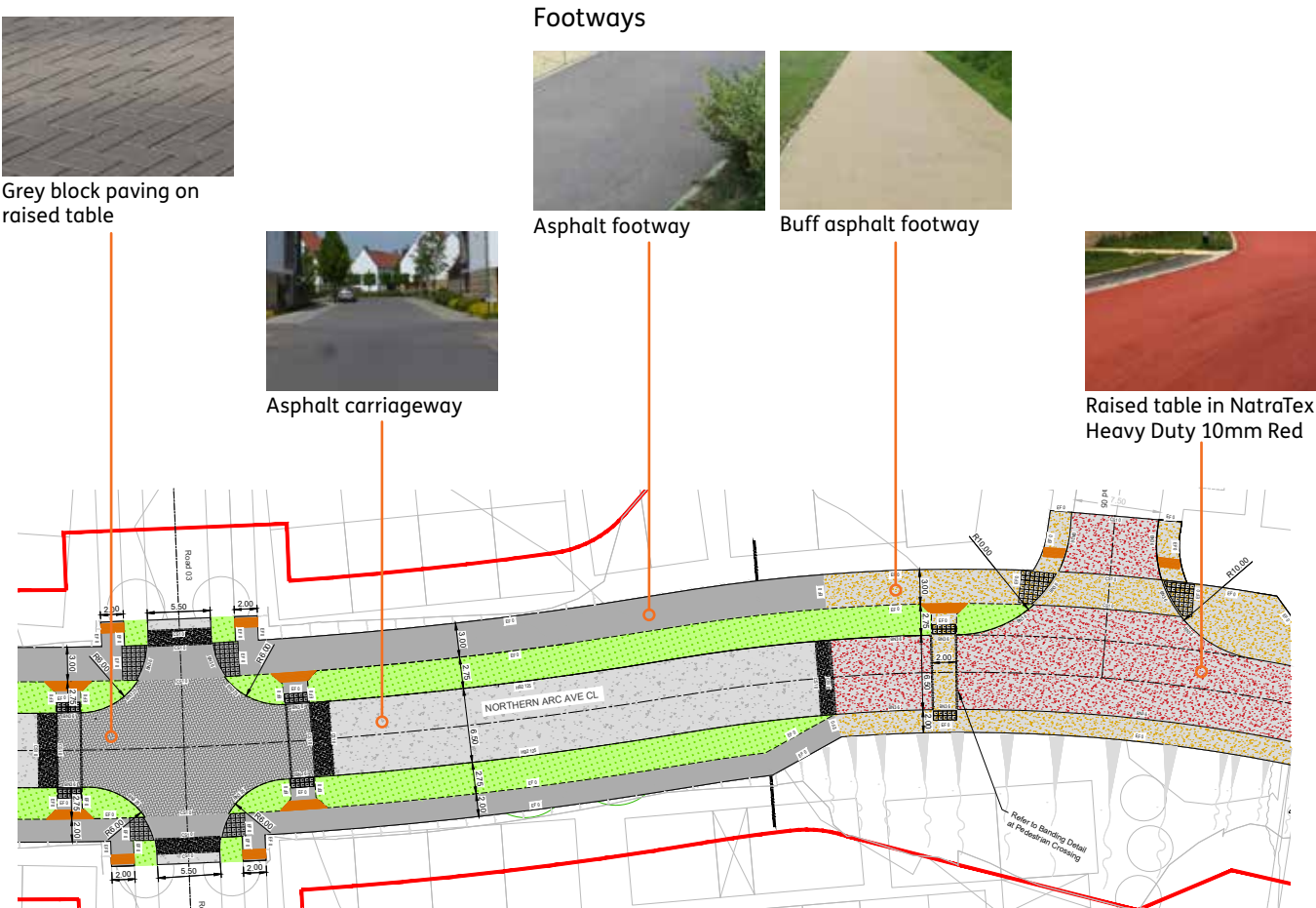
- Key:
- Species-rich Grassland / Wildflower Mix
 - Groundcover Verge Planting
 - Wetland / Rain Garden Mix

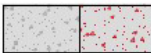
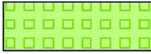
⬆ N Not to scale

For proposed street planting types refer to colour coded images on previous page.

5.6. Materials Strategy

This materials strategy is illustrated here for the different components of the avenue in the Central Section and will be specified in accordance with the principles and specifications set out in the SDAM. Refer to the submitted Road Kerb and Pavement Plan drawing pack for further detail.



-  Flexible Asphalt Carriageway
50mm HRA 35/14 F SURF 40/60, colour as shown
-  Block Paved Carriageway
200 x 100 x 80mm Grey Block Paviours
-  Carriageway Overlay
50mm HRA 35/14 F SURF 40/60
-  Flexible Footway and Cycleway
AC6 Dense Surf 100/150, colour as shown
-  Tarmac Footway Overlay
AC6 Dense Surf 100/150
-  Soft Landscaping
Refer to Landscape Drawings for Details
-  Grasscrete Maintenance Lay-by
Turf or Seed & Topsoil Mix
-  Vehicular Ramp (75mm high)

Green Super Highway



Asphalt footway



Green coloured cycleway

Parking Bays



Block paving/ block paving in inset parking bay

Kerbs



Precast concrete

Pedestrian Crossings



Corduroy Paving in buff



Blister tactile paving in buff

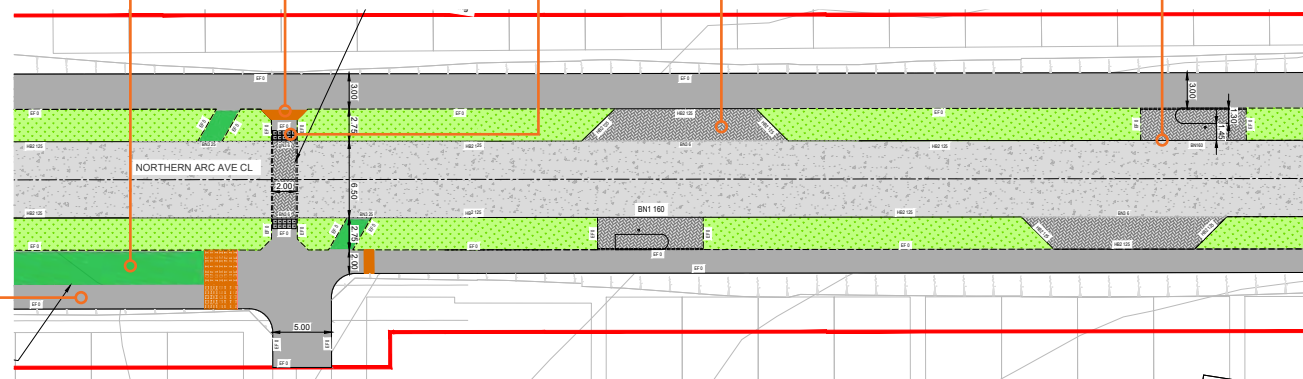


Figure 21. Materials Diagram with extracts of the Road Kerb and Pavement Plan drawing pack

5.7. Street Furniture

Street furniture will not be included within this application and is to be specified at a later stage within the detailed design of the wider Brookleigh scheme. Cycle parking will be provided at later development stages. This will be in compliance with the street furniture section in the approved SDAM.

5.8. Lighting Strategy

The lighting strategy for the Central Section follows the design principles set out in the SDAM. It promotes the efficient, sustainable and attractive use of lighting in the public realm. The strategy addresses the issues of safety and security for vehicles and pedestrians, providing focused areas of illumination to highlight distinctive areas and features while limiting light pollution and impacts on local habitats.

Lighting column locations have been safeguarded within the road layout design and the wider design proposals. This will notably minimise potential conflicts with street trees, including tree crowns and growth.

Further lighting unit specification will be in compliance with the SDAM and agreed with WSCC.

5.9. Ecology

AECOM previously completed a suite of ecological surveys at the wider Brookleigh site in 2019, which included the Central Section. Updated ecological surveys of the Central Section were completed in 2022, with updated walkovers completed in 2023 and 2024. Surveys in 2022 included:

- Phase 1 habitat survey
- Bat roost suitability assessment of trees
- Bat emergence survey of trees
- Bat activity surveys
- Great crested newt (*Triturus cristatus*) survey
- Badger (*Meles meles*) survey
- Hazel dormouse (*Muscardinus avellanarius*) survey
- Emergence surveys did not confirm the presence of bat roosts; however, trees with suitability to support roosting bats are present within and adjacent to the Central Section.
- Great crested newts were present within two ponds within 250m of the Central Section; therefore, great crested newts may be present within terrestrial habitats within the Central Section.
- Badger setts are present in the surrounding area, including adjacent to drainage proposals in the north of the Site.
- There is a low residual risk of reptiles being present in suitable habitat within the grassland in the north of the Site.
- Himalayan balsam (*Impatiens glandulifera*) has been present along the River Adur to the north and west of the Site.
- Hazel dormice were found to be absent.
- Mitigation strategies, including avoidance measures and the proposed implementation of Natural England licences for badger and great crested newt where appropriate have been developed and submitted as part of the application. These build on mitigation strategies developed during outline planning, where appropriate.
- The design of the Central Section includes a badger and amphibian tunnel to provide connectivity for species north and south of the proposed road.

5.10. Drainage Strategy

The flood risk assessment for the site established that the majority of the Site is located in Flood zone 1, with the river channel corridors of Copyhold Stream and the River Adur located in Flood Zone 2 and Flood Zone 3. As such, the majority of the site is considered to have less than a 0.1% (1 in 1000) Annual Exceedance Probability (AEP) of flooding from the River Adur, groundwater, and artificial sources, while the areas located in Flood Zones 2 and 3 have between a 0.1% and 1% (1 in 100), and a greater than 1% AEP of flooding respectively. All built development, with the exception of road and pedestrian watercourse crossings will be located beyond the 1% AEP with 105% climate change flood extent.

The site is at medium probability of flooding from surface water runoff. Surface water runoff following heavy rainfall would naturally drain following the undeveloped greenfield topography of the Site, mainly flowing into existing watercourses on the Site. However, there are a number of 'hotspot' locations of surface water flooding within the site boundary that have higher risk of surface water flooding, constrained by low spots or existing infrastructure. Surface water flood risk is therefore considered to be of medium importance.

The proposed drainage design is in accordance with MSDC's Strategic Flood Risk Assessment (SFRA), WSCC specifications and with Design Manual for Roads and Bridges (DMRB) CG 501 – Design of Highway Drainage.

MSDC's SFRA requires that the following disposal hierarchy should be observed:

- Discharge by infiltration to the ground.
- Discharge to surface water bodies.
- Discharge to a surface water sewer, highway drain or another drainage system.
- Discharge to a combined sewer.

The site is assumed to be underlain by very low permeability Weald Clay. As this means infiltration drainage is unlikely to be viable, the drainage system has been designed to discharge to local watercourses at a restricted rate.

The NPPF requires that new development should not increase flood risk outside the Site. In the context of surface water drainage, this effectively means that surface water runoff from the Proposed Development should not exceed the greenfield runoff rates and volumes already generated. This is typically achieved by restricting the rate of surface water discharge from the development at a controlled rate equating to the mean annual flood, Q_{bar} . This is the approach adopted in the drainage design.

The area of impermeable surfacing will increase from the current greenfield condition as a result of the Proposed Development. Restriction of runoff from the site will therefore be restricted to 7.9 l/s/ha of impermeable area for flows into the drainage networks from the areas contributed by the development of the Central Section. Two of the networks will also assume flow from adjacent development plots.

To restrict the rate of surface water discharge from the Proposed Development to a controlled rate equating to Q_{bar} , attenuation storage is necessary to balance the difference between runoff and discharge. Surface water attenuation storage locations have been identified, fragmented and distributed across the site according to site constraints including development plot layouts, topography, ecology and arboriculture. Attenuation for the Northern Arc avenue Central Section shall be provided through SuDS features, including ponds and tree pits, and online storage in the form of oversized pipes beneath the carriageway.

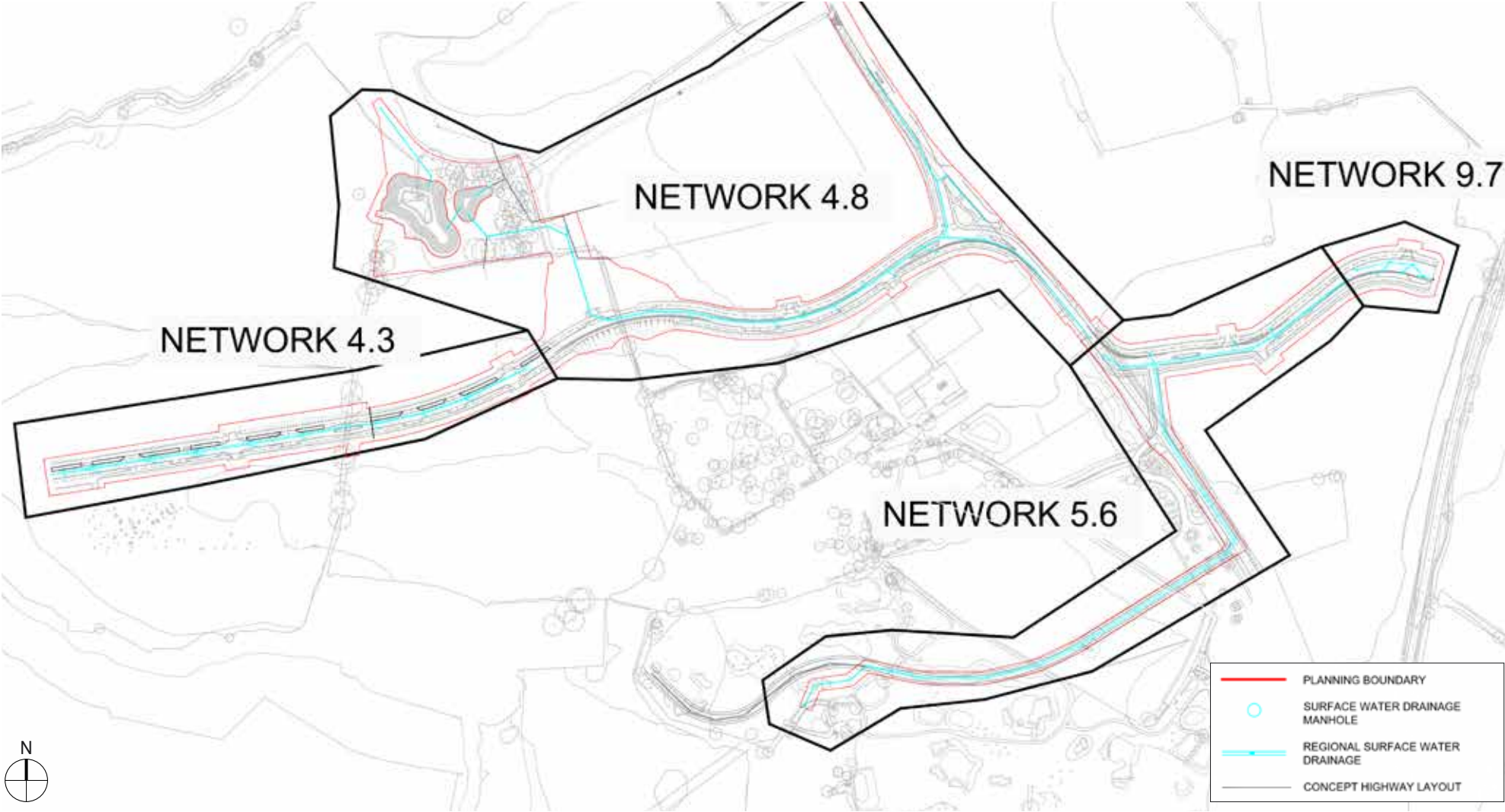


Figure 22. Drainage Strategy Overview

5.11. Utilities

Utilities provision and diversions strategy for the Central Section will align with the proposed site-wide utilities work submitted with the OPA in December 2018.

Drawings 60610807-ACM-XX-XX-DR-UT-020000 (constraints plan) and 60610807-ACM-XX-XX-DR-EL-020007 (new buried service route) detail the provisional indicative alignments of the existing and proposed utilities, including diversions.

The following summarises the works relevant to the Central Section:

- There is an existing Intermediate Pressure Gas Main (IP) crossing the central highway. AECOM are liaising with Scottish Gas Networks (SGN) to determine the constraints on this main and what the requirements will be when constructing the new road over the main (note: this main may have to be diverted to allow for the future development parcels North of the Central Avenue Highway).
- At the point where the Central Section ties into Cuckfield Road there are the following utilities:
 1. Potable Water – owned by South East Water
 2. Telecoms – owned by Openreach
 3. Electric overhead cables – owned by UK Power Networks

All the above Statutory Authorities have been contacted and we are waiting on a response from them for their requirements with regards to protection or diversion during the construction phase of the new road layout.

All the new infrastructure services will be installed along the central section within the footpath/carriageway, the alignment will pick up from the WBLR and continue along Central Avenue.

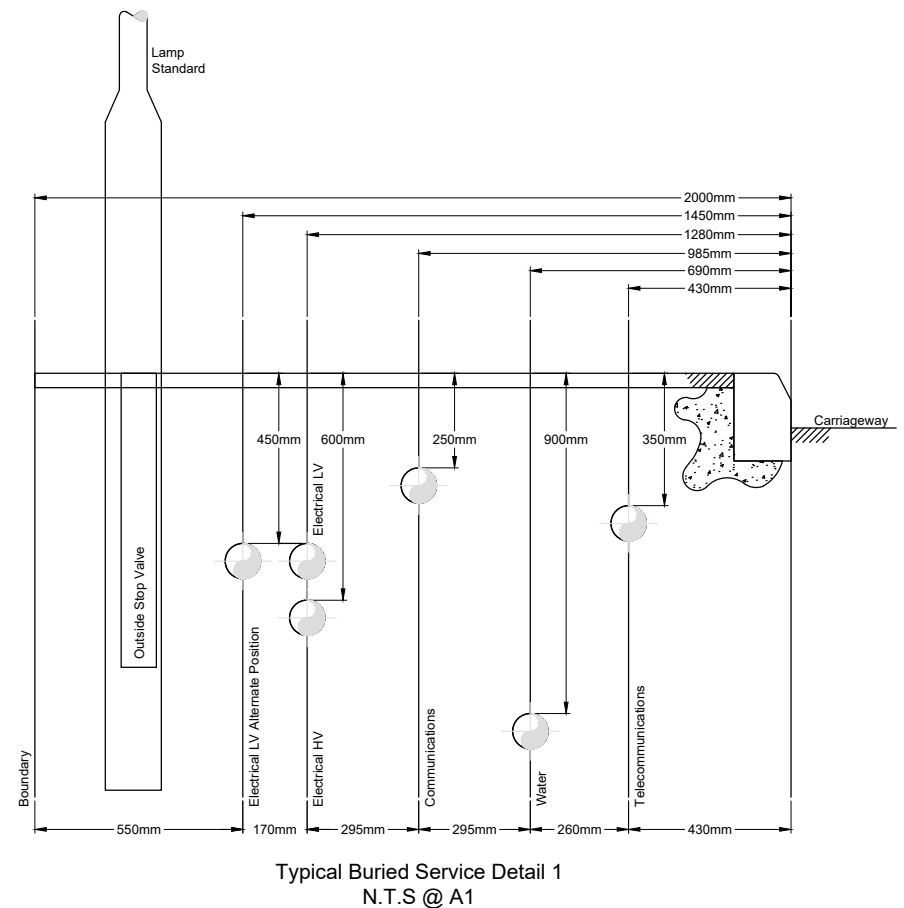


Figure 23. Typical Buried Service Detail

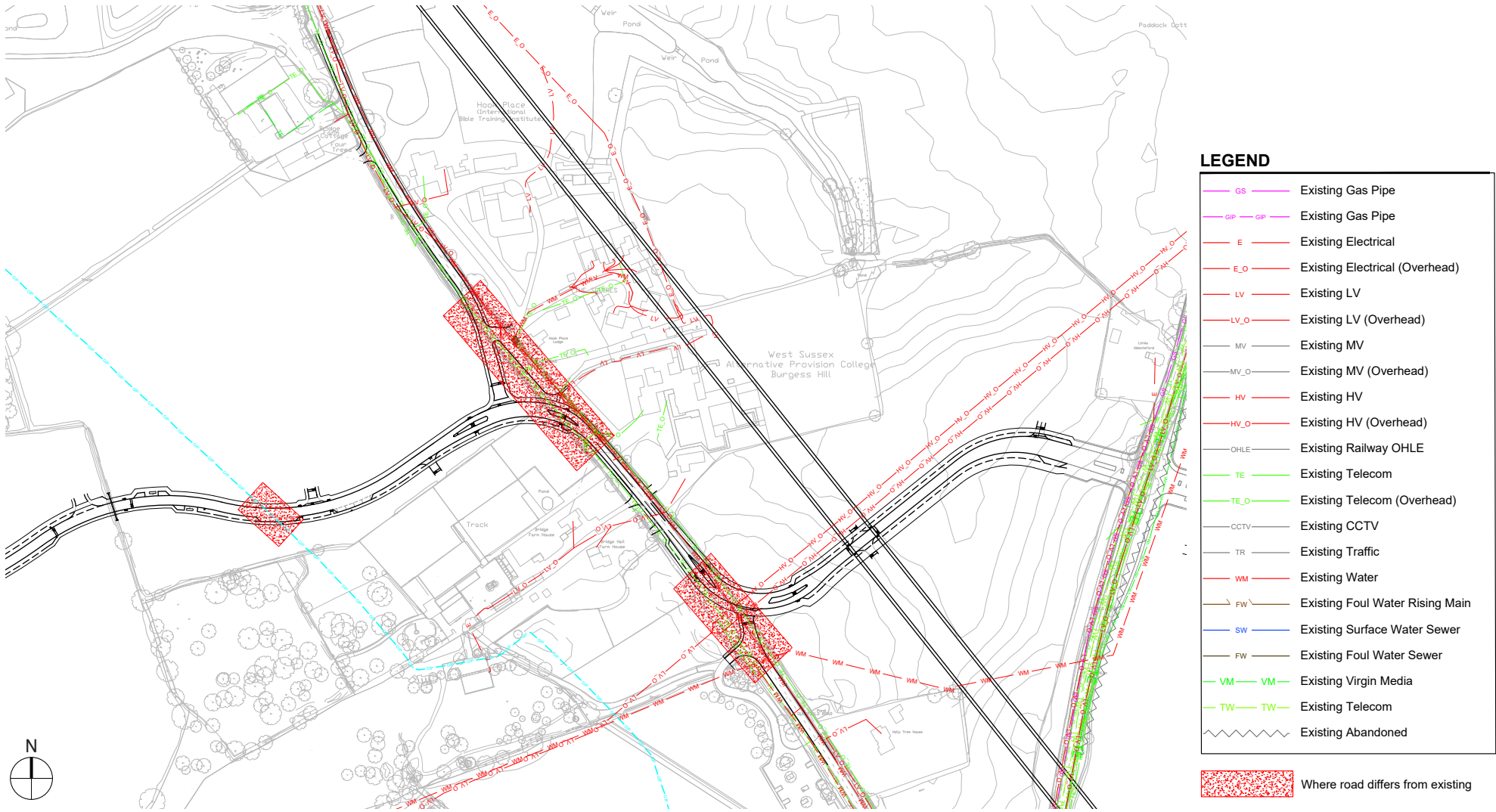


Figure 24. Extract of Existing Site Wide Combined Utilities for Diversion

6. Central Section Character Areas



6. Central Section Character Areas

The Design Guide divides the Northern Arc avenue into different character areas. This chapter provides details on how the character areas located within the Central Section respond to the design principles set out in the Design Guide and the SDAM.

The Central Section character areas plan (Figure 24) shows the locations of the different character areas that comprise the Central Section:

- East of Western Bridge - Section 2B
- Central Neighbourhood Centre - Sections 2C & 2D
- Cuckfield Road Junctions - Section 3
- West of Isaacs Lane Junction - Section 4

This section provide more details on the design principles for each character area and the avenue design.

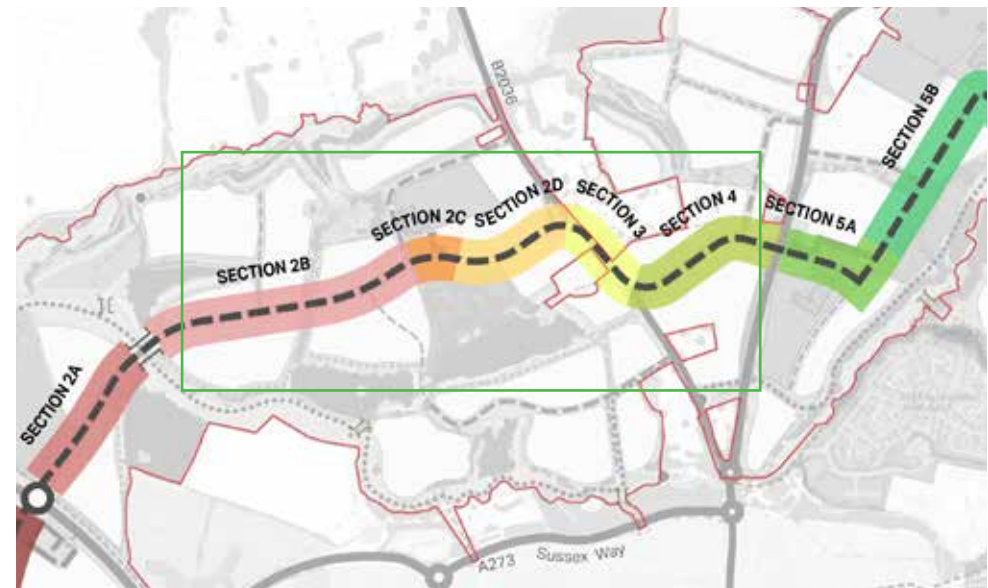


Figure 25. Central Section character areas

6.1. East of Western Bridge - Section 2B

The Central Section extends seamlessly from the Western Bridge Link Road (WBLR), which has been designed in detail by another party. This section has been carefully developed to ensure a smooth connection between the two. The design of the Central Section begins east of the Western Bridge and comprises the following elements: a 3m shared footpath and cycleway on the north side, a 2.75m verge, a 6.5m carriageway, another 2.75m verge, and a 2m footway on the south side. Intermittent verge sections are utilised to provide parallel parking bays. These verges also accommodate large street trees, planted in clusters of four, as outlined in the Tree Strategy.

The GSH continues briefly from the WBLR into the Central Section before being redirected southward. Within the residential parcel (P2.4b), it transitions into a segregated active travel route consisting of a 2m pedestrian footway and a 3m cycleway.

The Northern Arc avenue provides two access points to residential development parcels to the north and south in the form of a junction on a raised table. Two bus stops are provided before the raised table.

Moving further east, at the line of retained mature trees, an island is proposed at the pedestrian crossing containing street trees within the carriageway. This creates a gateway on the approach to the central neighbourhood centre creating a clear landmark.

Another raised-table junction further to the east provides access to plots P2.8a and P2.8b.

Footways have been designed to allow pedestrians to continue straight at junctions when travelling parallel to Northern Arc avenue. They also benefit from the raised tables in crossing on a surface with a 6mm high kerb. The raised tables assist in wayfinding, creating memorable points along the avenue, and contribute to the traffic calming strategy.

There are six uncontrolled pedestrian crossings provided within this area along the key desirelines perpendicular to Northern Arc avenue.

KEY	
	Central Section application boundary
	Green Super Highway
	Green Circle
	Pedestrian and cycle links
	Uncontrolled Pedestrian crossing
	Controlled Pedestrian crossing
	Access to residential parcels
	Active frontages
	Western Bridge
	School
	Play spaces
	Bus stop
	Gypsy & Traveller Facility
	Attenuation pond
	Proposed avenue trees
	Indicative street trees
	Ancient woodland and buffers
	Existing trees (identified in topographic & arboricultural surveys)
	Indicative existing hedges
	Green openspace
	Public square
	Landmark building (flexible retail use)
	Indicative school building
	Block paved (defined for on-street parking, bus stops, and pedestrian crossings)
	Neighbourhood Centre raised table
	Tactile paving
	Ramp
	Lighting column
	School grounds
	Indicative residential building
	Residential gardens
	Residential parking
	Streets
	Grass verges



Figure 26. East of Western Bridge - Section 2B Illustrative Layout

6.2. Central Neighbourhood Centre - Sections 2C & 2D

The Northern Arc avenue section at the Central Neighbourhood Centre is formed of a 3m shared footpath and cycleway to the north side, a 6.5m carriageway, a 2.75m verge and a 2m footway to the south side. Sections of verge will provide parallel parking bays to service local facilities. The verges will create a greater sense of enclosure and enhance the sense of urban character.

The Central Neighbourhood Centre is envisioned as a key destination along the Northern Arc avenue, serving the surrounding neighbourhoods. In this section, the Central Neighbourhood Park is situated to the south of the avenue, while to the north lies a 2FE primary school and commercial spaces housed within a landmark building. These elements are unified by a public square, designed to act as a focal point and vibrant social hub for the community. The public square is to be delivered by others following completion of the Northern Arc avenue.

This area is expected to experience higher levels of pedestrian movement both along and across the avenue, driven by the proximity to key amenities. To support this, a raised table with contrasting surface materials is proposed south of the square and at the junction with the secondary road. This feature will facilitate pedestrian crossings and align with natural desire lines between amenities and residential areas. It also creates a central focal point along the avenue and contributes to the overall traffic-calming strategy.

Two bus stops are proposed in the eastern corner of the center, positioned diagonally opposite each other.

Access points to development parcels on the east of this area have raised tables for pedestrian crossings only.

KEY	
	Central Section application boundary
	Green Super Highway
	Green Circle
	Pedestrian and cycle links
	Uncontrolled Pedestrian crossing
	Controlled Pedestrian crossing
	Access to residential parcels
	Active frontages
	Western Bridge
	School
	Play spaces
	Bus stop
	Gypsy & Traveller Facility
	Attenuation pond
	Proposed avenue trees
	Indicative street trees
	Ancient woodland and buffers
	Existing trees (identified in topographic & arboricultural surveys)
	Indicative existing hedges
	Green openspace
	Public square
	Landmark building (flexible retail use)
	Indicative school building
	Block paved (defined for on-street parking, bus stops, and pedestrian crossings)
	Neighbourhood Centre raised table
	Tactile paving
	Ramp
	Lighting column
	School grounds
	Indicative residential building
	Residential gardens
	Residential parking
	Streets
	Grass verges



Figure 27. Central Neighbourhood Centre - Sections 2C & 2D Illustrative Layout

6.3. Cuckfield Road Junctions - Section 3

The Northern Arc avenue within section 3 is formed of a 3m shared footpath and cycleway to the north side, a 6.5m carriageway, and a 2m footway to the south side. This area between the Cuckfield Road junctions is constrained by the root protection areas of the existing trees and hedgerows either side of the road. This provides a screen for the private land on either side of this section. To protect the existing established vegetation the avenue is proposed with a reduced overall width, achieved without verges.

The Northern Arc avenue includes a reconfiguration of the existing Cuckfield Road resulting in the realignment of the route and two proposed junctions. This reprioritisation of Cuckfield Road provides traffic calming by design, and creates an arrival to the Brookleigh development, while establishing the Northern Arc avenue as a continuous movement corridor.

The northern junction considers the access requirements of the private properties and the Alternative Provision College (APC). The avenue is proposed with a horizontal bend that complements the existing constraints and a central dedicated right turn lane pocket for vehicles going north on Cuckfield Road.

The southern junction has been designed to create an urban street character while being considerate of the heavy goods vehicles (HGV) that will remain in use on the route. The avenue will be aligned with green verges, street trees and continuous building frontages.

GSH is accommodated on the southern side of the avenue and access connection to the south is provided for the rest of the link to be delivered in the future.

KEY	
	Central Section application boundary
	Green Super Highway
	Green Circle
	Pedestrian and cycle links
	Uncontrolled Pedestrian crossing
	Controlled Pedestrian crossing
	Access to residential parcels
	Active frontages
	Western Bridge
	School
	Play spaces
	Bus stop
	Gypsy & Traveller Facility
	Attenuation pond
	Proposed avenue trees
	Indicative street trees
	Ancient woodland and buffers
	Existing trees (identified in topographic & arboricultural surveys)
	Indicative existing hedges
	Green openspace
	Public square
	Landmark building (flexible retail use)
	Indicative school building
	Block paved (defined for on-street parking, bus stops, and pedestrian crossings)
	Neighbourhood Centre raised table
	Tactile paving
	Ramp
	Lighting column
	School grounds
	Indicative residential building
	Residential gardens
	Residential parking
	Streets
	Grass verges



Figure 28. Cuckfield Road Junctions - Section 3 Illustrative Layout

6.4. West of Isaacs Lane Junction - Section 4

West of Isaacs's Lane Junction, the highway is formed of a 3m shared footpath and cycleway to the north side, a 2.75m verge, a 6.5m carriageway, a 2.75m verge and a section of the GSH consisting of 3m segregated cycleway and a 2m footway to the south side. Two bus stops are proposed. The street trees are grouped in fours. The avenue tapers out to the west to accommodate a dedicated right turn lane for vehicles travelling west from the eastern junction. EBLR starts west of this junction.

In this section, there is only one uncontrolled pedestrian and cycle crossing. Further east, controlled crossings are provided as part of the signalised junction between the existing Isaacs Lane and the connection with the Eastern Bridge and Link Road to establish safe and efficient pedestrian and cycle links between the Eastern and Central neighbourhoods.

KEY

	Central Section application boundary		Existing trees (identified in topographic & arboricultural surveys)
	Green Super Highway		Indicative existing hedges
	Green Circle		Green openspace
	Pedestrian and cycle links		Public square
	Uncontrolled Pedestrian crossing		Landmark building (flexible retail use)
	Controlled Pedestrian crossing		Indicative school building
	Access to residential parcels		Block paved (defined for on-street parking, bus stops, and pedestrian crossings)
	Active frontages		Neighbourhood Centre raised table
	Western Bridge		Tactile paving
	School		Ramp
	Play spaces		Lighting column
	Bus stop		School grounds
	Gypsy & Traveller Facility		Indicative residential building
	Attenuation pond		Residential gardens
	Proposed avenue trees		Residential parking
	Indicative street trees		Streets
	Ancient woodland and buffers		Grass verges



Figure 29. West of Isaacs Lane Junctions - Section 4 Illustrative Layout

7. Conclusion



7. Conclusion

This Design and Access Statement supports the reserved matters application for the Northern Arc avenue Central Section. The document outlines the relevant national and local policy; the stakeholder engagement; the context appraisal; and the design principles and concepts. Further to this, clear explanations have been provided in how these considerations have been addressed within the development proposals.

The Northern Arc avenue Central Section has been developed through an integrated approach across project disciplines, and achieved through workshops with WSCC and MSDC. This integrated approach follows on from the consented outline scheme for Brookleigh. This is reflected in the development outcomes and notably in embedding placemaking principles throughout the design development.

The Northern Arc avenue Central Section will deliver an important piece of infrastructure that will enable the development of the wider Brookleigh site. In doing so it is committed to achieving a people-friendly street that has a sense of place and identity. It will facilitate active travel and public transport through ease of movement, the use of natural connections, and accessibility. The landscape strategy will provide both placemaking and biodiversity benefits. Drainage, utilities, and street lighting have been considered together which will support generous tree and verge planting. Car parking provision will keep a balance between the streetscape and vehicular access, while cycle parking facilities will be provided at future development stages.

The development proposals have been developed through a robust and integrated approach to meet the design vision of creating an attractive street in the heart of the Brookleigh Community while delivering an important link across the north of Burgess Hill. For any further information, please refer to the technical reports and drawing packs within this submission.

