



Northern Arc, Burgess Hill Masterplan



Limitations

AECOM Infrastructure & Environment UK Limited (hereafter referred to as "AECOM") has prepared this Report for the sole use of Homes England ("the Client") in accordance with the Agreement under which our services were performed. No other warranty, expressed or implied, is made as to the professional advice included in this Report or any other services provided by AECOM. This Report is confidential and may not be disclosed by the Client nor relied upon by any other party without the prior and express written agreement of AECOM.

The conclusions and recommendations contained in this Report are based upon information provided by others and upon the assumption that all relevant information has been provided by those parties from whom it has been requested and that such information is accurate. Information obtained by AECOM has not been independently verified by AECOM, unless otherwise stated in the Report.

The methodology adopted and the sources of information used by AECOM in providing its services are outlined in this Report. The work described in this Report was undertaken between July and August 2018 and is based on the conditions encountered and the information available during the said period of time. The scope of this Report and the services are accordingly factually limited by these circumstances.

Where assessments of works or costs identified in this Report are made, such assessments are based upon the information available at the time and where appropriate are subject to further investigations or information which may become available.

AECOM disclaims any undertaking or obligation to advise any person of any change in any matter affecting the Report, which may come or be brought to AECOM's attention after the date of the Report.

Certain statements made in the Report that are not historical facts may constitute estimates, projections or other forward-looking statements and even though they are based on reasonable assumptions as of the date of the Report, such forward-looking statements by their nature involve risks and uncertainties that could cause actual results to differ materially from the results predicted. AECOM specifically does not guarantee or warrant any estimate or projections contained in this Report.

Copyright
© 2018 AECOM Infrastructure & Environment UK Limited. All Rights Reserved.

Contents

| | | | |
|---|-----------|--|-----------|
| 1. Executive Summary | 6 | Community and Employment..... | 31 |
| 1.1 Introduction..... | 6 | SDP 10 - Integration with Established Communities..... | 31 |
| 1.2 Vision..... | 6 | SDP 11 - Education..... | 32 |
| 1.3 Masterplan..... | 6 | SDP 12 - Mixed and Balanced Community..... | 32 |
| 1.4 Strategic Development Principles..... | 8 | SDP 13 - Integrating Employment Opportunities..... | 33 |
| 1.5 Next steps..... | 9 | Landscape and Infrastructure..... | 33 |
| 2. Context | 12 | SDP 14 - Landscape and Green Infrastructure..... | 33 |
| 2.1 Introduction..... | 12 | SDP 15 - A rich variety of open space..... | 34 |
| 2.2 Purpose and status of the Masterplan Report..... | 12 | SDP 16 - Ancient Woodland and Veteran Trees..... | 34 |
| 2.3 Approach and methodology..... | 13 | SDP 17- Sports Facilities..... | 35 |
| 2.4 Structure of document..... | 13 | SDP 18 – Topography..... | 35 |
| 3. Planning Policy Context | 16 | SDP 19 –Visibility..... | 36 |
| 3.1 Introduction..... | 16 | SDP 20 - Existing Utility Infrastructure..... | 36 |
| 4. Analysis of the Site and Surrounding Area | 20 | Sustainability..... | 37 |
| 4.1 Summary of site constraints..... | 20 | SPD 21 – Climate resilient development..... | 37 |
| 4.2 Summary of site opportunities..... | 22 | SDP 22 – Low carbon energy..... | 37 |
| 5. Vision and Strategic Development Principles | 26 | SDP 23 – Integrated Water Management..... | 38 |
| 5.1 The Vision for the Northern Arc..... | 26 | SDP 24 – Construction and Material Use..... | 38 |
| 5.2 Description of Development..... | 26 | 6. The Masterplan Framework | 42 |
| 5.3 Strategic Development Principles..... | 26 | 6.1 The Masterplan..... | 42 |
| Access and Movement..... | 27 | 6.2 Access and Movement Framework..... | 44 |
| SDP 1 - Access and Strategic Movement..... | 27 | 6.3 Landscape and Green Infrastructure Framework..... | 50 |
| SDP 2 - Northern Arc Avenue..... | 27 | 6.4 Community Facilities..... | 52 |
| SDP 3 - Strategic Green Connections..... | 28 | 6.5 Utilities and Infrastructure..... | 56 |
| SDP4 - Pedestrian and Cycle Links..... | 28 | 7. Next Steps | 60 |
| Built Form..... | 29 | Appendix - Analysis of Site Constraints and Opportunities | 64 |
| SDP 5 - Centres and Walkable Neighbourhoods..... | 29 | 1. Access and Movement..... | 64 |
| SDP 6 - Housing Mix, Density and Capacity..... | 29 | 2. Community Infrastructure..... | 67 |
| SDP 7 - Place-making objectives..... | 30 | 3. Landscape..... | 74 |
| SDP 8- Northern Arc Design Guide..... | 30 | 5. Arboriculture..... | 83 |
| SDP 9 - Built for Life..... | 31 | 6. Drainage and Flood Risk..... | 86 |
| | | 7. Noise, Air Quality and Odour..... | 89 |
| | | 8. Archaeology and Built Heritage..... | 92 |





Executive Summary

01

1. Executive Summary

1.1 Introduction

This Masterplan is submitted by Homes England to support the delivery of the Northern Arc as a strategic mixed use allocation within the adopted District-wide Local Plan. Homes England is committed to the delivery of an exemplary new community at the Northern Arc that will support the wider economic, social and environmental vision for Burgess Hill and the wider District. With the provision of approximately 3,500 new homes (30% of which will be affordable), the Northern Arc will make a major contribution to meeting Mid Sussex District's housing needs.

The Masterplan is submitted alongside an Infrastructure Delivery Plan and Phasing Strategy to provide a comprehensive framework for the delivery of the Northern Arc over a 15 year time-frame. The submitted documents build on earlier stakeholder and community engagement and have been prepared in close collaboration with the District and County Councils. More detailed development of the proposals as part of an Outline Planning Application will include further stakeholder and community engagement.

The Masterplan has been developed through close collaborative working with the District and County Councils. This included an Options Workshop to select the preferred Masterplan (below).



1.2 Vision

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 facilities within a series of sustainable neighbourhoods linked by a new Northern Arc Avenue, green cycle and footpaths and successfully integrated into Burgess Hill and the wider improvements to the town.”

1.3 Masterplan

The site-wide Masterplan has been developed in accordance with Policy DP9 and is in conformity with the other policies of the District-wide Local Plan. It has been prepared in close collaboration with the District Council and the County Council and on the basis of a comprehensive technical analysis of the site and surrounding area. The principal constraints and opportunities identified through this analysis are summarised in Section 4 and set out in further detail in the Appendix to this report.

The Masterplan is illustrated opposite and described in detail in Section 6. 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, including two standalone community facilities
- A Northern Arc Avenue providing a highway link between the A2300 and A273 to be delivered by the end of phase 1
- Leisure and community uses
- Health provision
- Significant formal and informal recreational space, and landscaped areas
- A Centre for Community Sports
- Employment opportunities including a dedicated employment site and other employment within mixed-use neighbourhood centres
- A network of pedestrian and cycling routes
- A public transport corridor

In addition to the elements noted above the development will provide a contribution towards off-site provision of permanent pitches for settled Gypsies and Travellers, and support for enhanced sports facilities at Triangle Leisure Centre.

The Masterplan is supported by more detailed frameworks for the provision of:

- Access and Movement
- Landscape and Green Infrastructure
- Community Facilities
- Utilities and Infrastructure.

These frameworks are set out in further detail in Section 6.

This Masterplan Report should be read in conjunction with the Northern Arc Infrastructure Delivery Plan (IDP) which also includes a Phasing Strategy for the development. The IDP has been submitted in parallel with this Masterplan Report and sets out the sequencing of development at the Northern Arc and the timing and arrangements for the delivery of the necessary supporting infrastructure.

THE NORTHERN ARC MASTERPLAN



© Crown copyright and database rights 2018 Ordnance Survey GD 100024393

| KEY | | | | | |
|-----|--|--|--------------------------------------|--|--|
| | Site boundary | | Woodland | | Grassland |
| | Land for Frees Farm site access and open space | | Ancient woodland veteran tree buffer | | Flood zone |
| | Residential area | | Parkland | | Local nature reserve |
| | Employment area | | Centre for Community Sports | | Veteran trees |
| | Ancient woodland (hatched) | | Natural green space | | Indicative layout of neighbourhood centre |
| | | | | | Proposed primary road |
| | | | | | Proposed secondary road |
| | | | | | Proposed tertiary road |
| | | | | | Vehicular bridge |
| | | | | | Pedestrian bridge |
| | | | | | Cycle and pedestrian route |
| | | | | | Green circle |
| | | | | | Green super highway |
| | | | | | Public Rights of Way |
| | | | | | Mitigated odour contour |
| | | | | | Water main (400mm) |
| | | | | | Gas main (250mm) |
| | | | | | Overhead cable and pylon |
| | | | | | Primary school with an indicative layout |
| | | | | | Secondary school with an indicative layout |

1.4 Strategic Development Principles

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 as shown below.

• 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 3 Strategic green connections** - The Northern Arc provides two strategic pedestrian and cycle links: enhancing the existing Green Circle; and a new Green Super Highway through the Northern Arc.
- **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 6 Housing mix, density and capacity** - The Northern Arc will provide a full range of housing opportunities, with different densities and typologies across the new community creating distinctive and legible character areas that maximise the potential for sustainable design and non-car based travel.
- **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.
- **SDP 9 Built for Life** - Design proposals for the Northern Arc will be assessed against the place-making objectives set out in Design Guide (SDP 8) and Building for Life 12.

• Community and employment

- **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 11 Education** - The Northern Arc will include a new Secondary School and two Primary Schools. These new schools will be a significant focus for community life, playing a key role in fostering a new community through the development and education of younger people from the Northern Arc and the wider area.
- **SDP 12 Mixed and balanced community** - The Northern Arc will provide a range of housing types to meet current and anticipated future local housing need, including extra care and elderly persons' housing. The development will provide 30% of all new homes as affordable homes, of which 75% will be social or affordable rented and 25% will be intermediate, and the affordable dwellings built will meet the requirements of the Council's Affordable Housing SPD.
- **SDP 13 Integrating employment opportunities** - The Northern Arc will include 4 ha of employment land to the south of the A2300, which would be suitable for a range of B-Class uses (offices, research and development, and/or industry).

• Landscape and 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 15 A rich variety of open spaces** - The Northern Arc will provide a rich variety of attractive open spaces. These will support wider bio-diversity objectives and promote climate change, pest and disease resilience, as well as meeting community needs for recreation and supporting health and well-being.

- **SDP 16 Ancient woodland and veteran trees** - The multiple designated Ancient Woodlands within the Northern Arc, which are an irreplaceable habitat, will be retained and protected through a sensitive design approach. Ancient Woodlands will be incorporated into the framework of green spaces and protected by a buffer zone.
- **SDP 17 Sports facilities** - An area on the western edge of the Northern Arc (west of Jane Murray Way) will be a strategic location for the provision of sports facilities to serve the new and existing communities. This area would accommodate the Centre of Community Sports and include approximately 9ha of outdoor sports pitches, as well as supporting facilities, to complement existing and enhanced provision at the nearby Triangle Leisure Centre.
- **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 21 Climate resilient development** - Development within the Northern Arc will seek to make best possible use of passive design approaches to optimise the internal comfort of buildings. Coupled with extensive green infrastructure, these will in turn help to manage external comfort by managing air flows, temperature and shade.
- **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.
- **SDP 23 Integrated water management** - Responding to the challenge of water stress across the South East, the Northern Arc will identify opportunities to reduce potable water demand to below the 110 litres per day required by Part G of the Building Regulations.
- **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 innovated and sustainable use of natural resources.

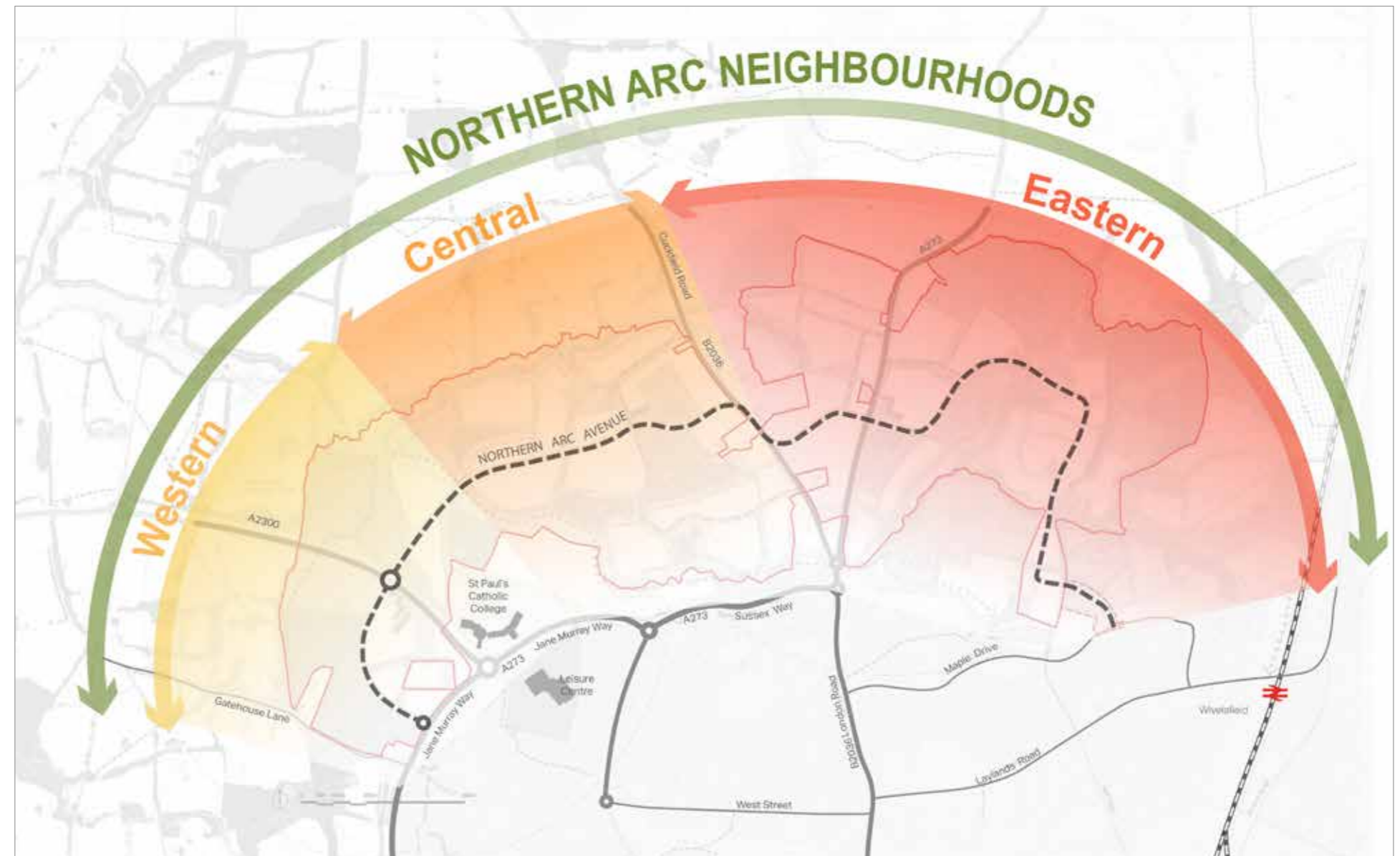
ORIENTATION PLAN

1.5 Next steps

Following approval of this Masterplan Report, together with the IDP (and Phasing Strategy), the next steps for the Northern Arc development are set out in Table 1.1 below (timescales are indicative only). Further details of the wider phasing of the development are provided within the IDP and Phasing Strategy.

Table 1.1. Indicative Table of Next Steps

| | |
|---------|--|
| Q4 2018 | Determination of the Freeks Farm Outline Planning Application (ref.) for 460 dwellings following assessment of the proposals against the Masterplan Report, IDP and Phasing Strategy. Any approval would be subject to a planning condition requiring the subsequent Reserved Matters Application (RMA) to be accompanied by a Design Guide in accordance with Section 5 of this Masterplan Report. |
| Q4 2018 | Submission of Northern Arc Sitewide Outline Planning Application (excluding Freeks Farm), to be accompanied by a Design Guide in accordance with Section 5 of this Masterplan Report. |
| Q1 2019 | Submission of a Full Planning Application for the Freeks Farm bridge and link road to Isaac's Lane. |
| Q2 2019 | Determination of the Northern Arc site wide Outline Planning Application and the Full Planning Application for the Freeks Farm bridge and link road to Isaac's Lane. |
| Q3 2019 | Submission of Freeks Farm Reserved Matters Application. |
| Q4 2019 | Determination of Freeks Farm Reserved Matters Application. |
| Q1 2020 | Construction commences on Freeks Farm (including the bridge and link road to Isaac's Lane). |







Context

02

2. Context

2.1 Introduction

The Northern Arc development area 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.

Burgess Hill is situated on the edge of the South Downs National Park and is located approximately 39 miles south of London, 10 miles north of Brighton and Hove and 29 miles east of the county town of Chichester. Other nearby towns and villages include Haywards Heath which lies 1.5 miles to the north, Hurstpierpoint, Goddards Green, Ansty and Cuckfield.

The site's strategic location in the South East of England, situated within the "Gatwick Diamond" between the major economic centres of Crawley and Brighton and Hove, makes it a scheme of sub-regional importance in an area of high residential demand. The development is critical to the delivery of the new housing in the district of Mid Sussex, and infrastructure for Burgess Hill and the surrounding area. It presents a significant opportunity for new sustainable development that will make a significant contribution to the overall vision for Burgess Hill. However, issues surrounding the delivery of the site have been complex and challenging. Early, in 2018 Homes England intervened and acquired land and options to unlock and accelerate the potential of this exceptional development opportunity.

The Northern Arc will deliver approximately 3,500 homes when fully built out with associated neighbourhood centres, schools, leisure facilities, green infrastructure and sustainable transport improvements. As well as playing an important role in delivering significant new housing in Mid Sussex, it will also provide much needed infrastructure for Burgess Hill and the surrounding area. Given the scale of anticipated development, a comprehensive approach to masterplanning and infrastructure provision is being promoted by Mid Sussex District Council (MSDC), West Sussex County Council (WSCC) and Homes England.

2.2 Purpose and status of the Masterplan Report

A Masterplan, together with the Infrastructure Delivery Plan (and Phasing Strategy) are required for approval in accordance with Policy DP9 of the Mid Sussex District Plan (March 2018). As set out in Policy DP9, each planning application relating to the Northern Arc should accord with such approved documents, unless otherwise agreed by the local planning authority.

Therefore, the purpose of this Masterplan Report is to present the site wide Masterplan for the Northern Arc, supported by a clear explanation of and rationale for the proposals. It also establishes Strategic Development Principles which will guide the development and provide an assessment framework for all planning applications relating to the Northern Arc.

This Masterplan Report should be read in conjunction with the Northern Arc Infrastructure Delivery Plan (IDP) which also includes a Phasing Strategy for the development. The IDP has been submitted in parallel with this Masterplan Report and it sets out the sequencing of development at the Northern Arc and the timing and arrangements for the delivery of the necessary supporting infrastructure.

Once approved by Mid Sussex District Council, this Masterplan Report, together with the IDP (and Phasing Strategy) will be material considerations in the determination of each planning application relating to the Northern Arc.

The Mid Sussex District Plan which (through Policy DP9) establishes the principle of the Northern Arc development, was subject to a wide range of assessments to meet statutory requirements, including Sustainability Appraisal, Strategic Environmental Appraisal, Habitats Regulations Assessment and Equalities Impact Assessment. Furthermore, planning applications relating to the Northern Arc will also need to be accompanied by the relevant assessments to meet statutory requirements e.g. Environmental Impact Assessment, Transport Assessment etc. Accordingly, no further assessment of this Masterplan Report is required.

In addition to formal consultations on Policy DP9 as part of the Local Plan process, the development of the Northern Arc Masterplan has also been subject to extensive engagement by the former Landowner Consortium. This has included a number of public consultation events between 2014 and 2017 together with ongoing liaison with elected members and technical workshops involving the developers, their consultants and the relevant local authorities.

Public consultation will be undertaken in advance of the submission of future Northern Arc planning applications to inform the development of more detailed proposals subject to those submissions. Each of these applications will be accompanied by a Statement of Community Involvement which summarises the consultation undertaken and how this has informed the development of those proposals.

It is recognised that the Masterplan will be further developed to reach a site wide Outline Planning Application (excluding Freeks Farm – see below) and that this is an iterative process to be informed by a range of technical and environmental assessments, which will result in further refinements. All planning applications relating to the Northern Arc will need to be in broad conformity with this Masterplan Report and further design evolution will need to be explained and justified within the Design and Access Statement submitted with subsequent planning applications.

It is recognised that an Outline Planning Application for Freeks Farm (ref. DM/18/0509) has already been submitted and is currently under consideration. As this forms part of the Northern Arc Masterplan area, the Masterplan Report and IDP (once approved) will be material considerations in the determination of this application. Accordingly, that application will need to be assessed against the Strategic Development Principles contained within this Masterplan Report.

2.3 Approach and methodology

The Masterplan has been prepared by AECOM on behalf of Homes England and in close collaboration with Mid Sussex District Council and West Sussex County Council. The Masterplan builds on the work undertaken over many years by the former Landowner Consortium. The Masterplan is substantially consistent with the earlier spatial framework that has been consulted upon previously but has been developed further to reflect Homes England's ability to delivery comprehensive development across the Northern Arc, and the additional technical analysis undertaken as part of the masterplanning process.

The masterplanning process has followed AECOM's "Masterplanning ie" methodology, which is an integrated and evidence-led approach. This has included a comprehensive analysis of the site and surrounding context including consideration of the following technical topics:

- Town Planning;
- Access and movement;
- Community Infrastructure;
- Economic development;
- Landscape;
- Ecology;
- Arboriculture;
- Drainage;
- Flood Risk;
- Noise, air quality and odour;
- Archaeology;
- Built heritage;
- Ground conditions; and
- Infrastructure and utilities.

This technical analysis has been complemented by an assessment of the residential and commercial property market, a review of planning policy and an assessment of infrastructure and development costs. This has enabled a Masterplan to be developed which reflects the Council's ambition for the Northern Arc and which is technically robust and deliverable.

2.4 Structure of document

This Masterplan Report contains five further sections as follows:

- Section 3 provides an overview of the planning policy context;
- Section 4 presents a summary of the key constraints and opportunities that have been identified, and which have informed the preparation of the Masterplan;
- Section 5 describes the Vision for the Northern Arc and sets out 24 Strategic Development Principles that will guide the development of the new community;
- Section 6 presents the Masterplan. This includes a description of the disposition of land uses and the key features of the Masterplan. It is supported by a more detailed explanation of the key elements including the frameworks for:
 - Access and movement
 - Landscape and green infrastructure
 - Community facilities
 - Utilities and infrastructure
- Section 7 summarises the next steps in terms of the submission of the Outline Planning Application, supporting materials and subsequent reserved matters applications, as well arrangements for monitoring and review.

The main part of the Masterplan Report is supported by an Appendix which includes further detail on technical analysis of site constraints and opportunities that has informed the development of the Masterplan.





**Planning Policy
Context**

03

3. Planning Policy Context

3.1 Introduction

Preparation of the Northern Arc Masterplan has been informed by consideration of the local planning policy context, comprising the Adopted Development Plan, and other policy considerations, as summarised below.

Mid Sussex District Council - Mid Sussex District Plan

The Mid Sussex District Plan, adopted March 2018, supports development of the Northern Arc to make a significant contribution to meeting local housing need and to help accelerate the regeneration of Burgess Hill.

DP7 'General Principles for Strategic Development at Burgess Hill' states that all strategic development at Burgess Hill must support the following general principles:

- Be designed in a way that integrates it into the existing town providing connectivity with all relevant services and facilities;
- Provide additional, high quality employment opportunities including suitably located Business Park developments accessible by public transport;
- 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 improved community, retail, cultural, educational, health, recreation, play and other facilities to create services and places that help to form strong local communities and encourage healthy lifestyles;
- 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;
- Support delivery of a multi-functional route between Burgess Hill and Haywards Heath;
- Provide a Centre for Community Sport in the vicinity of the Triangle Leisure Centre;

- Provide a range of housing including affordable housing and housing for older people;
- Identify and respond to environmental, landscape and ecological constraints and deliver opportunities to enhance local biodiversity and contribute to the delivery of green infrastructure in and around the town; and
- Wherever possible, incorporate on-site 'community energy systems' to meet energy needs and create a sustainable development, and include appropriate carbon reduction, energy efficiency and water consumption reduction measures to demonstrate high levels of sustainability.

DP9 'Strategic Allocation to the north and north-west of Burgess Hill', summarised below, makes provision for a strategic mixed use development for:

- Approximately 3,500 additional homes and associated new neighbourhood centres, including retail, education, health, employment, leisure, recreation and community uses, sufficient to meet the day to day needs of the whole of the development;
- 25 hectares of land for use as a high quality business park south of the A2300 and served by public transport;
- Two new primary schools (including co-location of nursery provision and community use facilities as appropriate) and a new secondary school campus, in each case in locations well connected with residential development and neighbourhood centres;
- A Centre for Community Sport in the vicinity of the Triangle Leisure Centre and St Paul's Catholic College;
- Provision of permanent pitches for settled Gypsies and Travellers to contribute, towards the additional total identified need within the District commensurate with the overall scale of residential development proposed by the strategic development; or the provision of an equivalent financial contribution towards off-site provision of pitches towards the additional total identified need within the District;
- A new Northern Link Road connecting through the Strategic Allocation Area from the A2300 to the A273 Isaac's Lane should be provided as a highly attractive and functional route. New junctions will be provided on the A2300, B2036 Cuckfield Road and A273 Isaac's Lane. A road link across the river corridor will be required to facilitate a public transport route to Maple Drive.
- *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.

The majority of other Local Plan policies are relevant to the Northern Arc to some degree.

Other Policy Context

Revised National Planning Policy Framework (NPPF)

The Revised NPPF published in July 2018 sets out strategic planning policies at the national level and provides guidance on local adaptation. The presumption in favour of sustainable development underscores how plans and decisions at the local level should seek opportunities to meet the development needs of their areas whilst being flexible to change.

Mid Sussex District Council - Supplementary Planning Documents (SPDs)

The Masterplan proposals have been informed by three Supplementary Planning Documents adopted in July 2018:

- Development Infrastructure and Contributions SPD
- Affordable Housing SPD
- Development Viability SPD

Burgess Hill Town Council - Burgess Hill Neighbourhood Plan

The Burgess Hill Neighbourhood Plan, made in January 2016, covers the town, with a small part of the Plan area overlapping with the south-eastern part of Northern Arc Strategic Allocation. The overall aims of the Plan are to:

- Deliver improved civic and community facilities;
- Protect and enhance existing open spaces; and,
- Improve the residential environment.

The main policies directly relevant to the Northern Arc are:

Policy LR1 'Improved Recreation Facilities and a new community/sports hall at Leylands Park' outlines a proposed public transport and cycle link between the Northern Arc strategic development and Maple Drive for the relocation of the existing Burgess Hill Town Football Club; Policy G1: Areas of Open Space; Policy G5: Local Green Space /Policy G6: Footpath and Cycle Links /Policy H1: Protecting and Enhancing Heritage Assets and Conservation Areas

Burgess Hill Town Council - Burgess Hill Town Wide Strategy (2011) identifies a 20 year plan for the strategic development of Burgess Hill and provides an overall framework for the delivery of significant community regeneration and infrastructure improvements across the town. This vision involves building Burgess Hill towards being:

- A fully sustainable 21st century town focused around a high quality, vibrant and accessible town centre

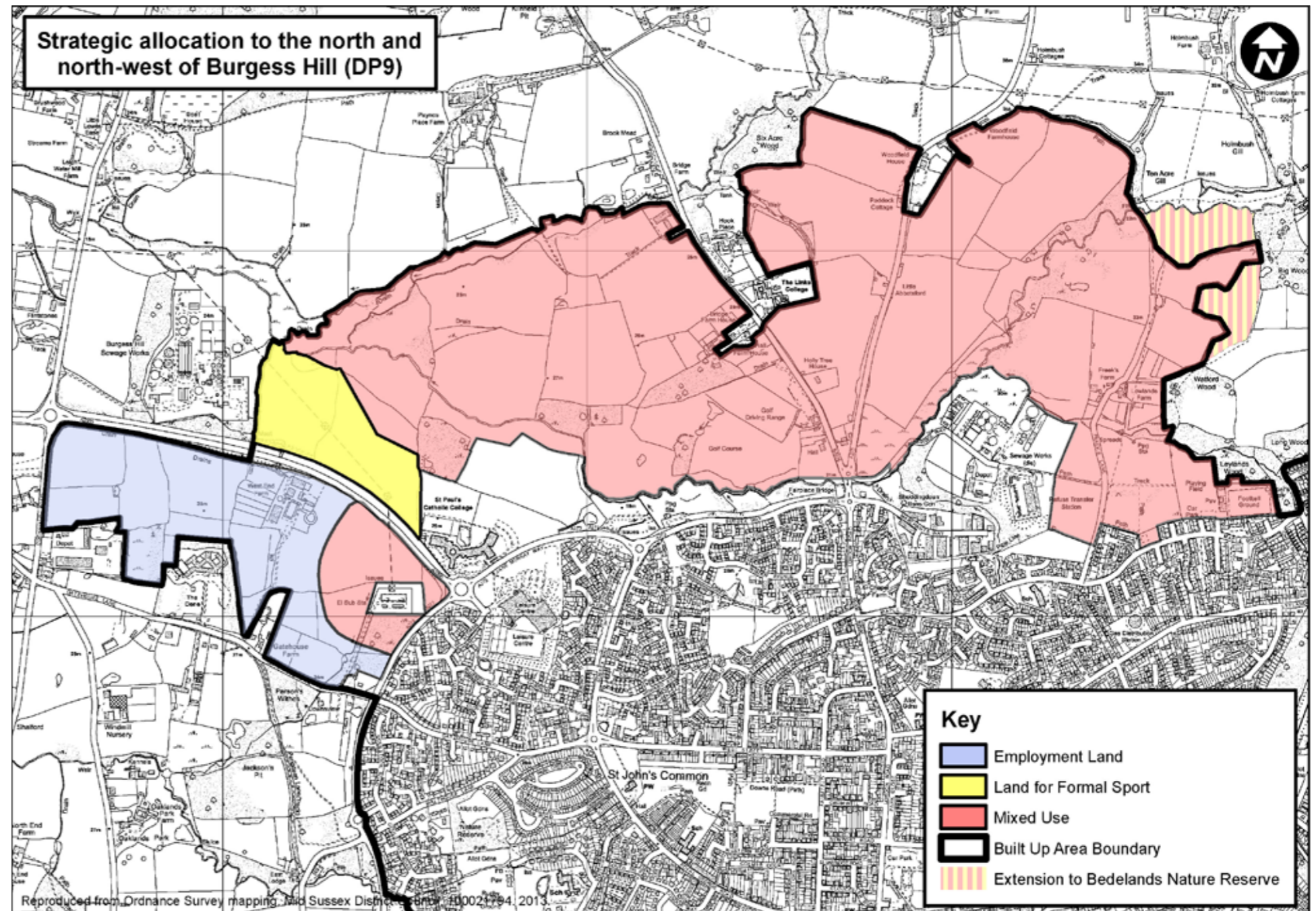
- A town that's existing and future population is supported by the necessary community facilities, employment opportunities and access to green space; and
- A town that functions efficiently and is underpinned by a state of the art transport network and modern supporting infrastructure

Ansty and Staplefield Parish Council – Ansty, Staplefield & Brook Street Neighbourhood Plan was made in February 2017. The Plan area lies to the north of the Northern Arc, but notes the potential for the development to affect the Plan area, particularly in relation to increased traffic.

Hurstpierpoint and Sayers Common Parish 2031 Neighbourhood Plan was made in March 2015. The Plan area includes the western part of the Northern Arc Masterplan area to the west of Jane Murray Way (A273). The Neighbourhood Plan includes employment and recreation land allocations, consistent with the District Plan strategic allocation (DP9). The following Neighbourhood Plan policies and aspiration relate specifically to the Northern Arc:

- POLICY Amenities HurstA3: Northern Arc Outdoor Community Sports: An area for Outdoor Community Sports shall be provided as part of the Burgess Hill 'Northern Arc' Development Plan, adjacent to the A2300.
- POLICY Employment HurstE1: Business Park: Proposals for the development of a Business Park providing high quality employment at Goddards Green as part of the Northern Arc Development Plan will be supported. Land at Goddards Green, as shown on the Proposals Map, is safeguarded for this use.
- AIM Transport Aim 5 - Goddards Green: Support will be given for a traffic management scheme to be introduced to prevent additional traffic from the Burgess Hill Northern Arc development, and the proposed Business Park at Goddards Green on the A2300, from using Cuckfield Road and Malthouse Lane.

The West Sussex Transport Plan 2011-26 (LTP3), February 2011, sets the strategy for guiding future investment in our highways and transport infrastructure. It also sets a framework for considering transport infrastructure requirements associated with future development across the county. The Plan identifies a series of transport improvements across the County, including schemes to promote travel choice in Burgess Hill, including improvements to railway stations and walking and cycling enhancements. The Plan notes the need to mitigate transport impacts arising from major development such as the Northern Arc.



Strategic allocation to the north and north-west of Burgess Hill (Policy DP9) from Mid Sussex District Plan 2014-2031, page 47





Analysis of the Site and Surrounding Area

04

4. Analysis of the Site and Surrounding Area

The Masterplan has been informed by a comprehensive analysis of the site and surrounding context. The principal constraints and opportunities are summarised in this section. The more detailed analysis of each of the key topics is set out in the Appendix - Analysis of Site Constraints and Opportunities.

4.1 Summary of site constraints

The site analysis has identified a number of important issues that have taken into account in the development of the Masterplan. These include:

Access and movement - Due to the site, for the most part, not being developed and located on the fringes of the urban area of Burgess Hill, currently there are limited facilities for pedestrians and cyclists provided within the Site boundaries. The topography and the watercourses limits the vehicular, pedestrian and cycle movement throughout the site.

Existing landscape features and woodlands - One of the main values of the site is the existing woodlands and hedgerows including ancient woodlands. While they are restricting the development capacity throughout the site they also create the skeleton of the green infrastructure and an exceptional setting for the new community.

Visibility - Parts of the site are exposed to views from the South Downs National Park with a consequently high sensitivity to the impact of new development and the cumulative visual impact of buildings and other structures. This includes Wolstonbury Hill and Ditchling Beacon in the South Downs National Park. The High Weald Area of Outstanding Natural Beauty (AONB) is approximately 2.4km to the north at its closest point. Development should sit below the skyline, designed with minimum impact on views from the Downs and surrounding landscape.

Ecology - The extensive network of habitats are generally considered to be species-rich and they are mainly located on semi-improved grasslands, hedgerows, ponds and mature trees. They are intended to "future proof" the design and create linkages across the landscape that add to the resilience of retained habitats within the Masterplan.

Arboriculture - The Site is generally rural in nature and contains large areas of mature broadleaved trees, typically as woodland or hedgerow features bordering roads and fields along with notable isolated individual mature trees. There is an Area Tree Protection Order (TPO) in force protecting trees along Isaac's Lane which runs north to south through the Site. Immediately outside of the Site boundary are a number of individual and area TPOs to the south of the Site boundary. A number of areas of designated Ancient Woodland are located within the Site. These are not subject to statutory protection but are a significant material consideration within the planning process and are afforded significant weight by the National Planning Policy Framework and standing advice from Natural England and the Forestry Commission. There are a number of veteran or potentially veteran trees within the Site. Both veteran trees and ancient woodland are considered to be irreplaceable heritage and ecological assets.

Drainage and flood risk - Environment Agency flood maps show that the majority of the site is located in Flood Zone 1. This indicates a probability of flooding from rivers or the sea in any given year of less than 1 in 1000. Along the river corridor parts of the west of the Site are categorised as Flood Zone 3. This indicates a probability of flooding in any given year greater than 1 in 100. -

Due to the low permeability of the site's underlying geology, infiltration drainage is not likely to be possible. The best opportunities for surface water management on site are likely to involve attenuation features such as ponds and wetlands, which would hold and slowly release the urban runoff. These features can be designed to complement the landscape, amenity and biodiversity aspects of the development.

Odour - In accordance with the The Mid Sussex District Plan 2014 – 2031, as the development is within 800m of a waste water treatment works, an odour assessment was undertaken in 2012 by SKM Enviros. This showed that odours from the treatment processes impose a constraint on the development of land to the east of the works for odour-sensitive uses including residential. The SKM Enviros assessment methodology was agreed between the developers, Southern Water and the Council's independent specialist advisers (Arup) and the results have been agreed as an accurate reflection of the odour constraints. An odour contour produced with additional mitigation soon to be installed is shown on the constraints plan opposite, and prevents a small area being used for sensitive uses such as housing.

Heritage - There are 12 listed buildings within 500m of the red line boundary, all Grade II Listed. Those closest to the red line boundary include Bridge Farm to the north and Firlands to the south. Listed farmhouses are located on the high ground within the northern extent of the study area. There are five non-designated heritage assets recorded in the HER within the Site boundary and a further 24 non-designated HER assets are recorded within the wider study area.

The setting of these listed and non listed heritage assets will require careful consideration.

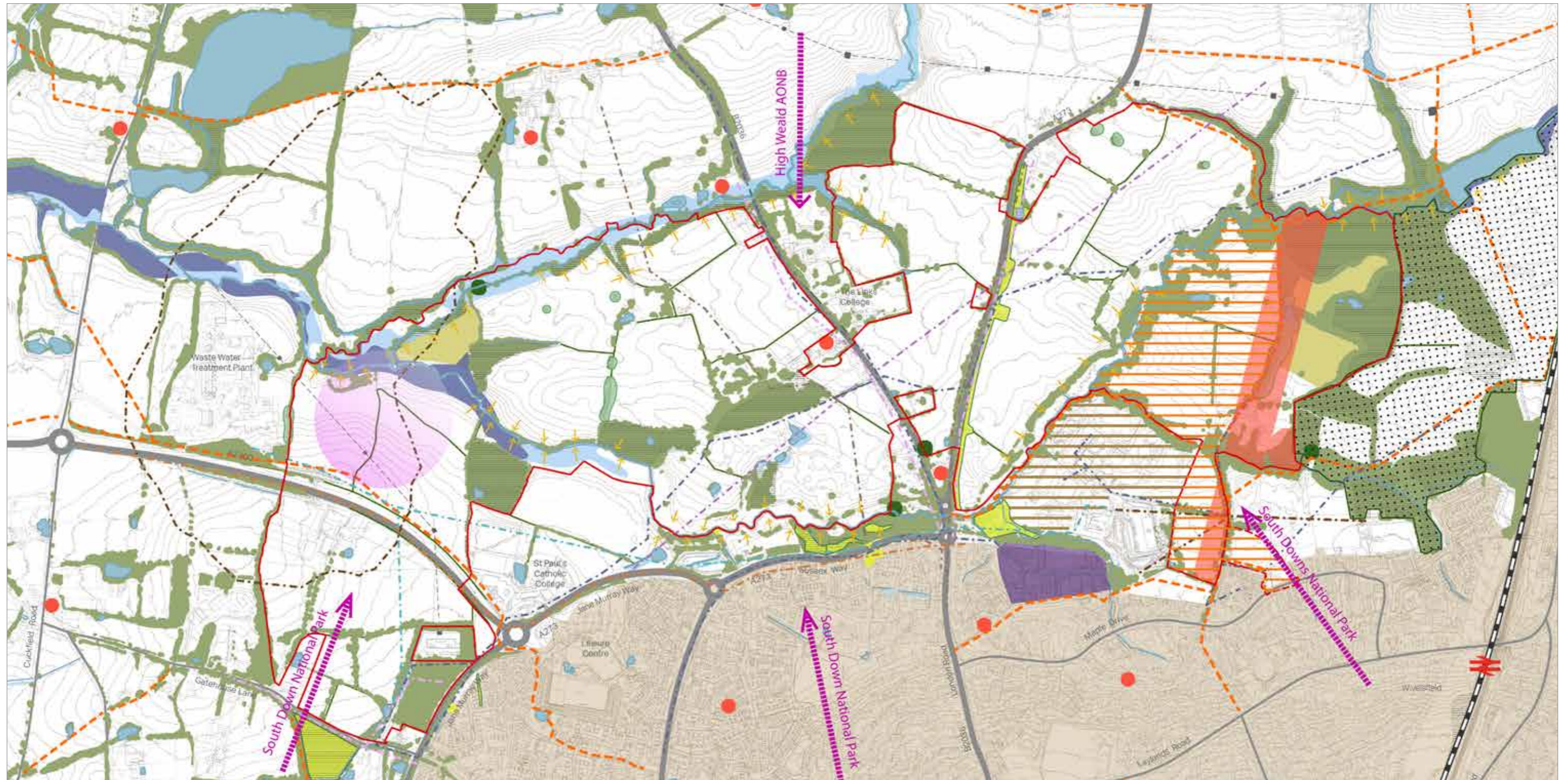
A single Archaeological Notification Area (DWS14402) crosses the eastern part of the Proposed Development area. This is part of the London to Brighton Way, a Roman road that is poorly understood in this area. In addition there is archaeological evidence of settlement and related activity from the Roman, medieval and post medieval periods in the area.

Infrastructure - There are several key infrastructure elements crossing over the site. These elements have been accommodated on the Masterplan together with their required easement zones or mitigated accordingly.

- A 132kV overhead power line enters the site from the west before turning south towards the electricity sub-station. It requires a 30m stand-off distance to either side of the cables.
- There is a Southern Gas Networks (SGN) 250mm diameter intermediate pressure (IP) steel gas main crossing the Site north to south to the west of Cuckfield Road (B2036). No development/building works will be permitted to be constructed over or within 3 metres of either side of the SGN pipeline
- There are also two SGN medium pressure mains located within the Site boundary. One of these runs down Isaac's Lane (A273). The other runs through Burgess Hill and out towards the east, immediately south of the site. Easement would need to be provided for the water main. Additional demand likely to require network upgrades

Additional demand arising from the proposed development is likely to require utility network upgrades.

CONSTRAINTS



© Crown copyright and database rights 2018 Ordnance Survey GD 100024393

| KEY | | | | | | |
|---|---------------------|----------------------|-------------------------|---------------------|---------------|-------------------------------------|
| Site boundary | Existing road | Woodland | Tree Preservation Order | Flood zone 3 | HV powerline | Rising main |
| Land for Freeks Farm site access and open space | Railway line | Ancient woodland | Likely high value trees | Flood zone 2 | Virgin media | Water main |
| Freeks Farm - outline application boundary | Public Right of Way | Unimproved grassland | Veteran trees | Archaeological area | BT | Steep topography |
| Consented development | Business park | Local nature reserve | TPO individual trees | Listed buildings | Gravity sewer | Theoretical long distance views |
| | Existing settlement | Hedgerows | Water courses | Odour contour | Gas line | Theoretical area of high visibility |

4.2 Summary of site opportunities

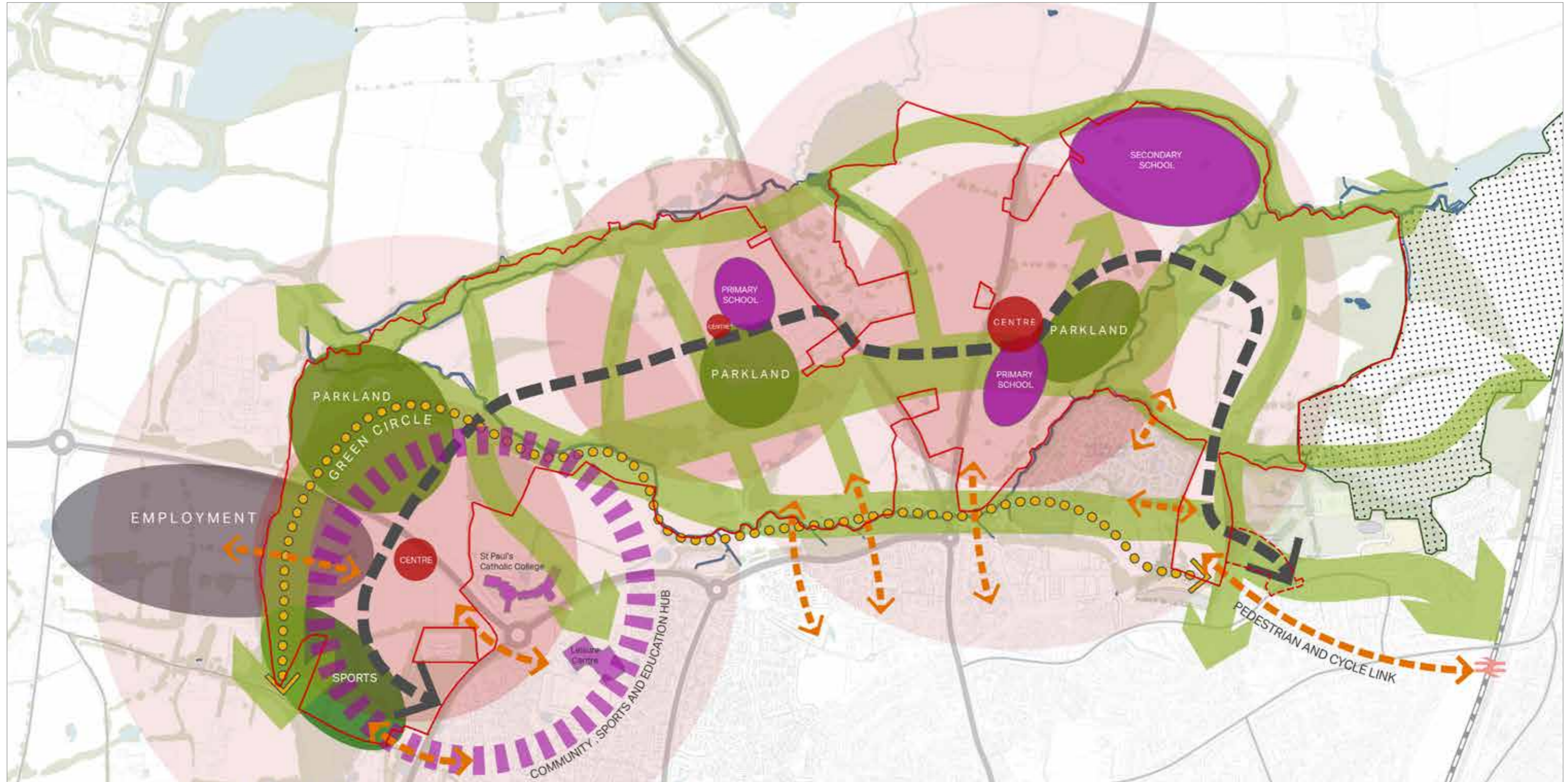
The analysis identified a number of key opportunities that have been incorporated into the Northern Arc Masterplan. These include:

- Vehicular access into the site can be achieved from a number of points on the existing highway network. A new link road, Northern Arc Avenue, can be provided to run through the site and ensure that a permeable layout is achieved, this would integrate new and existing settlements and make the best use of the surrounding network. Northern Arc Avenue can also provide a conveniently located bus route running through the site.
- A network of green corridors can be created making use of the existing trees and hedgerows, creating wildlife corridors to protect and enhance the existing biodiversity and habitats.
- Three neighbourhood centres can be located at the most prominent locations to provide walkable neighbourhoods and easy access for all residents. Centres can differ in scale and functions in order to respond to the needs of the each area.
- Community uses, schools and open spaces can be co-located in close vicinity of the neighbourhood centres in order to create strong community nodes where people can socially interact. This would include standalone community facilities in the eastern and western centres.
- A community, education and sports hub can be created at the western section of the site together with St. Paul's Catholic College, Triangle Leisure Centre and new Centre for Community Sports. These places can be connected to each other and to the town centre and Northern Arc by pedestrian and cycle links.
- An employment area can be provided within the western section of Northern Arc adjacent to the future employment site to the west of A2300. A pedestrian and cycle link can be provided to connect these employment sites with each other and with the railway stations and the rest of Burgess Hill.
- A number of pedestrian and cycle connections can be provided between the existing town and the Northern Arc to ensure that both existing and new communities are well integrated.
- The northern section of the Green Circle can be enhanced to create an opportunity to the new and existing residents to enjoy the natural green spaces of Burgess Hill.



The Masterplan builds on a comprehensive technical analysis of the site and surrounding area. The principal constraints and opportunities are summarised in this section and set out in the appendix to the report.

OPPORTUNITIES



© Crown copyright and database rights 2018 Ordnance Survey GD 100024393

| KEY | | | |
|-----|---|--|-----------------------------|
| | Site boundaries | | Pedestrian and cycle routes |
| | Land for Freeks Farm site access and open space | | Green Circle |
| | Existing road | | Neighbourhood centres |
| | Railway line | | Education |
| | Northern Arc Avenue | | Parklands |
| | Green corridor | | Employment |
| | 400m - 5 minutes walk-band | | Local nature reserve |
| | 800m - 10 minutes walk-band | | |
| | Centre for Community Sports | | |





Vision and Strategic Development Principles

05

5. Vision and Strategic Development Principles

5.1 The Vision for the Northern Arc

The Northern Arc will make a significant contribution to delivering Mid Sussex District Council's vision for the wider District as "thriving and attractive... a desirable place to live, work and visit." Based on the existing analysis of the site and its surrounding area, and the current planning policy context, 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 facilities within a series of sustainable neighbourhoods linked by a new Northern Arc Avenue, green cycle ways and footpaths and successfully integrated into Burgess Hill and the wider improvements to the town.

People will want to live in the Northern Arc with its range of Built for Life neighbourhoods and homes, schools, employment and recreation opportunities provided within convenient walking or cycling distance, and with good access to national, regional and local destinations by a choice of travel modes.

People will want to work and invest in the Northern Arc and the wider Burgess Hill area with its range of employment opportunities including the neighbouring proposed Science and Technology Park. A variety of jobs will be provided within the local employment area in the western part of the development, with direct access to the A2300 and connections to the wider Hub employment area further west, as well as jobs within the three neighbourhood centres, schools, health and leisure facilities. The development will also incorporate the Burgess Hill gigabit capable full fibre project to facilitate flexible and home working.

People will want to visit the Northern Arc's many natural and recreational assets with its rich variety of attractive open spaces, existing woodlands and river valleys, all connected via the Northern Arc Avenue and accessible on foot or cycle via the enhancement of the Green Circle and a new Green Super Highway, linking the western part of the development to Bedelands Nature Reserve and Wivelsfield station in the east."

This vision for the Northern Arc is underpinned by four priority themes which are also the main objectives of the District-wide vision, and which aim to promote the development of sustainable communities. These are:

- **Protecting and enhancing the environment** – the Northern Arc will incorporate and protect the existing woodland, open space and river valleys into a connected green infrastructure network. The Masterplan will seek to maintain and create natural habitats and biodiversity corridors with the aims of: achieving an overall net gain in biodiversity across the site; supporting climate change objectives; and enhancing place-making objectives. The development will also conserve heritage assets, including the settings of neighbouring listed buildings.
- **Promoting economic vitality** – economic growth of the wider Burgess Hill area will be enhanced by the development of the Northern Arc which will provide local employment opportunities with direct access to the strategic road network and links to the Hub and jobs within the neighbourhood centres, schools, health and leisure facilities.
- **Ensuring cohesive and safe communities** – the Northern Arc will provide and promote physical, environmental and social links to the existing Burgess Hill communities with new walking and cycling routes which will be attractive, safe and convenient alternative modes of transport to the private car. Streets and public spaces will be well overlooked by new development, accessible for all and safe routes to schools will be provided. A mix of housing sizes and types, including market, affordable and Extra Care housing will be provided to meet the needs of a wide range of residents. Neighbourhood centres, including two standalone community facilities and new sports and recreation facilities will encourage social interaction between residents.
- **Supporting healthy lifestyles** – a range of sports, recreational facilities, parks and open spaces will be provided within the Northern Arc for residents to use and enjoy including a Centre of Community Sport and enhanced facilities at the Triangle Leisure Centre. New green links for walking and cycling will be provided via enhancements to the Green Circle and a new Green Super Highway for cycling. The incorporation of the existing woodlands, river valleys and open spaces within the development will enable residents to have close contact with nature. Tree-lined streets and public spaces will also promote a sense of well-being, as well as providing shading and cooling in the summer months and contributing to the development's climate change resilience capabilities. Radial links will be provided to connect the Northern Arc to Burgess Hill including providing access to the Town Centre and Wivelsfield railway station.

5.2 Description of Development

The Northern Arc is a strategic mixed use allocation and the development will 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 A2300 and the A273;
- 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; and
- A public transport corridor.

5.3 Strategic Development Principles

The overarching vision is translated into spatial and development proposals through 23 Strategic Development Principles (SDP). These principles set out the overall approach to development of the Northern Arc. They specify the location, function and where appropriate the size of key elements of the proposals and describe the approach that will be taken to addressing the identified site constraints and opportunities and to securing an exemplary standard of design and place-making at the Northern Arc.

The SDP are divided into five key topic areas as follows:

- Access and movement;
- Built form;
- Community and employment;
- Landscape and infrastructure; and
- Sustainability.

The SDP have been informed by close collaborative working with MSDC, WSCC and other stakeholders, including a series of Masterplan workshops and meetings. The principles will be developed and refined further as part of the preparation of the Outline Planning Application, including further stakeholder and community engagement.

The SDP are intended to be read alongside the Infrastructure Delivery Plan and Phasing Strategy, which set out in more detail the sequencing of development and infrastructure provision.

Access and Movement

SDP 1 - Access and Strategic Movement

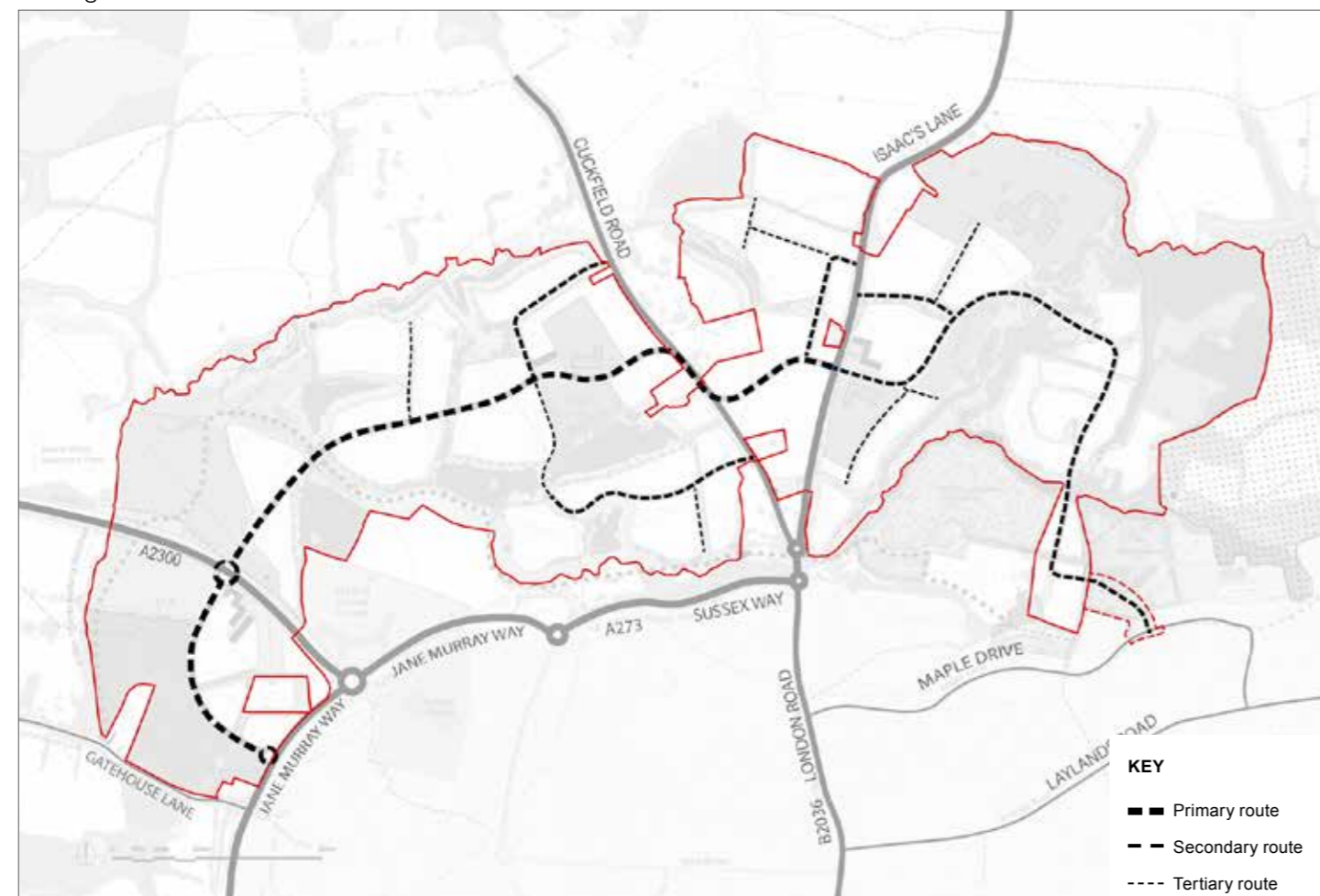
The new community at the Northern Arc will have a permeable layout that integrates and makes best use of the surrounding highway network, with access achieved from a number of points on it, and which maximises sustainable patterns of movement.

The principal points of access will be via a new roundabout on the A2300 and A273 Jane Murray Way in the east with further connections provided on the B2036 Cuckfield Road and A273 Isaac's Lane. The Northern Arc Avenue (SDP2) will provide a new through connection between the A273 Jane Murray Way and A2300 in the west and the A273 and Maple Drive in the east.

The design of the highway network and junctions will direct traffic southwards to the A2300 via the A273 and the Northern Arc Avenue and will seek to minimise traffic movement through the villages to the north of the site.

The bridge connection to the Freeks Farm site will enable public transport access through to Maple Drive from which connections towards Wivelsfield Station and the town centre will be possible. A series of secondary and tertiary streets will take access from Northern Arc Avenue to provide access into the development zones to the north and south.

Priority junctions and traffic signals will be favoured over roundabouts to support permeability for pedestrians and cyclists. The overall movement network will therefore form a consistent, logical hierarchy uniting all parts of the Northern Arc, implemented through the development of a high-quality and distinctive public realm throughout.



© Crown copyright and database rights 2018 Ordnance Survey GD 100024393

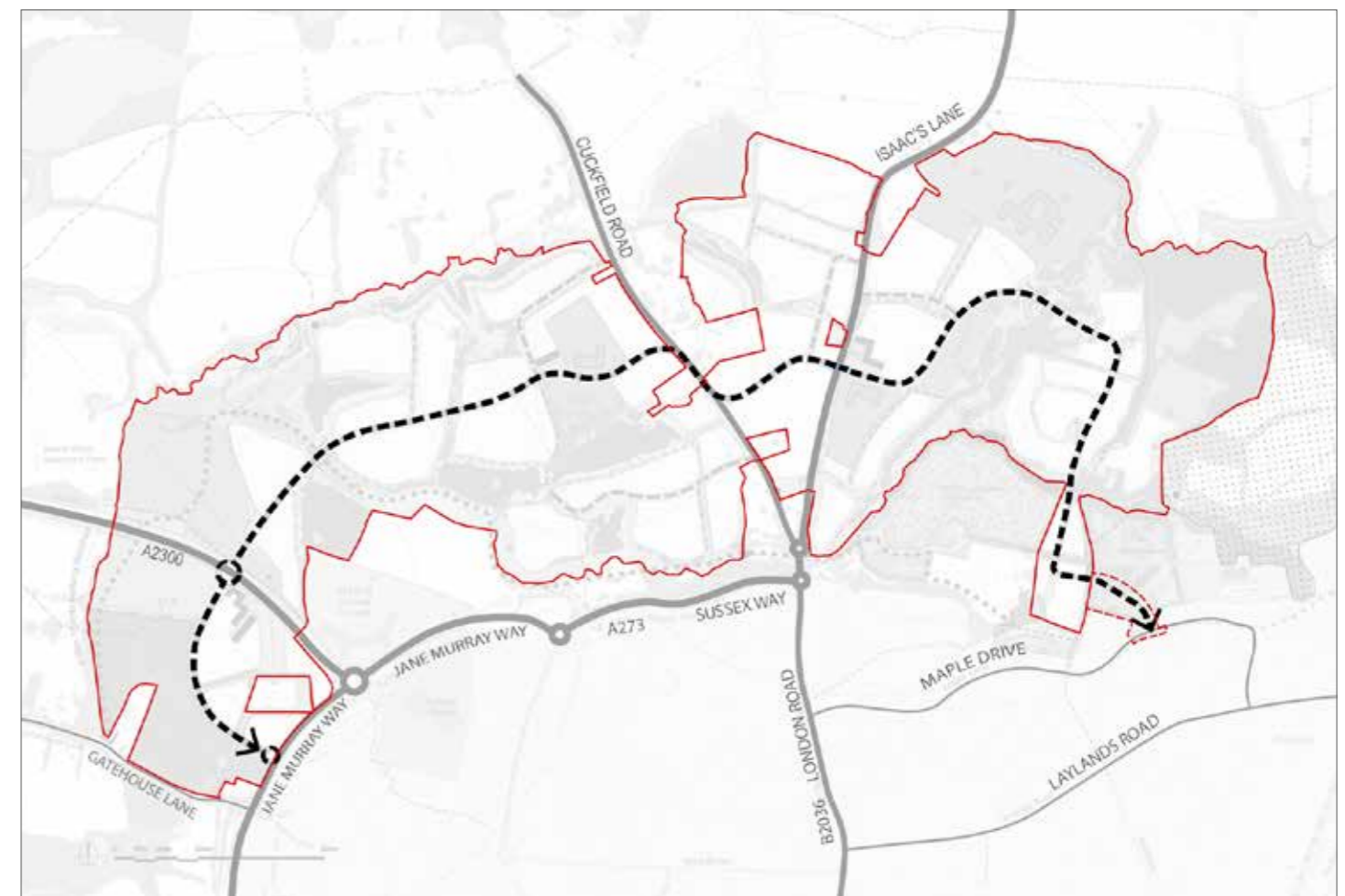
Access and Movement

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.

The existing A273 will continue to play an important role as part of the strategic road network, helping to ensure traffic volumes along Northern Arc Avenue are kept to a level that are commensurate with residential frontages.

The design and character of Northern Arc Avenue will be developed to ensure that it strikes the optimum balance between its place-making role at the heart of the community, uniting the various character areas across the Northern Arc, and its role as a supporting through route. The emerging approach to the design of different sections of the Avenue is set out in the Transport and Movement Framework (Section 6.2) and will continue to evolve as part of the preparation of the Planning Application and in close collaboration with WSCC and MSDC.



© Crown copyright and database rights 2018 Ordnance Survey GD 100024393

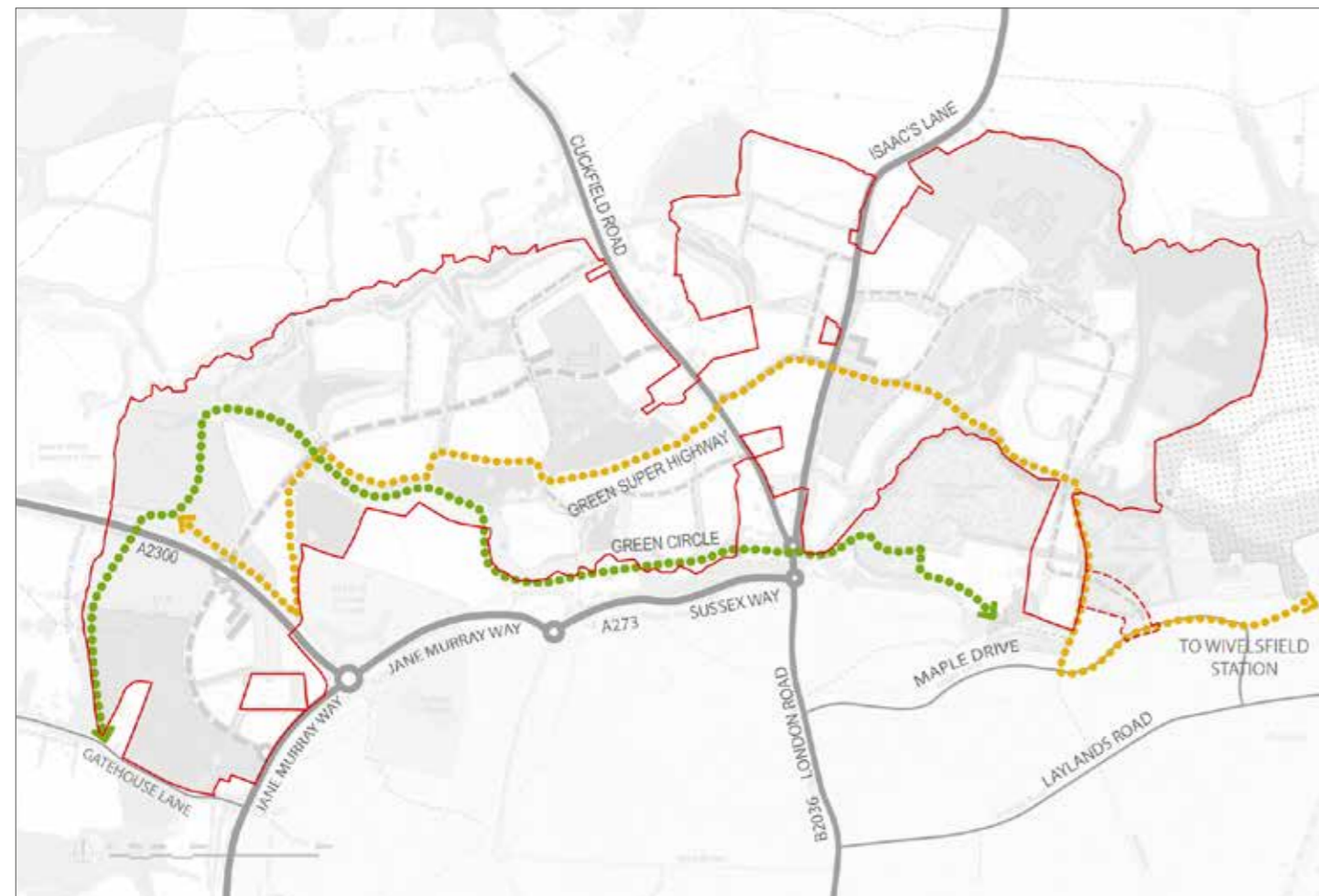
Access and Movement

SDP 3 - Strategic Green Connections

The Northern Arc provides two strategic pedestrian and cycle links: enhancing the existing Green Circle; and a new Green Super Highway through the Northern Arc.

This network brings a significant opportunity to the Northern Arc development by introducing a safer, car free route between destinations and linking with the rest of the Green Circle and other Public Rights of Way. The section of Green Circle within the Northern Arc will promote: a healthy, active lifestyle; reduce reliance on cars for short journeys; and connect residents with community facilities, sports, nature and public transport.

In addition to enhancing the Green Circle, the development of the Northern Arc will include the creation of a new dedicated walking and cycling Green Super Highway. This will run alongside existing tree and vegetation to provide a continuous corridor east to west through the centre of the community. The route will form a connection to Wivelsfield railway station to the south-east and link homes, community facilities, sports, recreation, schools and new employment in the west.



© Crown copyright and database rights 2018 Ordnance Survey GD 100024393

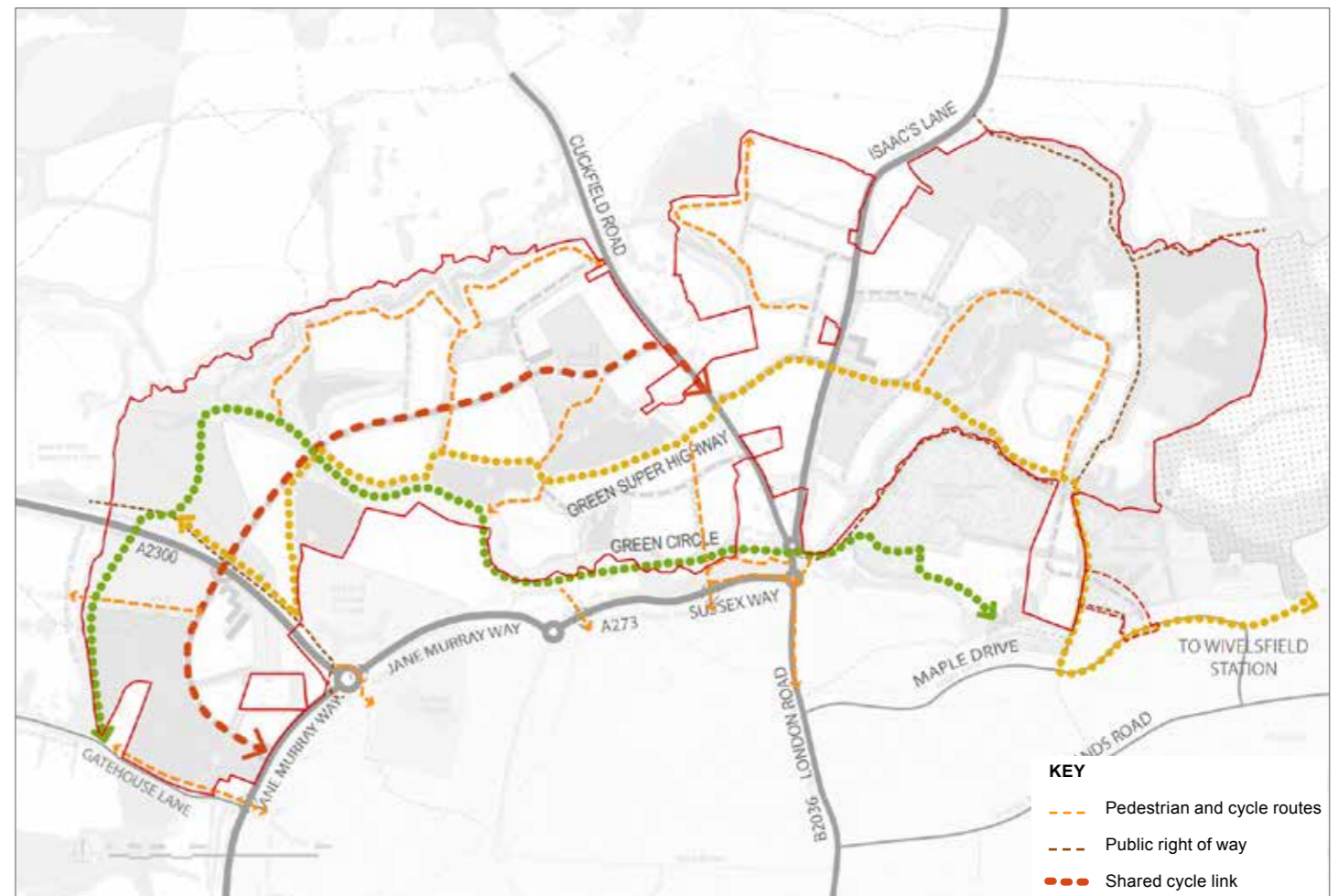
Access and Movement

SDP4 - 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.

The secondary pedestrian and cycle routes will connect neighbourhoods, local centres, schools and employment areas. They will also integrate the new community with existing residents of Burgess Hill by providing substantial north-south connections, including links to the town centre and Burgess Hill and Wivelsfield railway stations.

It is recognised that at present, the north-south radial pedestrian and cycle links to the town centre present a challenge west of the B2036 because of both landownership and topographical constraints north of the A273, and due to the impermeable and illegible street network south of the A273. As such, a more detailed assessment will identify opportunities to implement safe, well-overlooked and legible links in this location.



© Crown copyright and database rights 2018 Ordnance Survey GD 100024393

Built Form

SDP 5 - Centres and Walkable Neighbourhoods

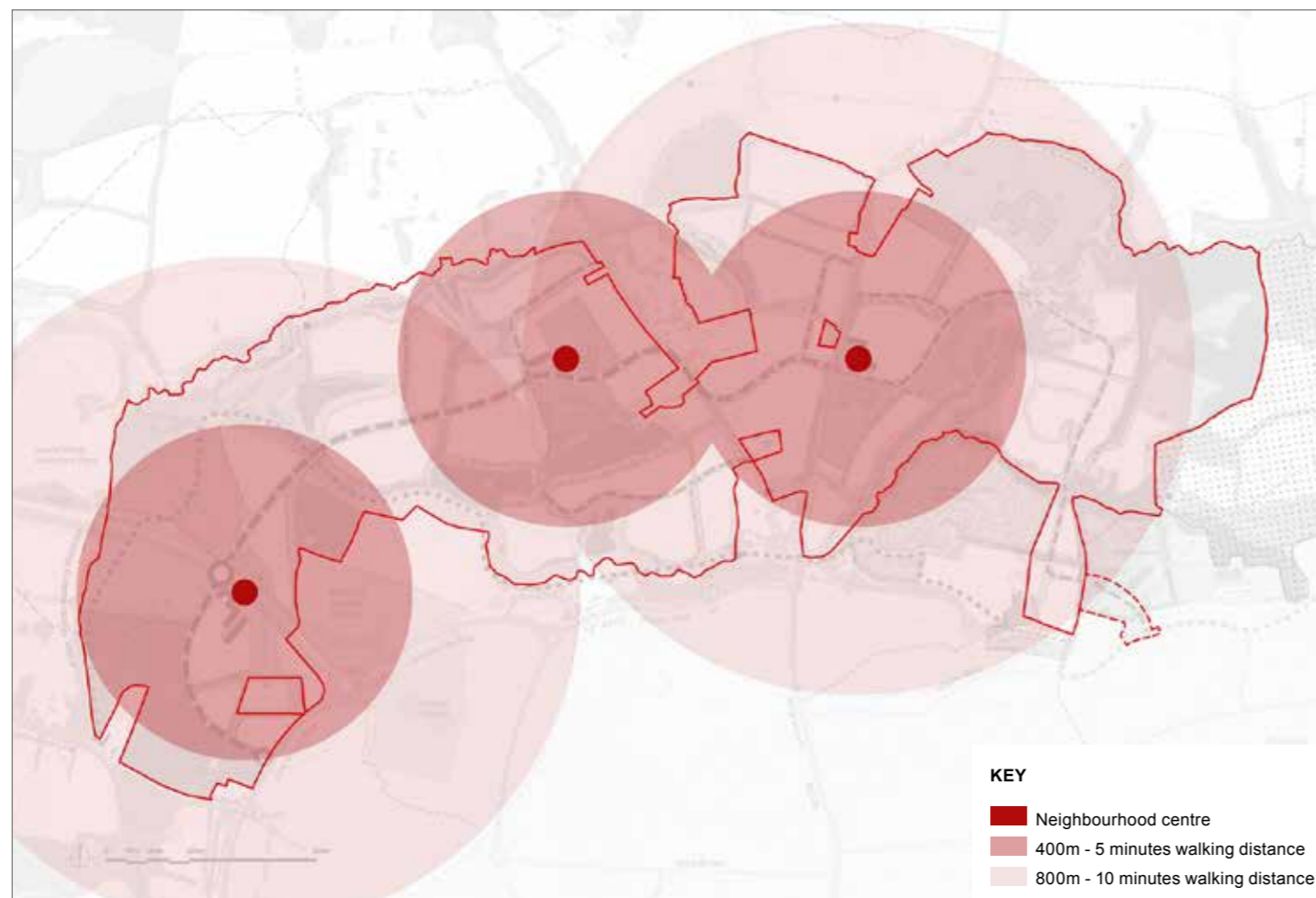
The Masterplan proposes that the Northern Arc will have three neighbourhood centres, connected to each other by the Northern Arc Avenue. These centres will be conveniently located so people can walk to local facilities and services within 5 to 10 minutes of their home, as well as being accessible by cycle, public transport and car.

Each centre will differ in terms of size and range of facilities, responding as appropriate to surrounding land uses and maximising connections with them. The design principles relating to each centre will be developed further as part of the Northern Arc Design Guide.

The eastern centre has the potential to be the largest within the Northern Arc. Located at the junction of Isaac's Lane and Northern Arc Avenue, it will mainly serve the eastern part of the community and will include a standalone community facility. The centre also benefits from being co-located with the new primary school and neighbourhood park and within a short walk of the new secondary school to the north.

The central neighbourhood centre is envisaged to be smaller, providing primarily local facilities to the adjacent community but also drawing on passing trade along the Avenue. It will be co-located with the new primary school and neighbourhood park and could also include smaller scale employment uses.

The western centre has the potential to be of at least medium scale and would include a standalone community facility. It will serve the residential neighbourhoods within this part of the community, as well as adjacent employment areas and existing development.



© Crown copyright and database rights 2018 Ordnance Survey GD 100024393

Built Form

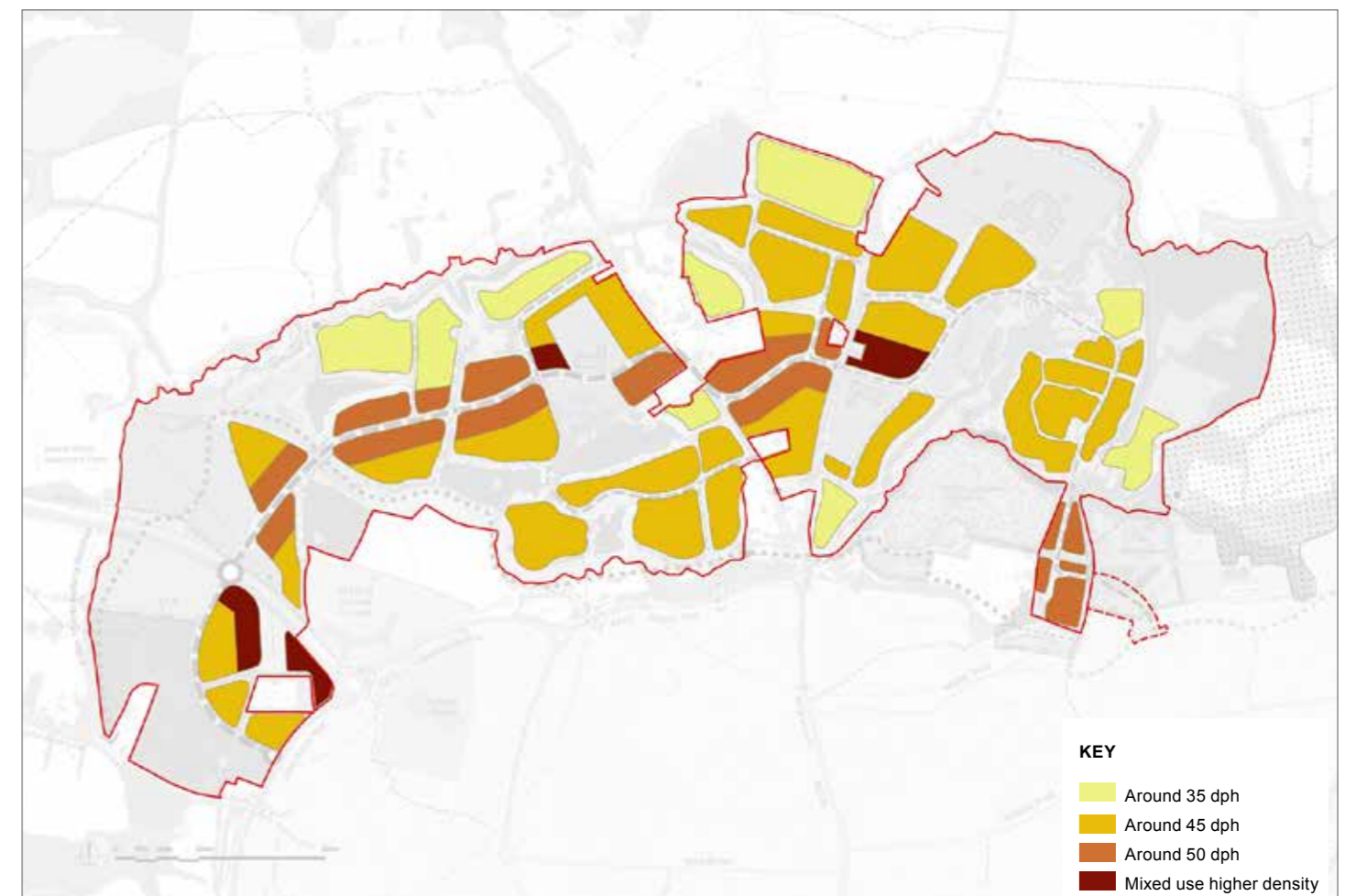
SDP 6 - Housing Mix, Density and Capacity

The Northern Arc will provide a full range of housing opportunities, with different densities and typologies across the new community creating distinctive and legible character areas that maximise the potential for sustainable design and non-car based travel.

A range of housing densities will be achieved, with the higher density areas focused around the three neighbourhood centres and along the western and central sections of Northern Arc Avenue. The residential neighbourhoods in these areas will be at a density of around 50 dwellings per hectare (dph). Medium densities of around 45 dph will predominate across much of the rest of Northern Arc in order to optimise the delivery of new homes, with lower density areas of around 35 dph in more sensitive edge locations.

In addition to these predominantly residential neighbourhoods, mixed-use areas focussed around the neighbourhood centres will provide the opportunity for higher density development.

The mix of housing types and density will support the timely delivery and phasing of approximately 3,500 homes within the Northern Arc.



© Crown copyright and database rights 2018 Ordnance Survey GD 100024393

Built Form

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.

The over-arching place-making objectives for the Northern Arc will include the following:

- Creating walkable neighbourhoods with vibrant centres that are accessible to all;
- Co-locating schools, community centres and open spaces with the neighbourhood centres to support vitality and community identity;
- Designing streets as places that encourage social interaction as well as walking, cycling and public transport;
- Ensuring that streets, public realm and open spaces are well overlooked and designed to feel safe and secure;
- Creating a place that is easy to find your way around with a clear hierarchy of streets and spaces, landmark features and views;
- Setting development within an interconnected, easily accessible network of attractive streets, green infrastructure, green corridors and open spaces to act as wildlife corridors and sustainable transport links;
- Incorporating trees, gardens and green spaces throughout the development to provide shade and cooling during extreme heat events and to increase its ability to adapt to climate change;
- Supporting health and well-being through opportunities for active lifestyles and living in close contact with nature;
- Providing a variety of different character areas which reflect variations in landscape and topography, as well as the role and function of different parts of the community;
- Integrating business and employment uses to diversify day time activities;
- Accommodating car parking and servicing in ways that are convenient and safe but also unobtrusive.

These over-arching principles will be further developed and articulated in the Northern Arc Design Guide (SDP 8).

Built Form

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.

The Design Guide will also identify the different character areas within the Northern Arc, and set out the key principles guiding more detailed design within each area to achieve variety in landscape and townscape character across the development. The Masterplan elements to be addressed in the Design Guide will include:

- The Northern Arc Avenue including sub-sections identified in Section 6.2;
- Secondary and tertiary street network design principles;
- High-level traffic junction design principles;
- Design of neighbourhood centres;
- Integration of cycleways;
- Access to primary and secondary schools;
- Landscape strategy;
- Building heights; and
- Parking strategy, including design of car parking courts, communal parking, on-street and private provision.

The design principles relating to the Avenue and the wider street network will include cross sections showing how the place-making function will be integrated with movement, parking, servicing and other requirements.

Subsequent Reserved Matters Applications will be supported by a more detailed Design Principles statement setting out how the Arc-wide and character area Design Guide has been applied.

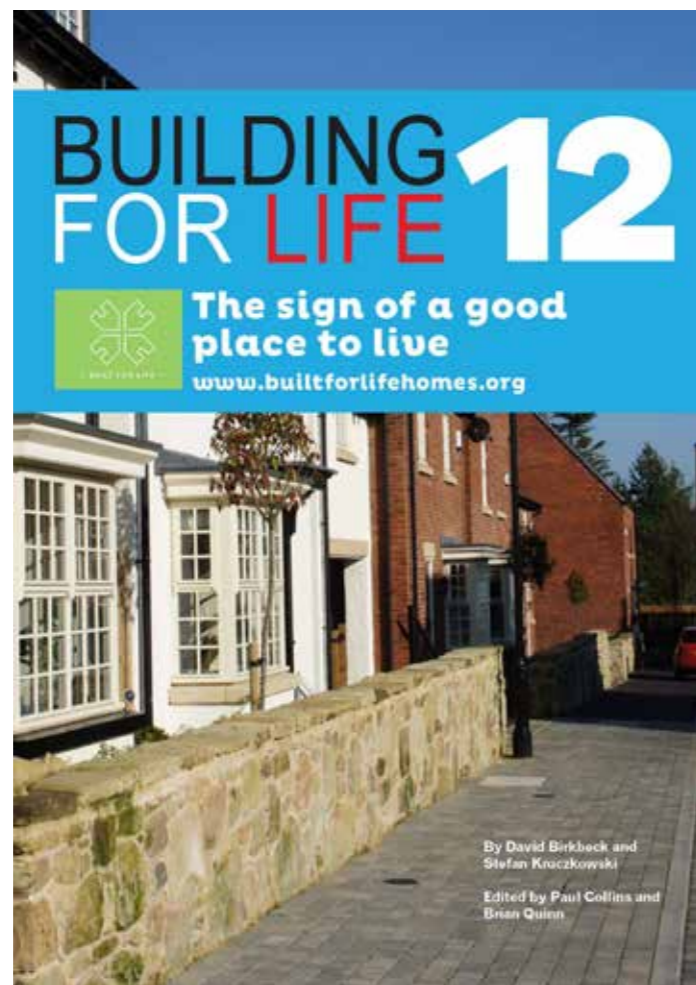
Built Form

SDP 9 - Built for Life

Design proposals for the Northern Arc will be assessed against the place-making objectives set out in Design Guide (SDP 8) and Building for Life 12.

The development of the Northern Arc will apply Building for Life 12 with the aim of achieving an Outstanding rating under the Built for Life accreditation scheme.

Designs for individual phases of development will be assessed against Building for Life 12 as part of the design process and before submission for planning permission. Completed phases of development will be submitted for accreditation as part of the Building for Life scheme.



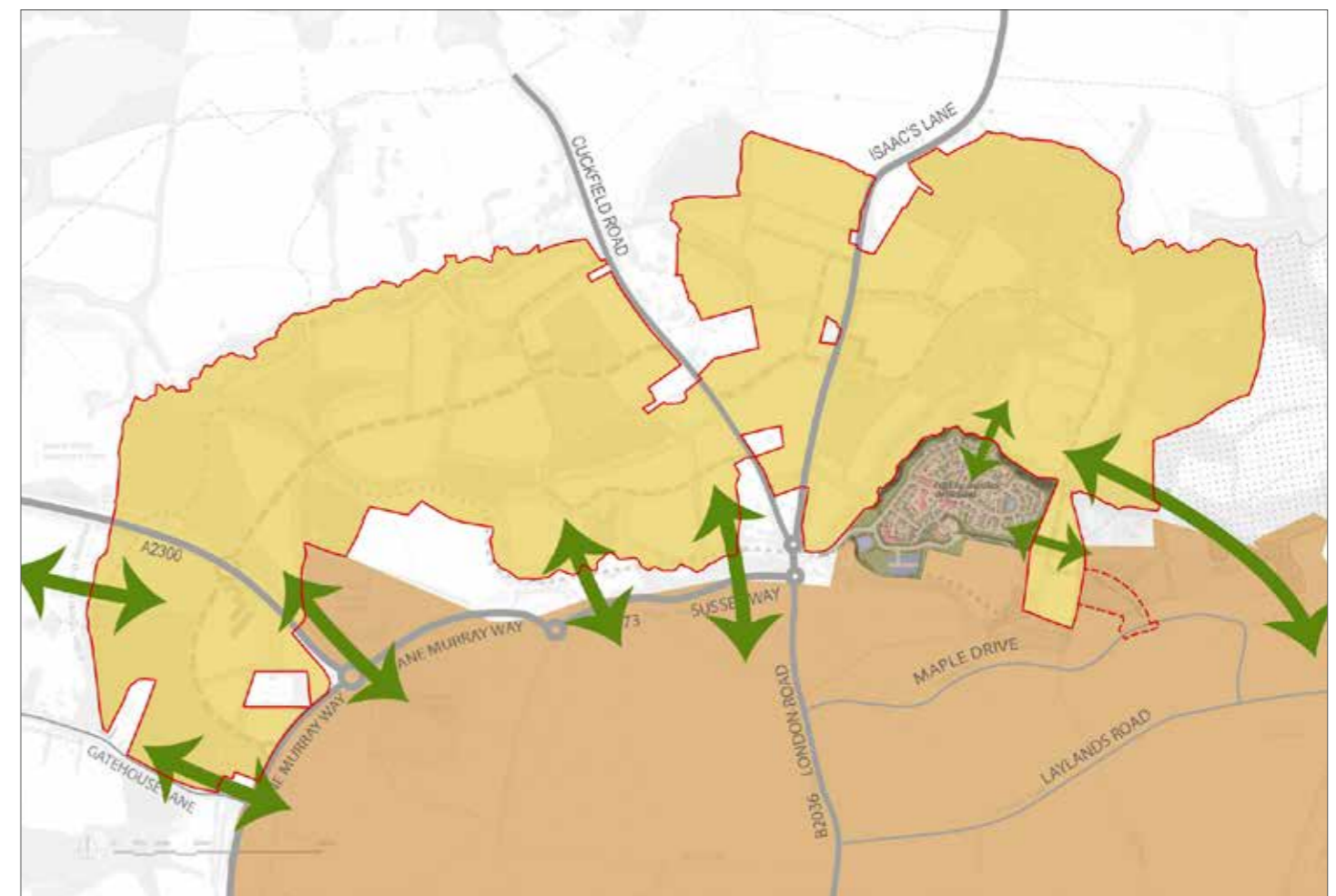
Community and Employment

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.

Existing pedestrian and cycle connections will be enhanced and new connections created across Jane Murray Way and Sussex Way at a logical points in the development phasing, so as to integrate the Northern Arc with the existing communities to the south. The enhancement of the Green Circle and the new 'Green Super Highway' through the Northern Arc will create strong east – west pedestrian and cycle connections linking the employment and sports area in the west to Wivelsfield Station in the east.

The supporting public transport strategy will ensure that new and existing facilities are well connected to existing and new residential neighbourhoods, Burgess Hill town centre, and employment areas.



Community and Employment

SDP 11 - Education

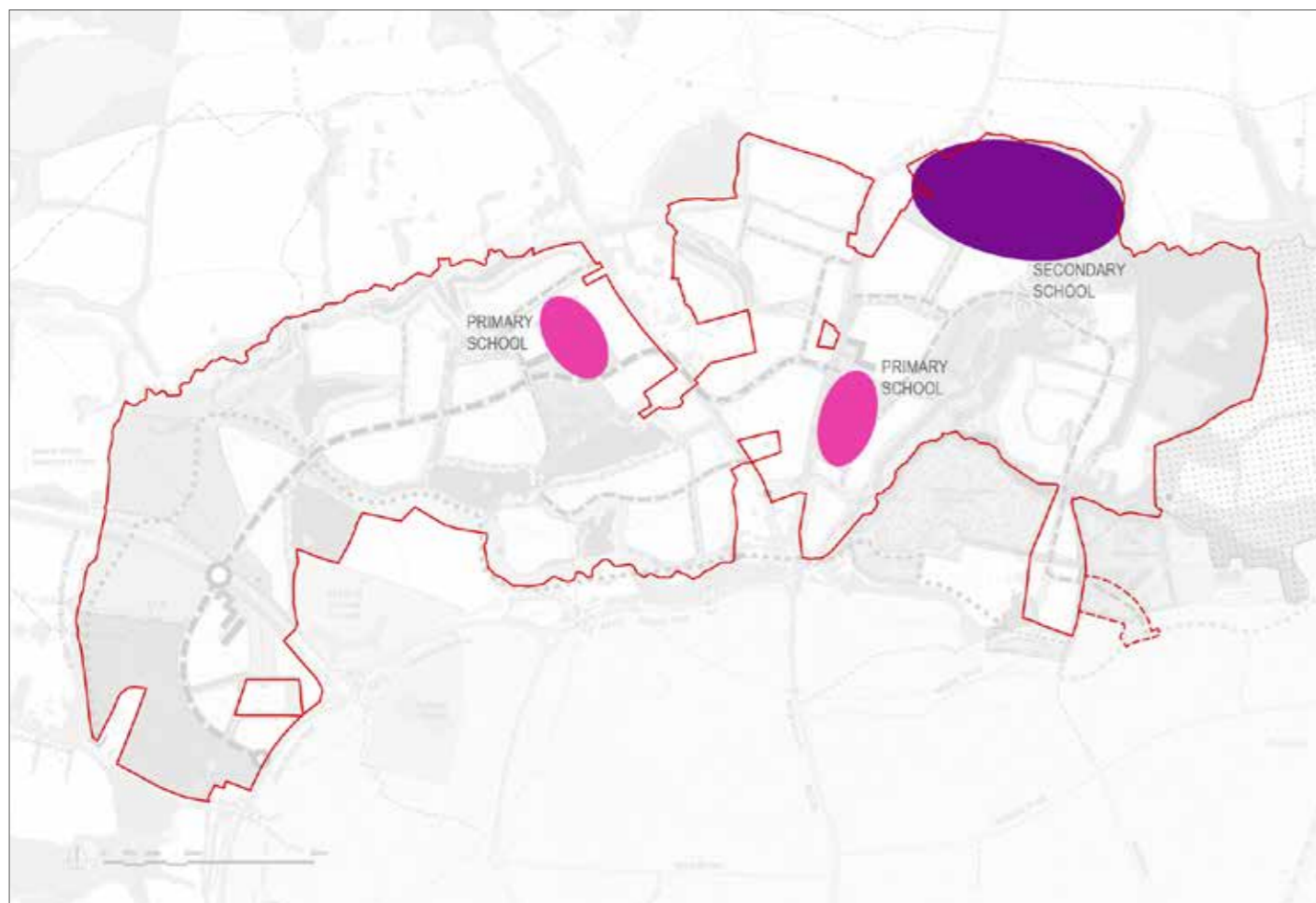
The Northern Arc will include a new Secondary School and two Primary Schools. These new schools will be a significant focus for community life, playing a key role in fostering a new community through the development and education of younger people from the Northern Arc and the wider area.

The schools will be located in accessible and prominent locations, reflecting their civic role, and contribute to the vitality and character of the Central and Eastern Neighbourhood Centres. They will incorporate, as required based on need, both early years and special educational needs provision.

The Secondary School will be located on an extensive site of 9.7 ha to the north of the Eastern Neighbourhood Centre. It will include on-site sports pitches and facilities and the aspiration is that these should be made available for community use outside of school hours.

Two Primary School sites, each of 2.14 ha, are identified at the Eastern Neighbourhood Centre and the Central Neighbourhood Centre.

Proposals for each of these sites, including a logical approach to delivery and phasing with respect to housing completions, will be developed in more detail as part of the preparation of the Outline Planning Application and this will include close engagement with the County Council and other relevant stakeholders.



© Crown copyright and database rights 2018 Ordnance Survey GD 100024393

Community and Employment

SDP 12 - Mixed and Balanced Community

The Northern Arc will provide a range of housing types to meet current and anticipated future local housing need, including extra care and elderly persons' housing. The development will provide 30% of all new homes as affordable homes, of which 75% will be social or affordable rented and 25% will be intermediate and the affordable housing dwellings built will meet the requirements of the Council's Affordable Housing SPD.

Homes England is committed to the delivery of affordable homes alongside market homes. During the whole development period at least 30% of the total site-wide number of homes consented through reserved matters applications will be affordable homes. 30% affordable housing will be expected to be delivered at each and every phase, but this can be applied flexibly depending on specific circumstances, supported by financial appraisal and other supporting information.

A wide choice of home sizes will be provided, ranging from one and two bedroom apartments to two, three, four and five bedroom houses. These will be provided in a range of different housing typologies including flats, terraced homes, town houses, semi-detached and detached properties. The extra care housing will be provided close to one of the neighbourhood centres, for elderly persons with specific housing needs.

Approximately 4% of the affordable homes will be built to full wheelchair accessible standards. The development will enable the delivery of self /custom build or for a community led schemes on land to the north of Faulkners Way in addition to the 30% affordable housing requirement.

This mix of housing, which will include private rented housing, rent to buy and custom build homes will support a well-balanced and mixed community. The mix of housing types will enable residents to up or down-size locally as their housing needs change, making the Northern Arc a 'life-time community'. The development will make a contribution to off-site provision of permanent pitches for settled Gypsies and Travellers.



A range of housing types will be provided in Northern Arc to meet current and anticipated future local housing need.

Community and Employment

SDP 13 - Integrating Employment Opportunities

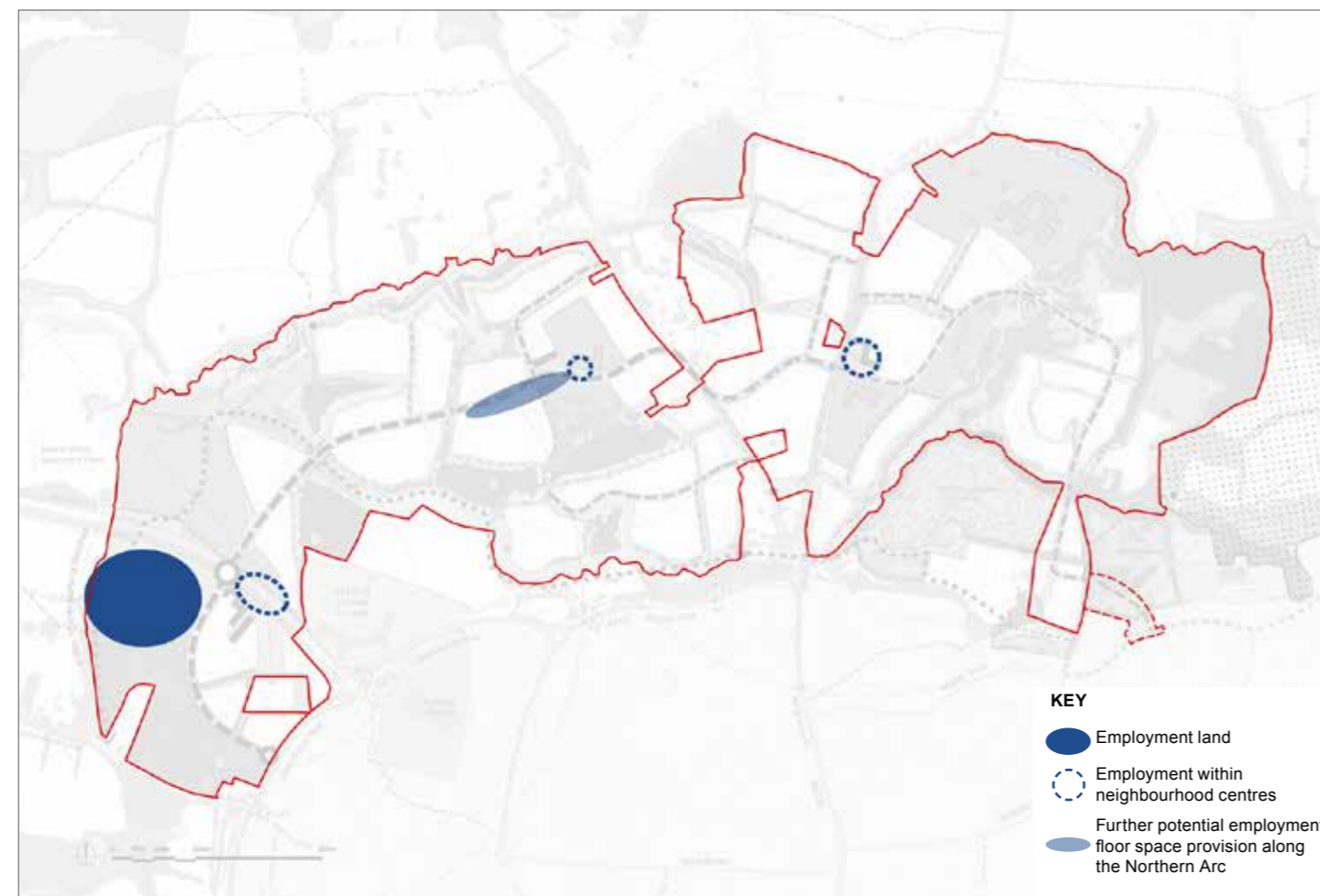
The Northern Arc will include 4 ha of employment land to the south of the A2300, which would be suitable for a range of B-Class uses (offices, research and development, and/or industry).

This part of the Arc offers a location with direct access to the strategic road network to support efficient and cost-effective journey times, a critical factor for attractiveness to modern and higher value business.

The Northern Arc will be designed to maximise opportunities associated with the directly adjacent 'Hub' employment site to the west. Business linkages will be encouraged, building on the Hub's proximity to the new development, thus encouraging integration between new and existing residents. The link road provides for a sufficient buffer between employment and residential uses, and could allow for industrial uses to come forward if required, with minimal impact to nearby residents.

The close proximity to the western neighbourhood centre and the sports facilities will assist in ensuring the employment site is attractive for investment, but will also ensure sufficient amenities for employees. Future employees can also help increase footfall to retail or services within neighbourhood centres.

Whilst the majority of employment will be provided south of the A2300, the wider Masterplan will also accommodate employment floorspace within the neighbourhood centres, which could comprise, for example, small scale office accommodation suitable for start-up and grow-on business.



© Crown copyright and database rights 2018 Ordnance Survey GD 100024393

Landscape and 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.

As well as creating character within the new community, the existing green infrastructure will help to integrate the development into the wider landscape and maintain important habitats.

The existing woodland, open space and river valleys will form a connected green infrastructure network. This will maintain existing and create new habitats and biodiversity corridors, provide attractive new open spaces, opportunities to walk and cycle and to enjoy close contact with the natural environment.

The Masterplan will preserve landscape features and wherever possible respect the landscape setting of nearby listed buildings and non-designated heritage assets. It will also deliver a net gain in biodiversity. This will be achieved by delivering ecological enhancements within the green infrastructure areas, such as ecologically valuable SuDS systems, private and shared garden and amenity space, and passive measures elsewhere such as green and brown roofs and the creation of new habitats through measures to support wildlife such as, for example, bat boxes. The development provides an opportunity to increase the diversity and resilience of tree cover, particularly in relation to climate change, pests and disease, as well as delivering a range of amenity benefits.



© Crown copyright and database rights 2018 Ordnance Survey GD 100024393

Landscape and Infrastructure

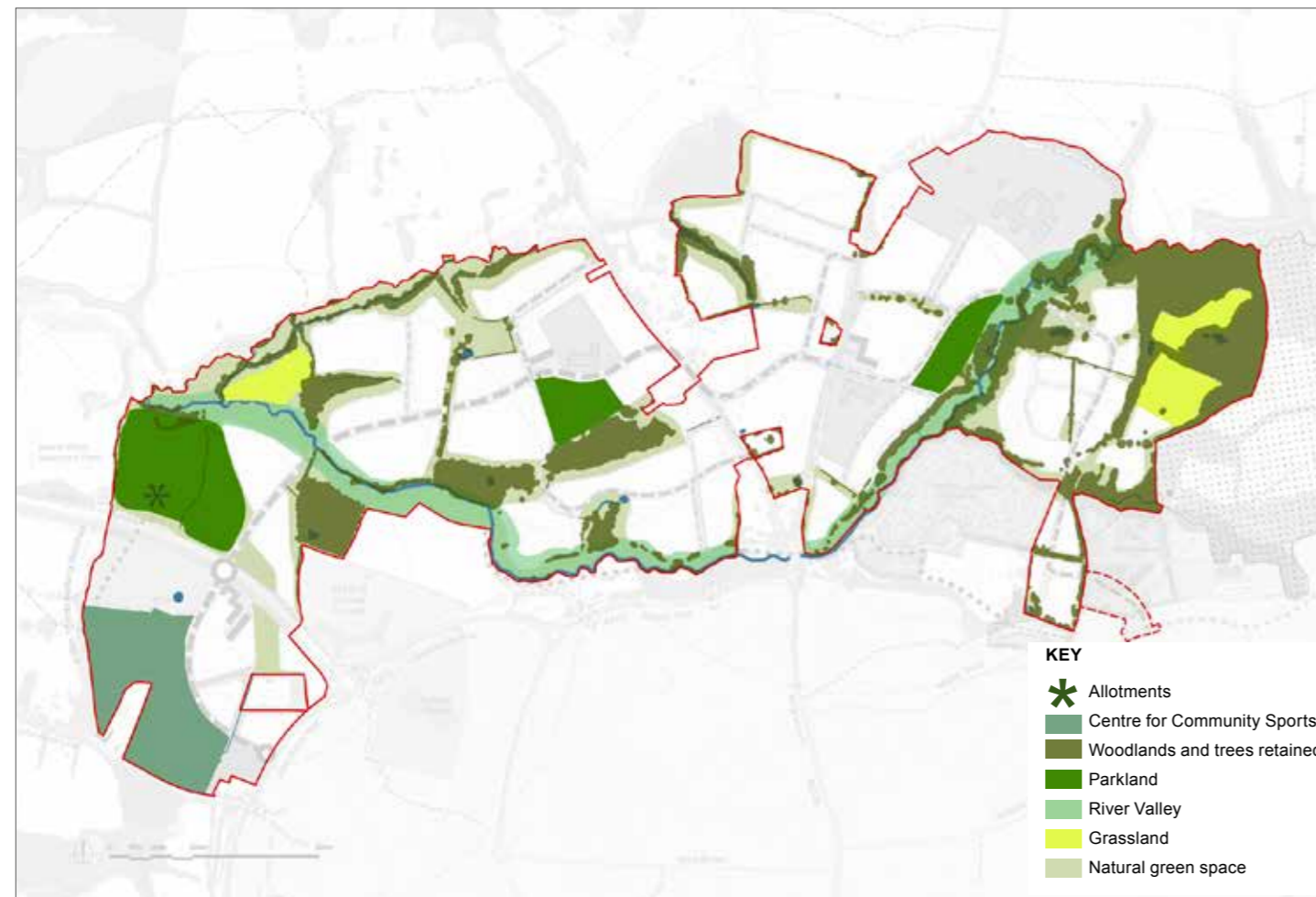
SDP 15 - A rich variety of open space

The Northern Arc will provide a rich variety of attractive open spaces. These will support wider biodiversity objectives and promote climate change, pest and disease resilience, as well as meeting community needs for recreation and supporting health and well-being.

The open space network will include extensive areas of natural open space encompassing the river valleys, woodlands and grassland areas. These areas will provide opportunities for passive recreation, walking, cycling and exercise and provide strategic connections both within the Arc and to existing cycle and pedestrian routes outside its boundary. The design approach to these areas of open space will be sensitive to their environmental value and seek to protect and enhance their biodiversity.

Areas of more formal parkland will be provided across the development to meet needs for children’s play, informal sports and passive recreation. The Masterplan includes three parklands located to be accessible to residents in each of the main neighbourhoods. The parks will form part of the extensive green network and be connected by east–west and north–south cycle and pedestrian routes. The parks will be sited and designed to be well overlooked to promote safety and security of users.

The neighbourhood parks will be provided alongside the Neighbourhood Centres to create a strong community focus and identity for the main neighbourhoods within the Arc. In the Central and Eastern Neighbourhoods, the primary schools will be located alongside the neighbourhood parks.



© Crown copyright and database rights 2018 Ordnance Survey GD 100024393

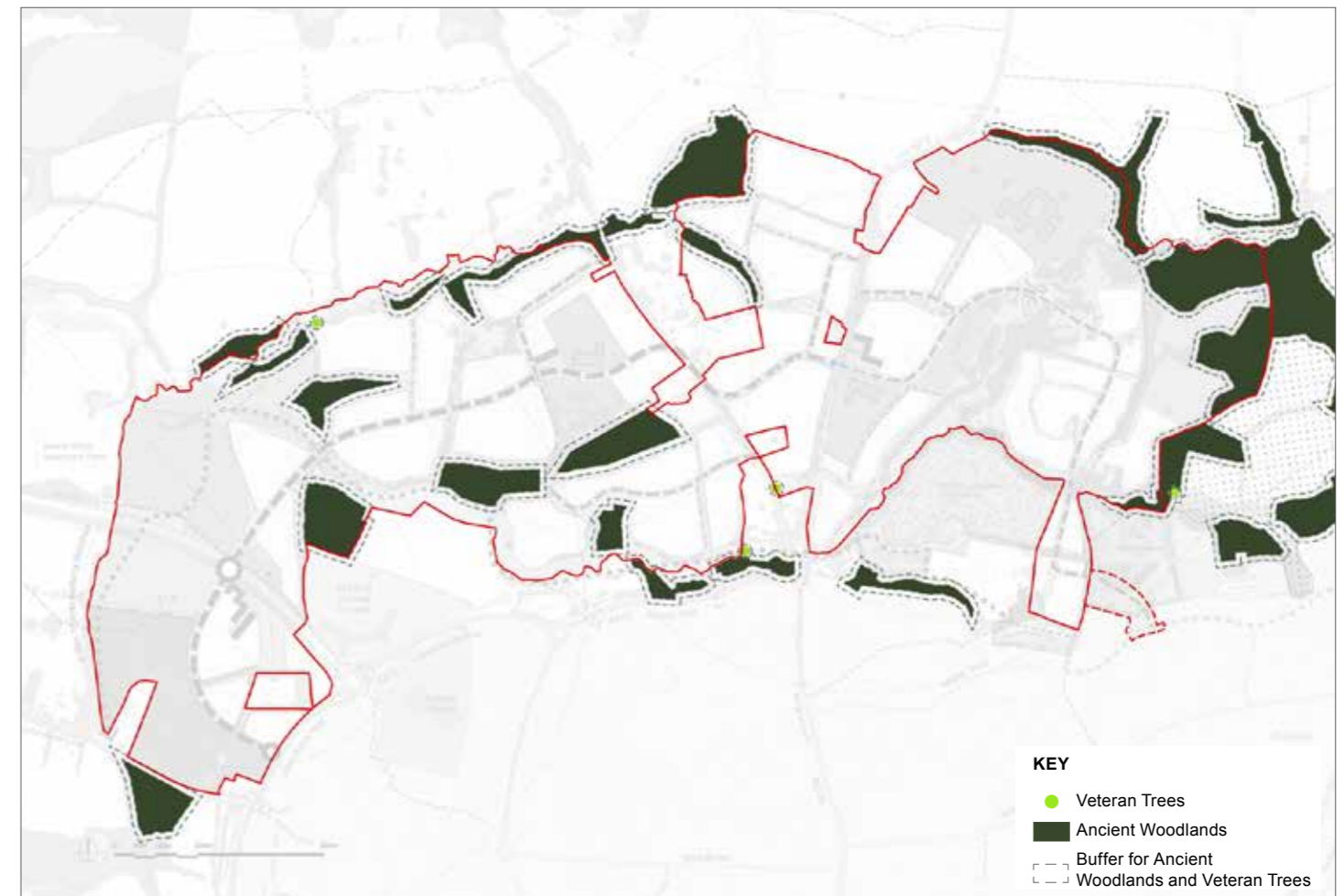
Landscape and Infrastructure

SDP 16 - Ancient Woodland and Veteran Trees

The multiple designated Ancient Woodlands within the Northern Arc, which are an irreplaceable habitat, will be retained and protected through a sensitive design approach. Ancient Woodlands will be incorporated into the framework of green spaces and protected by a buffer zone.

The buffer zone around the Ancient Woodlands will be a minimum of 15 metres and in most cases a further 10m of green space will be provided to accommodate recreational use and pedestrian and cycle routes between the minimum buffer and built development.

A small number of veteran trees and potentially veteran trees have been identified in the study area. A buffer zone in accordance with recognised best practice will be retained and protected as a minimum. Detailed surveys will be undertaken to identify other veteran or near veteran trees within the study area so these can also be retained and protected where possible.



© Crown copyright and database rights 2018 Ordnance Survey GD 100024393

Landscape and Infrastructure

SDP 17- Sports Facilities

An area on the western edge of the Northern Arc (west of Jane Murray Way) will be a strategic location for the provision of sports facilities to serve the new and existing communities. This area would accommodate the Centre of Community Sports and include approximately 9ha of outdoor sports pitches, as well as supporting facilities, to complement existing and enhanced provision at the nearby Triangle Leisure Centre.

The mix of sports pitches and facilities to be provided at the Centre of Community Sports will be informed by the on-going assessment of need across the District. This strategic provision of sports facilities will be complemented by further provision at the Triangle Leisure Centre to be secured through a financial contribution. There is also an aspiration for community use of sports facilities at the proposed new secondary school.

The proposed Secondary School will include on-site sports pitches and facilities and the aspiration is that these should be made available for community use outside of school hours.



© Crown copyright and database rights 2018 Ordnance Survey GD 100024393

Landscape and Infrastructure

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.

The steepest areas within the Northern Arc, typically around the water courses, will remain undeveloped, forming a buffer zone to the streams and riparian habitats. Areas of the site with more gradual slopes will be utilised for development, sports pitches and other uses.



© Crown copyright and database rights 2018 Ordnance Survey GD 100024393

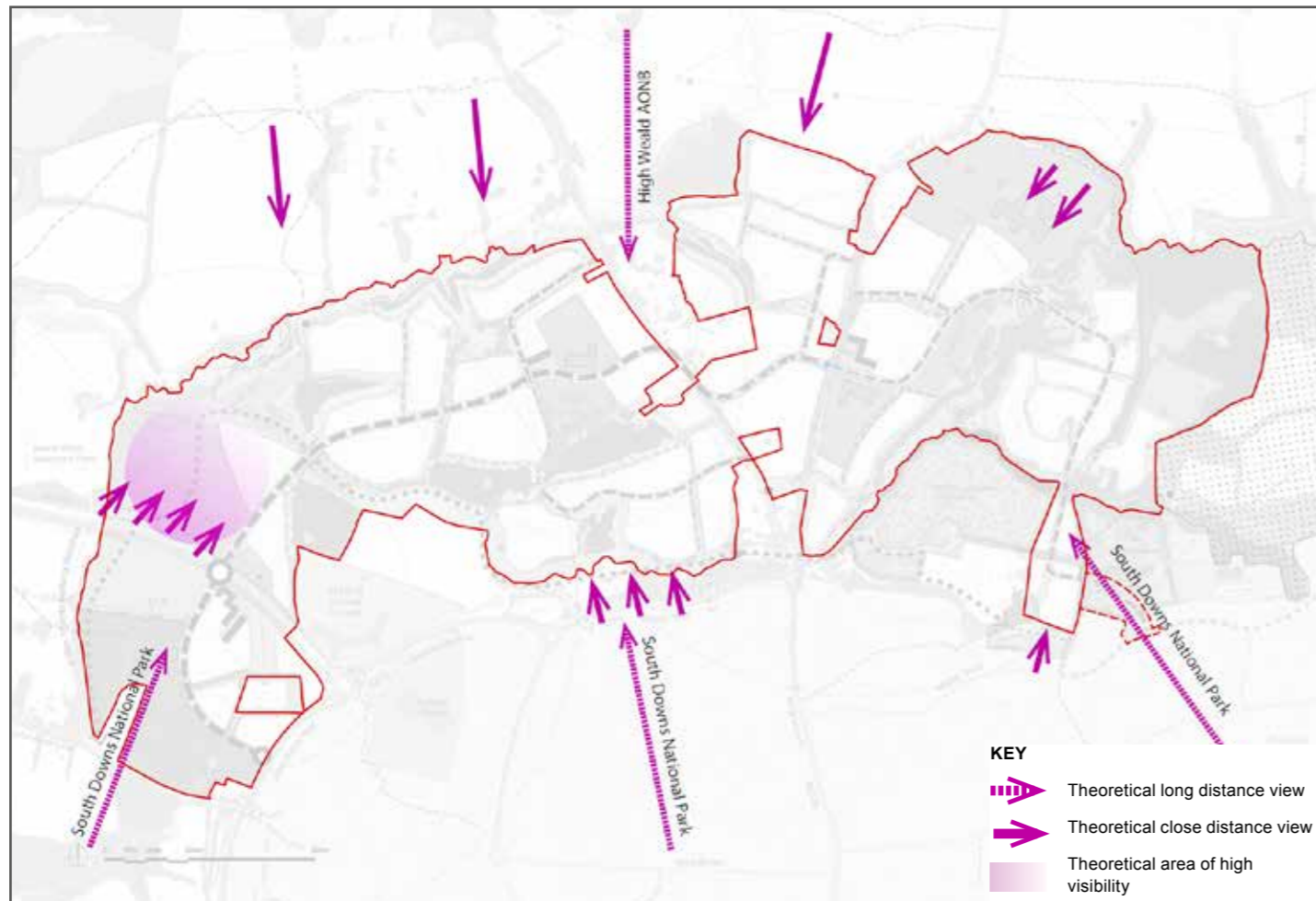
Landscape and Infrastructure

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).

The tree belts and hedgerows will be maintained wherever possible around and across the Northern Arc to break up and soften views of the built form and to maintain the well wooded character of the area.

Views within and across the Arc, typically influenced by the woodland blocks and well established hedgerows, will be retained where possible, as they create enclosed, intimate spaces and thereby foster local character. Other locations, such as in the west of the site are more open and therefore have more expansive views. In this western part of the site, the creation of green space will allow the retention of longer distance views, maintaining a visual connection to the surrounding landscape.



Landscape and Infrastructure

SDP 20 - Existing Utility Infrastructure

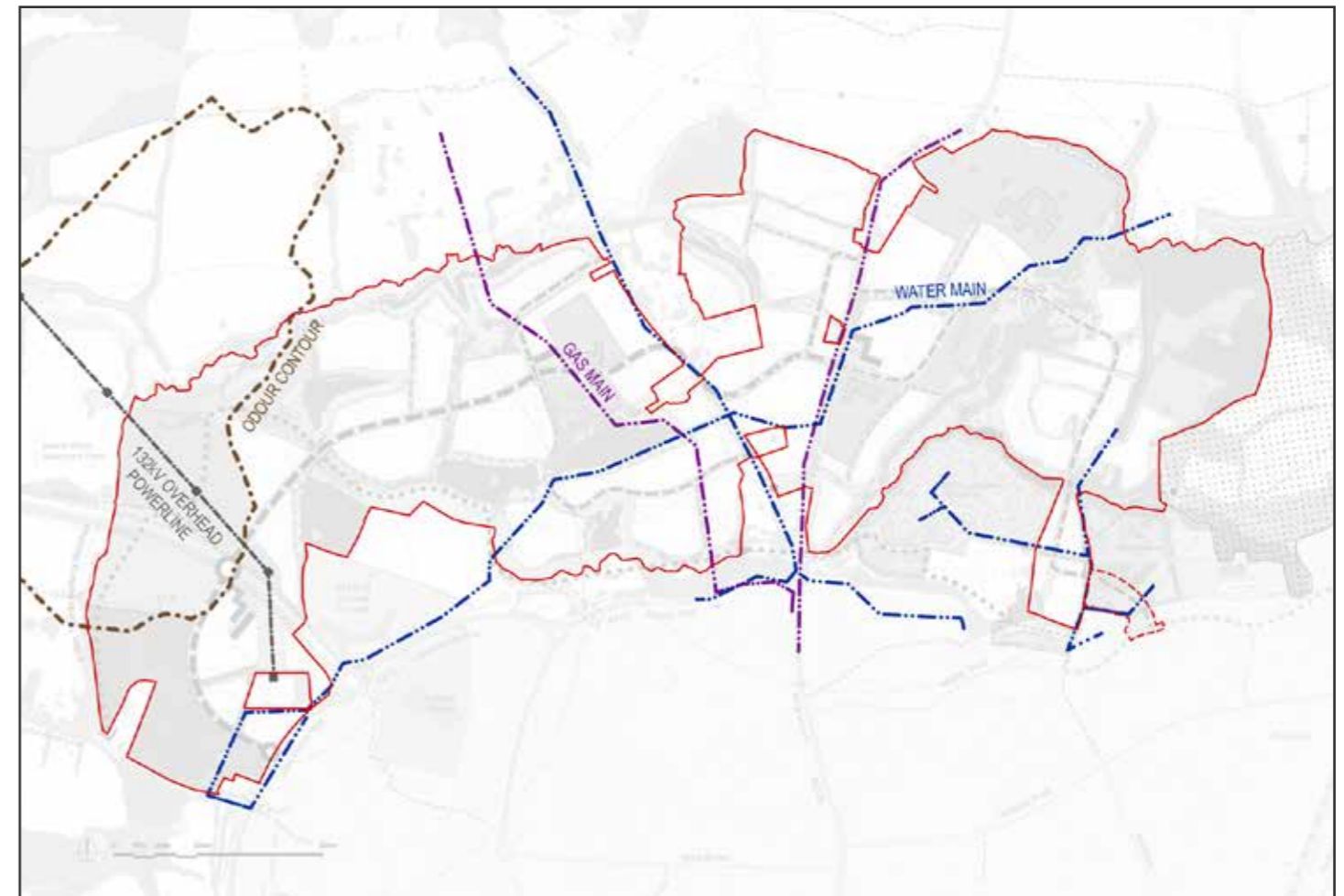
The development will respond positively to a number of significant infrastructure features in the area.

Goddards Green Water Treatment Works creates a localised odour impact. The odour contour shown on the plan below represents the recently reduced area subject to odour impact following investment secured by Mid Sussex District Council. The area within the odour contour will be used as a public open space. More sensitive uses such as homes and schools will be located outside this odour contour.

A 132kV overhead powerline crosses the western section of the Northern Arc. The potential to bury these powerlines is currently being explored. If the powerline remains, a 30m buffer zone will be provided at either side (60m width in total).

A gas main runs in a north-south direction through the central section of the Northern Arc. The gas main will be either retained or re-routed, and it will be accommodated within publicly accessible spaces, such as open spaces and green verges, with a 3m easement zone at either side.

A water main cuts across the new community, from the central southern section running towards the north-east. The water main will be either retained or rerouted, and it will be accommodated within publicly accessible spaces, such as open spaces and green verges, with a 3m easement zone at either side.



Sustainability

SPD 21 – Climate resilient development

Development within the Northern Arc will seek to make best possible use of passive design approaches to optimise the internal comfort of buildings. Coupled with extensive green infrastructure, these will in turn help to manage external comfort by managing air flows, temperature and shade.

Green infrastructure will also help to reduce flood risk and manage storm water through an extensive network of biodiverse SuDS. Evidence of response to future climate projections (i.e. UKCP18) will be required for all future development.

Green infrastructure will be designed with species that are tolerant to the prevailing climatic conditions of the south east, in order to respond to the hotter, drier summers and the colder winters. Additionally, a wide palette of species will be used to enhance the existing species range on site in order to improve resilience to pests and diseases.



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.

Buildings will be oriented for solar gain, alongside fabric efficiency measures. The development will also incorporate low carbon energy generation/distribution to ensure that energy performance delivers a meaningful reduction in carbon emissions from the baseline. This could include the use of emerging technologies, such as waste heat networks and local electricity storage and aggregation.

All properties with off- street parking will include charging points. For properties with on-street parking, there will be sufficient charging points to be ahead of the emerging electric vehicle market. The development will also include rapid charging points for taxis and buses and will provide electric car clubs to help reduce congestion and overall vehicle movement.



Sustainability

SDP 23 – Integrated Water Management

Responding to the challenge of water stress across the South East, the Northern Arc will identify opportunities to reduce potable water demand to below the 110 litres per day required by Part G of the Building Regulations.

To deliver this, a non-potable water network will be required, building on the existing commitment to an extensive network of natural SuDS which, as well as mitigating flood risk, will provide an alternative source of water and allow for the potential reuse of waste water

Sustainability

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 innovated and sustainable use of natural resources.

This will include the principles of 'Long life/loose fit' – buildings designed for adaptability with a simple floor plate, good daylighting, generous floor to ceiling heights and adequate space for servicing that enables easy reconfiguration of internal space as well as design for disassembly.

Homes England has an ambition to deliver homes at the Northern Arc at an accelerated pace, including through the use of Modern Methods of Construction (MMC). These comprise use of volumetric systems, panelised systems and systems which use pre-manufactured components.







The Masterplan Framework

06

6. The Masterplan Framework

6.1 The Masterplan

The Northern Arc Masterplan presented opposite 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. It demonstrates that all the relevant policies in the Mid Sussex District Plan could be successfully achieved on all the land included within the DP9 site allocation boundary.

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 A2300 and A273
- 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

In addition to the elements noted above, the development will provide a financial contribution towards the off-site provision of permanent pitches for settled Gypsies and Travellers and support for enhanced sports facilities at the Triangle Leisure Centre.

The Northern Arc Masterplan has been designed to create a strong sense of place, responding to the site and the surrounding context, with particular attention paid to the existing landscape features. It is served by a link road, the Northern Arc Avenue, at the east-west direction connecting to Jane Murray Way and A2300 in the west and to Cuckfield Road, Isaac's Lane and Maple Drive to the east. This will create a permeable street network with a clear street hierarchy. It also embraces sustainability principles to promote a sustainable lifestyle, by introducing a network of pedestrian and cycle routes, and a public transport corridor.

A strong framework of multifunctional landscape spaces will provide opportunities for a variety of activities including walking, running, natural play, formal sports and other recreational uses. It will protect and enhance the wooded character of the site. Open spaces, community uses and homes will be interwoven together with linear greenways.

The Northern Arc will be endowed with number of open spaces. Three parklands will be located in prominent and accessible locations at appropriate scales providing number of recreational uses and facilities. Two of the parklands will be co-located alongside the community uses at the eastern and central neighbourhood centres. The western parkland will be relatively larger in scale and will provide the opportunity to introduce variety of uses such as allotments, orchards and horticultural centre. These parklands will be the focus of the community life and contribute to the Northern Arc's identity as well as its biodiversity.

A Centre for Community Sports is located at the western section of the site. It will provide an opportunity to accommodate a range of sports pitches and create a "community, sports and education hub" by creating close links to St. Paul's Catholic College and the Triangle Leisure Centre, leisure centre.

The block structure of the Northern Arc is based upon a loose grid responding to the existing fragmented pattern of the site. The layout seeks to maximise the movement in and out, and throughout the Northern Arc reducing the need for car use by encouraging sustainable modes of transport.

Mixed-use neighbourhood centres - to the centre and the east, concentrated on the link road and co-located with community uses, primary schools and open spaces - will provide the social infrastructure essential for community interaction and social cohesion. The western centre will be co-located along the residential neighbourhoods, and it will be within close vicinity to employment sites, St Paul's Catholic College, and The Triangle.

The Masterplan makes an effective use of the site through appropriate scale, height and massing reflecting its relationship with existing landscape structure within the site and the surrounding sensitive landscape. The visually sensitive areas will be designed to lower the impact to minimum and higher buildings and higher density will be concentrated along the neighbourhood centres and the Northern Arc Avenue, creating a prominent and continuous frontages and well defined places.

An integrated SuDS network is provided to mitigate flood risk and ensure that the development is resilient to the potential impacts of climate change.

The existing overhead powerlines are retained in the western neighbourhood centre as shown in the Masterplan. It is possible that these overhead lines could be re-routed and this would enable an enhanced development of the mixed-use neighbourhood centre. The alternative approach is illustrated as an optional variation to the Masterplan.

Land Use Budget

The land use budget table below indicates quantum of the development proposed with the land take of the prominent uses within the Masterplan.

| Land use | Area (ha) |
|---|------------|
| Residential | 78.00 |
| Primary schools | 4.28 |
| Secondary school | 9.70 |
| Employment | 4.00 |
| Parkland | 19.30 |
| Centre for Community Sports | 9.00 |
| Natural open space including woodland and woodland buffer | 63 |
| Infrastructure | 10.00 |
| Existing infrastructure | 2.5 |
| TOTAL | 200 |

THE NORTHERN ARC MASTERPLAN



Alternative option on the western neighbourhood centre

© Crown copyright and database rights 2018 Ordnance Survey GD 100024393

| KEY | | | | | |
|-----|---|--|--------------------------------------|--|--|
| | Site boundary | | Woodland | | Grassland |
| | Land for Freeks Farm site access and open space | | Ancient woodland veteran tree buffer | | Flood zone |
| | Residential area | | Parkland | | Local nature reserve |
| | Employment area | | Centre for Community Sports | | Veteran trees |
| | Ancient woodland (hatched) | | Natural green space | | Indicative layout of neighbourhood centre |
| | | | | | Proposed primary road |
| | | | | | Proposed secondary road |
| | | | | | Proposed tertiary road |
| | | | | | Vehicular bridge |
| | | | | | Pedestrian bridge |
| | | | | | Cycle and pedestrian route |
| | | | | | Green circle |
| | | | | | Green super highway |
| | | | | | Public Rights of Way |
| | | | | | Mitigated odour contour |
| | | | | | Water main (400mm) |
| | | | | | Gas main (250mm) |
| | | | | | Overhead cable and pylon |
| | | | | | Primary school with an indicative layout |
| | | | | | Secondary school with an indicative layout |

6.2 Access and Movement Framework

Access to the site will be achieved from a number of points on the existing highway network to ensure a permeable layout that integrates and makes best use of the surrounding network. In the west the primary points of access will be achieved onto the A2300 and A273 Jane Murray Way. Both access points will take the form of roundabouts. Through the provision of a primary connection between the A2300 and A273 within the site, to the south of the A2300 traffic flows on the A2300 east of the main site access roundabout can be reduced. This will facilitate a lower speed environment with the ability to activate the frontage of this road. Opportunities to reduce severance at the Triangle Roundabout (A273/A2300) will be investigated as part of the Transport Assessment prepared in support of the Northern Arc Planning Application.

Further connections will be provided to the site on the B2036 and A273 Isaac's Lane and a new main access street provided between the A2300, B2036 and A273 Isaac's Lane. Through the provision of a new highway link between the A2300 and Isaac's Lane, coupled with the dualling of the A2300 corridor, opportunities exist to reduce the use of the B2036 towards Ansty and the A272 as a corridor to access the A23.

Access points on the B2036 will take the form of priority junctions and the priority of traffic will be changed to favour east-west movements rather than the current north-south movements.

The provision of a new highway connection between the A2300 and A273 Isaac's Lane will provide a new through route that will have the potential to reduce traffic levels on the current A273 corridor. This new route will take the form of an Avenue to balance the use of the road as both an access street and link between the A273 and A2300.

Access points on the A273 will take the form of either priority junctions or traffic signals. East from the A273 Isaac's Lane a secondary road will connect with the local centre, primary school and secondary school before continuing east into the Freeks Farm site. From here the secondary route will continue south to connect with Maple Drive.

Overall 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.

A series of secondary and tertiary streets will take access from the Northern Arc Avenue to provide access into the development zones to the north and south. Priority junctions and traffic signals will be favoured over roundabouts to reduce the severance effect to pedestrians and cyclists that roundabouts can cause.

To ensure that all types of pedestrians and cyclists are catered for a secondary walking and cycling corridor through the site is proposed. This will serve a dual function of being both a recreational and in places a commuter route to connect the facilities and amenities on the site with key destinations off site such as the train stations and town centre.

A series of improvements to the pedestrian and cycle infrastructure off-site is being developed to ensure that sustainable connections to key destinations off-site are catered for and that the development integrates with the wider Burgess Hill. New active mode connections are proposed at Gatehouse Lane, Sussex Way and Freeks Lane to enhance connectivity.

Pedestrian and Cycle Links

A comprehensive pedestrian and cycle network will be formed across the site. When developing the network of routes consideration has been given to access for all types of user as well as their intended journey purpose.

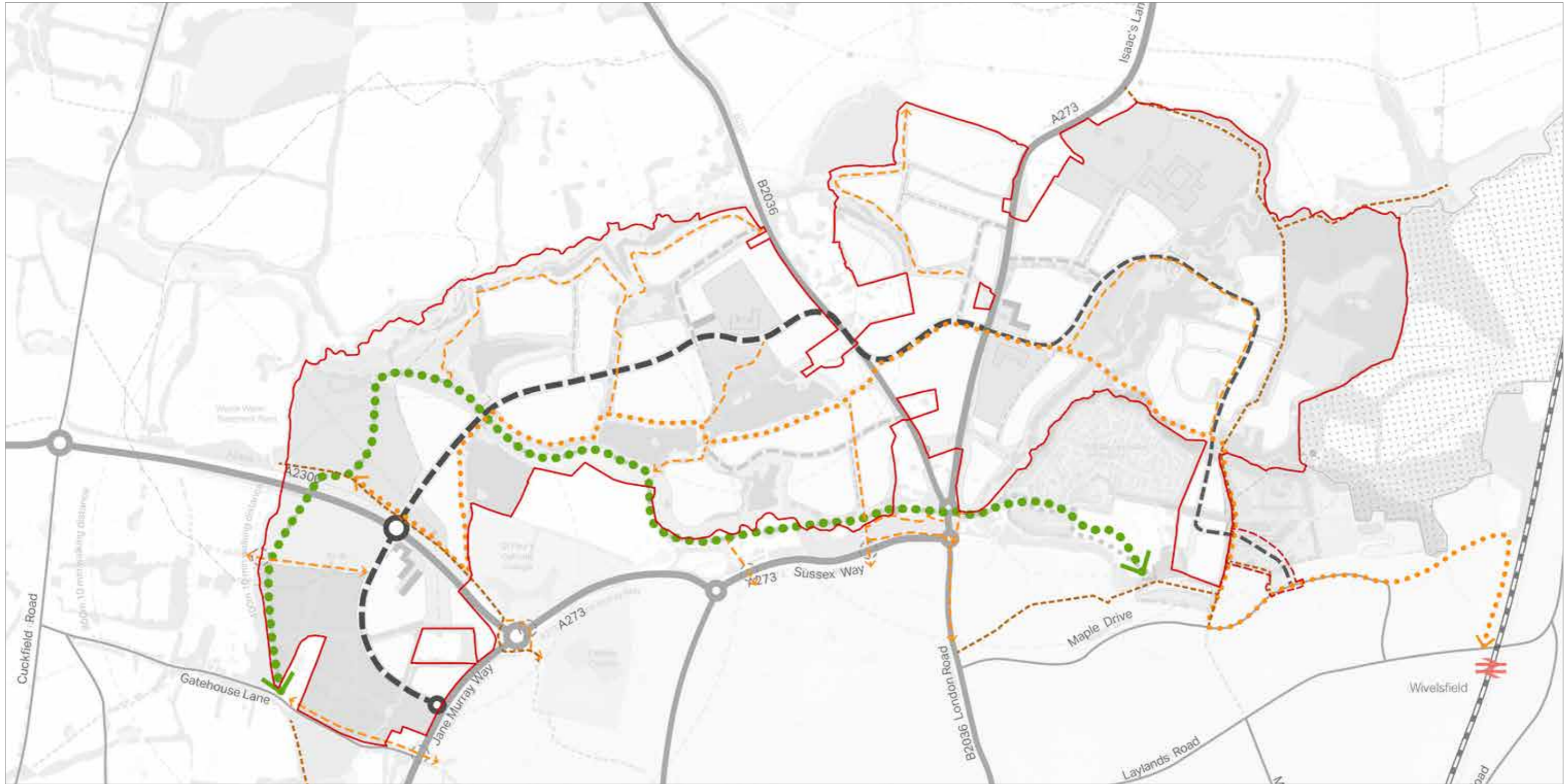
The Northern Arc Avenue will feature continuous pedestrian and cycle infrastructure along its length providing an east-west connection between the A273 and A2300 in the west and Maple Drive in the east. This will facilitate connections between the various land uses on the site.

To provide greater active mode permeability a secondary network of walking and cycling routes will be provided to offer an alternative corridor to the Northern Arc Avenue. The secondary pedestrian and cycle route will create a safe and convenient link connecting neighbourhoods, local centres, schools and employment areas within the Northern Arc. They will also integrate the new settlement and existing residents of Burgess Hill by providing substantial north-south connections.

In addition, the Green Circle will provide a recreational route through the site contributing towards the aspirations for a circular route around the Town.







Site visit photos from Freeks Lane



© Crown copyright and database rights 2018 Ordnance Survey GD 100024393

KEY

| | |
|--|---|
|  Site boundaries |  Green Super Highway |
|  Land for Frees Farm site access and open space |  Pedestrian and cycle routes |
|  Northern Arc Avenue |  Public Right of Way |
|  Green Circle | |

Northern Arc Avenue

A development of the scale proposed at the Northern Arc will require a street hierarchy that facilitates a permeable layout. The form that this street hierarchy takes is dependent upon a number of criteria including the type and quantum of uses proposed to be served, on site constraints such as land ownership, ecology, arboriculture, topography etc and the ability of the site to make use of and connect with the existing transport network.

When considering the design of the hierarchy, matters such as a permeable layout, ability to deliver public transport, walking and cycling corridors as well as efficient routes to distribute traffic must all be balanced to deliver a successful scheme.

The adopted policy for the Northern Arc requires a link to be provided between the A273 Isaac's Lane and the A2300 with a connection with the B2036. All of these external routes serve a strategic function. The A273 carries traffic between Hayward's Heath and Burgess Hill and connects with the A2300 which facilitates onward connections with the A23 trunk road. The B2036, whilst a lower classification of road connects Burgess Hill with the A272 which in turn connects with Hayward's Heath to the north east and the A23 to the west.

Provision of this link could therefore result in the re-routing of existing traffic from these routes if the main access street through the site provides an attractive alternative. Discussions to date on the form of this street have identified that the existing route between Hayward's Heath and the A23 via Sussex Way is already designed as a strategic corridor, featuring a wide single carriageway design with verges and properties set back that do not front the street. The site boundary for the Northern Arc also does not front this road with a band of woodland between the road and the site. The ability of the development to influence the nature and character of this link is therefore limited. It has therefore been concluded that whilst connections across this link will be required to facilitate active mode movements this corridor will remain a primary route for strategic traffic. Therefore, the main route through the site will need to balance the requirements of providing a new link and an access street that also creates a sense of place.

The Northern Arc Avenue, as it is hereby referred to been broadly created as a series of sections, reflecting the places that it serves. Each section and the design principles that underpin them are set out below acknowledging that further development will take place as the planning application is prepared.

Section One: A273 Jane Murray Way to A2300

This section of the Northern Arc Avenue will serve a mixture of uses with employment envisaged to the west of the street along with sports facilities and residential to the east. Discussions with WSCC have highlighted that this section of route will also serve a strategic function as it will carry traffic travelling to/from the west of Burgess Hill that currently uses the A273 Jane Murray Way. By providing a strategic connection in this location, traffic volumes at the A273/A2300 roundabout (Triangle Leisure Centre junction) will be reduced, facilitating potential for a revised layout that will reduce the severance created by a large roundabout in this location. This will also enable the potential upgrading of the section of the A2300 between the Northern Arc site access roundabout and the Triangle Leisure Centre junction.

This section would be appropriately designed to accommodate Heavy Goods Vehicles (HGVs) serving the wider Burgess Hill as well as the employment areas. Limited frontage access will feature with a main access point serving the employment, sports and residential uses. The main access is proposed to take the form of a traffic signal junction, depending upon final traffic flows.

Pedestrian and cycle provision would be provided off-carriageway but adjacent to in order to cater for all modes of transport. This link would also serve as a public transport corridor to ensure all that all uses are served by bus.

Section Two: A2300 to B2036

This section will serve not only residential areas but also a local centre and a primary school.

Intersections along the route would take the form of priority junctions or traffic signal junctions, either on one side or both (to form cross-roads). This will help to define a route hierarchy but also, with the formation of cross-roads create clearly defined pedestrian and cycle routes north-south that limit the severance effect that a main access street corridor could create.

Frontage access may be permitted along the route in places, to help re-enforce a lower speed environment. However, where higher speeds are anticipated properties would be set back to provide a sense of space and make a legible route. Around the local centre and primary school a lower design speed would be applied with on street parking helping to activate the street scene and encourage lower speeds.

The corridor will include continuous off-carriageway pedestrian and cycle facilities. Parallel routes on secondary, tertiary or dedicated routes will provide an alternative route for those not wishing to travel on the Northern Arc Avenue.

This section will function as a public transport corridor and bus stops would be provided on street (no lay-by's would be provided).

Section Three: B2036

Vehicle speeds on this section will be constrained through the provision of closely spaced junctions formed with the B2036.

Pedestrian and cycle provision would be provided off-carriageway along the street to cater for all modes of transport, acknowledging that the available corridor width may limit provision. The geometry will be capable of accommodating a bus route.

Section Four: B2036 to A273

This section will serve predominately residential development. The street will have a series of secondary routes that connect with it to provide connections into the development parcels. Accesses along the route would take the form of priority junctions.

The corridor will accommodate off-carriageway pedestrian and cycle facilities. Parallel routes on secondary, tertiary or dedicated routes will provide an alternative route for those not wishing to travel on the main access street.

This section will function as a public transport corridor and bus stops would be provided on street. A traffic signal junction will be formed with the A273 Isaac's Lane in the east of this section.

Section Five: A273 to Freeks Farm

This section of route would serve not only residential development but also the neighbourhood centre, primary school, secondary school and the Freeks Farm development site.

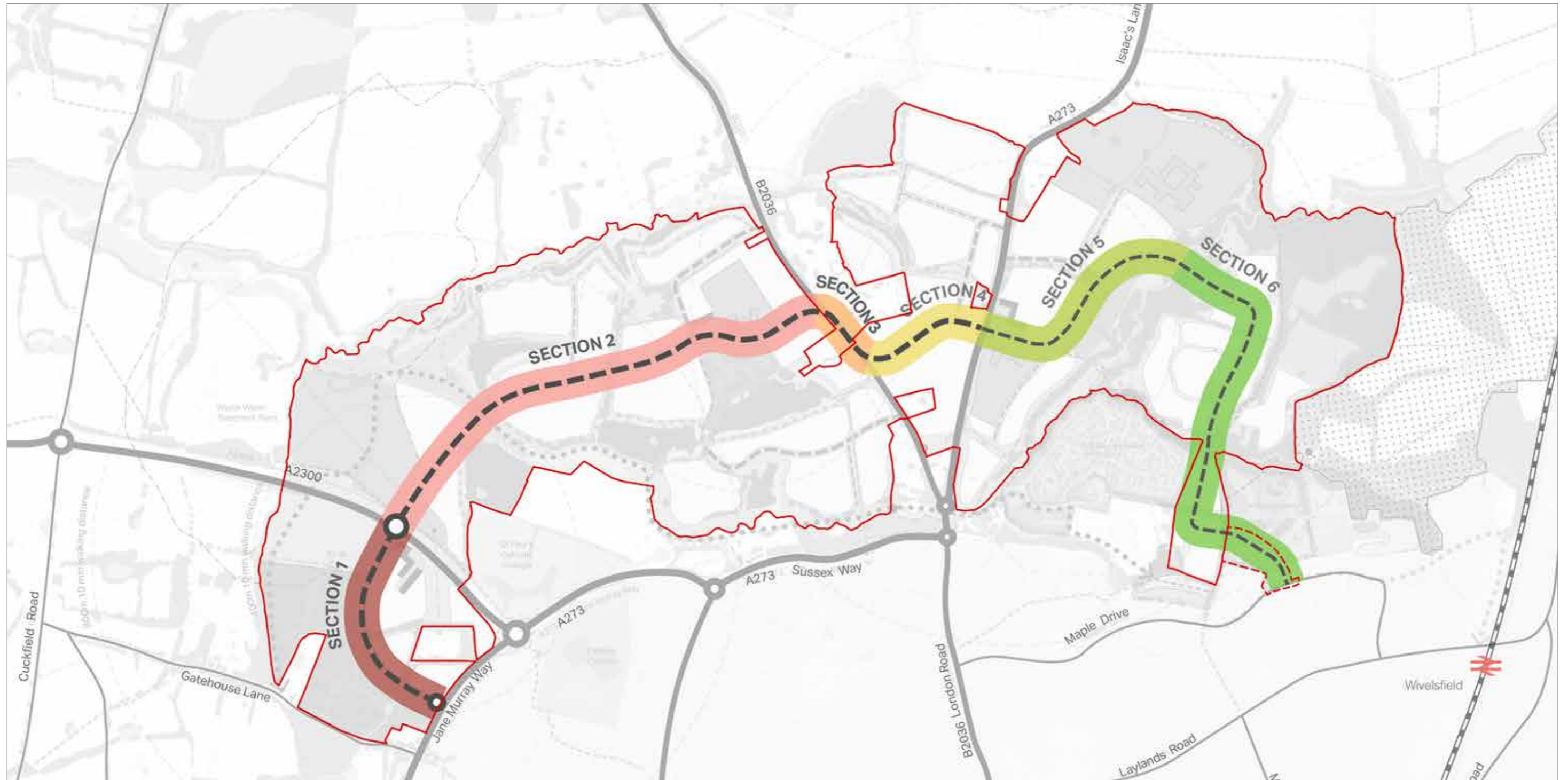
To prevent the route becoming a through route between Maple Drive and the A273 the design speed would be constrained. To enforce this speed, frontage access and on street parking will be utilised along with a narrower highway corridor.

Footway and cycleway provision would be provided. Parallel routes on secondary, tertiary or dedicated routes will provide an alternative route for those not wishing to travel on the main access street.

The route would also act as a public transport corridor. It is envisaged that through the design of this section, the need for a bus gate between the Freeks Farm site and Isaac's Lane can be avoided.

Section Six: Freeks Farm Development Site to Maple Drive

An Outline Planning Application has already been submitted for this section of the main access route. As such, the parameters for this section have already been defined within the planning application. However, further input to the detailed design of the route through the Freeks Farm site will be possible at the reserved matters application stage.

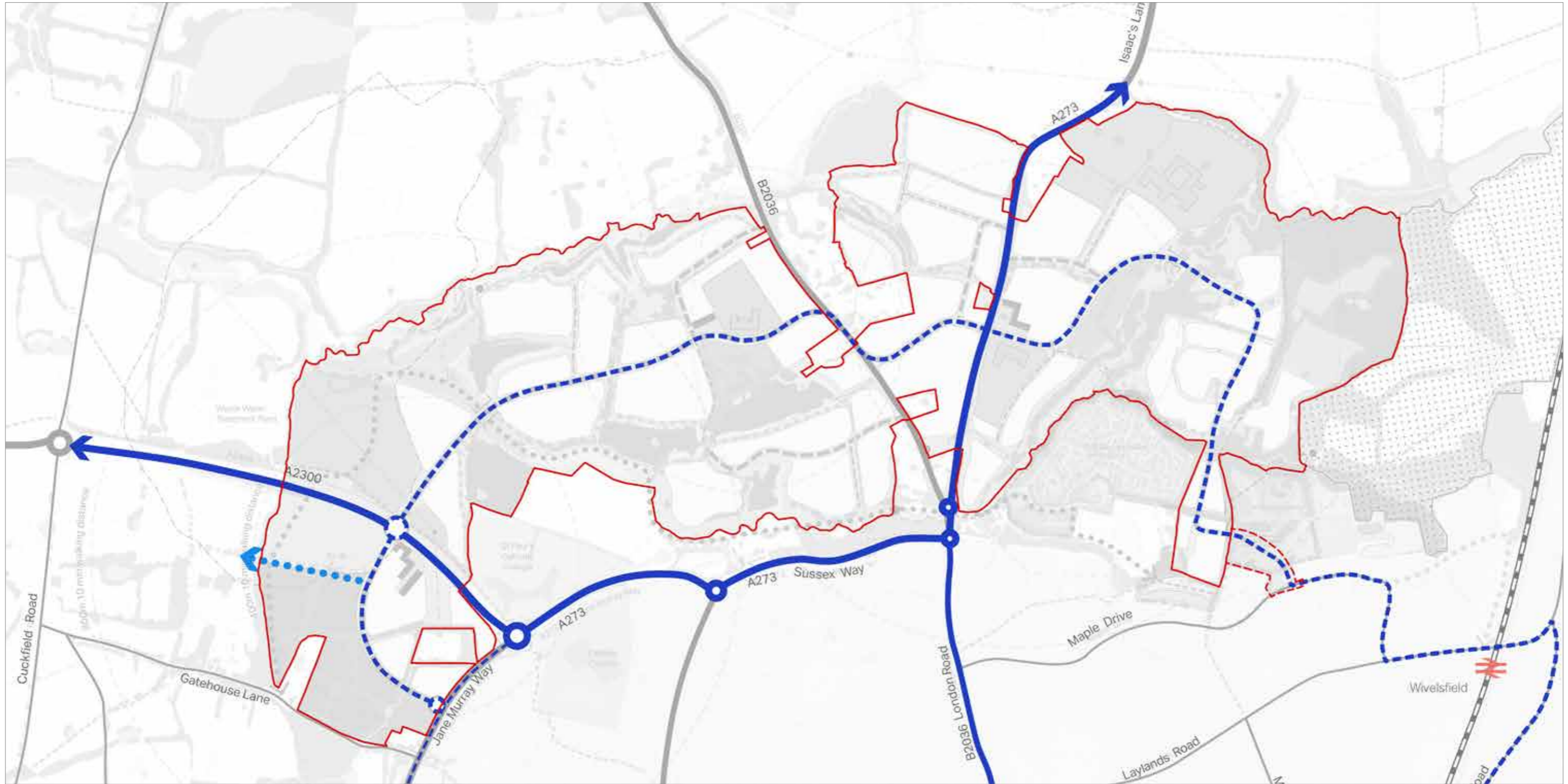


© Crown copyright and database rights 2018 Ordnance Survey GD 100024393

Public transport

Public transport will be critical to embed sustainable travel habits from the outset of the development. At this stage it is not possible to define the public transport infrastructure or services required to serve the development. Whilst the proposals for the Public Transport Strategy (PTS) are still being developed in conjunction with WSCC, the Masterplan has been designed to facilitate a main public transport corridor which will help to ensure that all part of the site have access to bus based public transport. The Northern Arc Avenue will serve as the primary public transport corridor, connecting the Hub and western section of the Northern Arc (south of the A2300) to the primary school and local centre in the western site. From here the corridor will continue east to connect with the neighbourhood centre, primary school and secondary school to the east of Isaac's Lane. The bridge connection to the Freeks Farm site will then enable public transport access through to Maple Drive from which connections towards Wivelsfield Station and the town centre will be possible. The local and neighbourhood centres are proposed to incorporate mobility hubs, a centre for all transport needs combining bus stops with a potential car club, cycle parking and electric vehicle parking.

The provisional PTS envisages two key public transport routes; an east-west service through the Northern Arc connecting employment in the west with facilities on the site, Wivelsfield in the east and onward connections to the town centre. A second north-south corridor will then provide a more strategic connection by enhancing the existing Route 33 to provide connections towards Crawley and Hayward's Heath in the north, Burgess Hill Town Centre, Tesco and the Victoria Business Park and Brighton in the South.



© Crown copyright and database rights 2018 Ordnance Survey GD 100024393

KEY

- Site boundaries
- Land for Freeks Farm site access and open space
- Existing bus route
- Proposed bus route
- Potential bus route

6.3 Landscape and Green Infrastructure Framework

The landscape of Northern Arc will be characterised by areas of woodland, woodland shaws and mature hedgerows. Such features will be retained and enhanced to create a network of well vegetated and accessible routes running through the scheme. These green links will preserve landscape assets and provide scenic corridors for pedestrian and cycle movement, thereby utilising the opportunity created by the existing landscape of ancient woodland and hedgerows.

The Green Super Highway will form the spine of the green network. Stretching from east to west, the route will connect key hubs including commercial centres, parks and transport links. A series of secondary routes will extend from the Green Super Highway into the surrounding residential areas, following routes defined by retained hedgerows and woodland shaws.

Three parklands will be located throughout the site, providing structure to the landscape and forming key community assets. The distribution of parks across Northern Arc will contribute to the sense of arrival and identity to the different areas and form multifunctional green space providing a range of ecosystem, community, cultural, play and recreational resources.

The Western Parkland may be suited to multi-functional uses, incorporating allotments and orchards, habitat mitigation and ponds, as well as potentially providing a horticultural education hub. Such uses may be able to accommodate the necessary buffer zone for the overhead power cables, should they be retained.

The retention and enhancement of on-site vegetation will contribute to embedded mitigation, limiting the visual effects of the development from the surrounding area. Proposed planting will be sympathetic to the existing species profile of the area whilst seeking to increase diversity to provide resilience to climate change, pests and diseases. New areas of woodland planting designed to connect existing areas of woodland could support a potential 'Forest District' which will contribute to the wider objectives of Natural England's Low Weald National Character Area (NCA) for 30% woodland cover. Similarly, further habitat creation could incorporate wet meadows and wet woodlands to re-link watercourses, reinforce a riparian character and improve the infiltration rates and provide flood mitigation.

Private and semi-private land will also make an important contribution to the site's green infrastructure. Front and back gardens will form key assets, further increasing the biodiversity of the area. Likewise, the provision of school grounds, sports pitches, and sustainable urban drainage systems will all contribute to the green infrastructure network and total proportion of permeable land.

The aspirations of the green infrastructure are aligned with Natural England's Statements of Environmental Opportunity to:

- *"Protect existing woodland, shaws, trees and hedgerows across the Site where possible, and improve access for health and well-being whilst reinforcing a sense of local identity through the provision of a comprehensive green infrastructure network within the masterplan, including holistic management of existing woodland within the network; and*
- *Plan for the creation of high-quality blue and green space and green corridors to provide a framework for new and existing development in urban areas and along major transport routes for the enjoyment and well-being of communities and to enhance biodiversity."*



© Crown copyright and database rights 2018 Ordnance Survey GD 100024393

| KEY | | | |
|-----|---|--|----------------------|
| | Site boundaries | | Existing trees |
| | Land for Freeks Farm site access and open space | | Local nature reserve |
| | Grassland | | Parklands |
| | BMX / pump track | | Playground |
| | Centre for Community Sports | | Green Super Highway |
| | Green Circle | | Green corridors |
| | River valley with pedestrian and cycle routes | | |

6.4 Community Facilities

Community infrastructure within the Northern Arc development will include the following categories of projects that will be delivered on site:

- Education - Early Years, Primary, Secondary and Further Education
- Health and Social Care - Primary Healthcare facilities, Hospitals, and Adult Social Care
- Community - Community Facilities (Incl. meeting spaces and libraries etc.),
- Sports and Leisure - Indoor Sport Facilities (incl. Fitness Suites and Swimming Pools), outdoor sports and Children's Playspace

Details of these social infrastructure projects and how they are intended to fit into the Masterplan are as follows:

Education Projects

• Early Year Provision

- Based upon WSCC pupil multipliers, the Northern Arc generates the need for between 169 and 175 early year pupils. Early year requirements from the site will be accommodated within the proposed primary schools situated to the east of the site and in the central area.

• Primary Schools

- Based upon WSCC pupil multipliers, the Northern Arc generates the need for between 686 and 875 pupils which equates to between 3.2 FE and 4.2 FE of pupil demand. There is a range due to the indicative nature of the housing mix at this stage. As the housing mix is confirmed in due course the demand figures will be revised.
- This demand will be accommodated through the provision of two on site primary schools.
- The first 2 FE Primary School including early year's provision, with a site area of 2.14 ha, is delivered towards the end of the first phase to support freaks farm residents and the impact of development in the west of the site. This also provides capacity for the residential unit commencing in phase 2.
- The Second 2 FE Primary School including early year provision, with a site area of 2.14 ha is delivered towards the beginning of the third phase to support the continued requirements from development across the site. This also provides primary school capacity for all remaining residential units commencing in phase 4.
- It is assumed the primary schools would be delivered by the master developer along with the required land allocation.

- If the development were to generate the maximum potential demand of 875 pupils then the 35 pupils generated above the 840 pupil capacity on site will be accommodated off site and this will be financed through appropriate contributions from the developer to WSCC to facilitate a relatively small expansion at an existing school in the area.

• Secondary School

- Based upon WSCC pupil multipliers, the Northern Arc generates the need for between 490 and 630 pupils which equates to between 3.2FE and 4.2FE of pupil demand. There is a range due to the indicative nature of the housing mix at this stage. As the housing mix is confirmed in due course the demand figures will be revised.
- A 6FE Secondary School including SEN provision is proposed within the Northern Arc Site, completed in Phase 1 to provide school places generated across the site in addition to serving pupils from the wider catchment area, helping to resolve existing capacity shortfalls forecast across the District.
- The county Council has highlighted the need for the secondary school to be expandable to 8FE at a future date. A site of 9.7ha has therefore been incorporated within the Masterplan which is sufficient to provide the secondary school and sixth form, its potential expansion and the necessary outdoor pitches and playspace.
- It is assumed the secondary school would be delivered through the Secretary of State for Education identifying a free school sponsor or by a competition process administered by the County Council with the necessary land allocation provided by the master developer along with a percentage of the build cost based on the number of children on the development. The contribution towards the build cost will be collected in line with the increase in pupils generated as the development is built out.

• Sixth Form Provision

- Based upon WSCC pupil multipliers, the Northern Arc generates the need for between 106 and 136 sixth form pupils. It is envisaged that the proposed secondary school will include capacity for sixth form provision to accommodate this demand. The approach to Secondary School delivery would also apply to sixth form provision.

• Special Education Needs (SEN) Provision

- Based upon WSCC pupil multipliers, the Northern Arc also generates the need for between 20 and 25 special education places. It is envisaged that the primary and secondary schools will include capacity for special education needs with an emphasis

on sufficient special resource provision at both primary and secondary school level to form a continuum of provision.

Health and Social Care Projects

• Primary Healthcare Provision

- Based upon Horsham and Mid Sussex Clinical Commissioning Group planning standards, the Northern Arc generates the need for the equivalent of 4.6 GPs which equates to a spatial requirement of 838 sqm.
- The Masterplan and IDP recommend an on site facility to meet the needs of the new community. Based upon the combined space requirements for a GP provision and dental provision (see below) the IDP has recommended a 1,070 sqm primary care facility based within the District Centre and delivered in close proximity to the primary school and other community services.
- A preferred approach will require agreement with the CCG and local GP practices to ensure an operator can be secured to locate into the primary care facility.

• Dental Provision

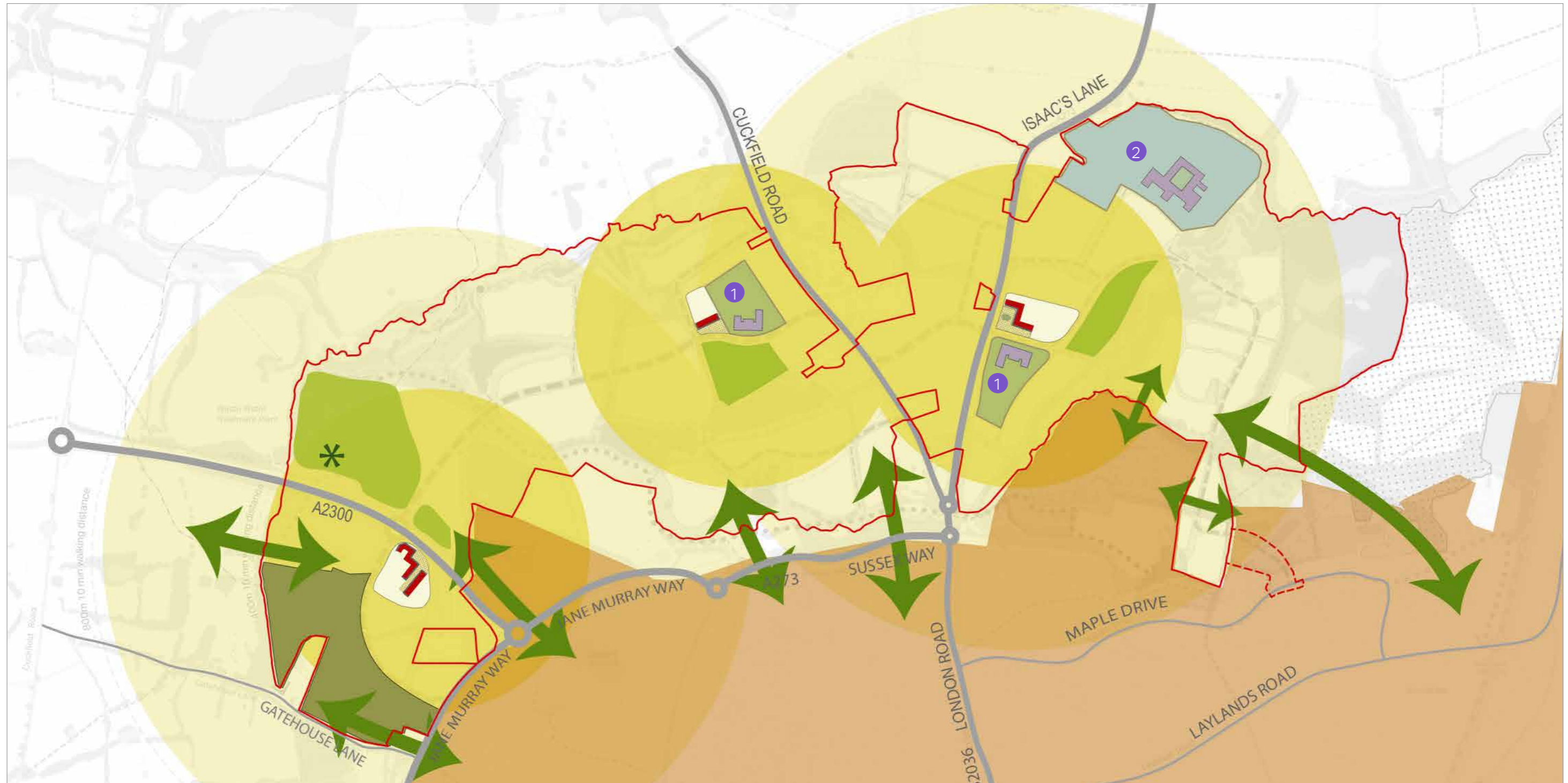
- Based upon benchmark planning standards, the Northern Arc generates the need for the equivalent of 4 dentists which equates to a spatial requirement of 229 sqm. Dental healthcare provision is delivered by market operators. A small element of the proposed commercial space in the district and neighbourhood centres provides the opportunity for market operator to open a practice serving the Northern Arc alongside potential space within the proposed primary care facility.

• Acute Healthcare Requirements







- Based upon benchmark planning standards, the Northern Arc generates the need for the equivalent of 19 acute healthcare beds. There are no proposals to provide hospital facilities within the Northern Arc development and the growth in patient requirements will be met through existing off site provision at hospitals across Brighton and Sussex University Hospitals Trust at the Princess Royal Hospital in Haywards Heath and the Royal Sussex County Hospital in Brighton.

• Extra Care Housing

- Based upon local authority analysis, the Northern Arc is expected to generate the need for between 50 and 60 units of extra care provision.
- The Masterplan is looking to meet a range of needs such as those of an extra care typology within the affordable housing mix of the



© Crown copyright and database rights 2018 Ordnance Survey GD 100024393

| KEY | | |
|---|--|---|
|  | Site boundary | |
|  | Parkland | |
|  | Centre for Community Sports | |
|  | Allotment | |
|  | Pedestrian and cycle links | |
|  | Indicative layout of neighbourhood centre |  |
|  | Primary school with an indicative layout |  |
|  | Secondary school with an indicative layout | |

Northern Arc development. There is the potential for this to be delivered in the form of a specific Extra Care Housing Facility.

Community and Civic Projects

- **District Centre incorporating a Multi-Use Community Facility 1**

- Located in the east of the Northern Arc this district centre will provide the community focal point with a range of local services and facilities including the larger of two on site standalone multi-use community facilities scaled to approximately 1,000 sqm to meet the combined social infrastructure needs of the central and eastern new communities. Located adjacent to the first primary school and on the primary access route across the Northern Arc this location offers the potential for a range of co-located social infrastructure facilities.

- **Neighbourhood Centre incorporating a Multi-Use Community Facility 2**

- Located in the western end of the Northern Arc this neighbourhood centre will provide the community focal point with a range of local services and facilities including a standalone multi-use community facility scaled to approximately 500 sqm to meet the combined social infrastructure needs of the western new communities.

- **Local Centre**

- Located in the centre of the Northern Arc this local centre will be adjacent to the second primary school and provide smaller scale local services.

- **Emergency Services**

- The Northern Arc new community will generate an increase in the demand for police, fire and ambulance services. No new emergency service facilities are proposed within the new development and the on-site demand will be covered by existing police, ambulance and fire stations in Burgess Hill and Haywards Heath.

Sports and Leisure Projects

- **Centre for Community Sports**

- The outline for a Centre for Community Sport (CFCS) scheme was developed by Burgess Hill Town Council in 2011 as part of its Town Wide Strategy for 20 Years. A number of amendments to this original proposal have taken place since 2011 but this concept has remained an important aspect of the Northern Arc for the District and Town Council.
- The original location for the CFCS has been tested through the masterplanning process and found to be unsuitable on a number

of grounds. As a result the CFCS location has been moved to the western end of the Northern Arc which maintains its broad location and benefits from remaining in close proximity to the Triangle indoor sports site. Enhanced facilities at the Triangle will be provided through a financial contribution.

- The Northern Arc development CFCS will include approximately 9 hectares of outdoor sports. The mix of sports pitches and facilities to be provided at the CFCS will be informed by the on-going assessment of need across the district but could include junior football pitches, mini football pitches and rugby pitches.

- **Wider Sports Provision across the Northern Arc**

- Based upon Sport England planning standards, the Northern Arc generates the need for additional indoor sports requirements. This is equivalent to 2.2 sports halls and 1.6 swimming pool lanes. The scale of demand does not equate to a full indoor sports facility and due to the adjacent Triangle Leisure Centre it is not deemed necessary to provide additional indoor sports facilities within the Northern Arc.
- At the east of the Northern Arc development site, the secondary school and its on-site sports provision provides the opportunity to mitigate a proportion of this demand. Access agreements to these secondary school facilities would need to be in place however for community access to be allowed. Demand from the western end of the site is assumed to utilise the existing Triangle Leisure Centre.

6.5 Utilities and Infrastructure

The location of existing utilities networks serving the local area, and the need for future upgrades, have informed the Masterplan for the Northern Arc.

In order to determine the capacity of existing utility infrastructure to accommodate the anticipated demand arising from the proposed development, the relevant utility network operators have been consulted in order to identify:

- Appropriate location(s) for connection of the proposed development to existing utilities infrastructure;
- The nature and costs of any upgrades to the existing utilities infrastructure networks that may be required to serve the proposed development; and
- Whether any diversions of existing services are required due to the proposed development and the nature and costs of any diversions.

Information on existing infrastructure for water, sewerage, gas and electrical provision have been obtained from UK Power Networks (UKPN), Southern Gas Networks (SGN), South East Water (SEW), Southern Water, British Telecom (BT) and Virgin Media.

For the current assessment it is assumed that the on-site utility works will be implemented by a Multi Utility Company rather than the incumbent utility companies.

Gas

There is a Southern Gas Networks (SGN) 250mm diameter intermediate pressure (IP) steel gas main crossing the site north to south to the west of Cuckfield Road (B2036). There are also a SGN medium pressure (MP) main located within the site, running along Isaac's Lane (A273).

The Northern Arc Masterplan has been developed to avoid the need to divert the IP main, which is an expensive, time-consuming and disruptive process. The IP main will require a 6m wide easement zone along its route, and any road crossing will need to be designed with adequate cover to provide protection to the main.

The MP main along Isaac's Lane is likely to require some minor localised diversion works along the proposed new junctions with the spine road.

If gas is used as a predominant energy source for the scheme, network upgrade work is expected to be required. However, Homes England is also actively exploring the potential to extract energy from the Goddards Green Waste Water Treatment Works.

Electricity

Electricity supplies in the area are provided by UKPN. There are existing 132 KV extra high voltage (EHV) overhead cables running across the western part of the site, to the west of St Paul's Catholic College. Homes England is actively exploring the potential for these overhead cables to be placed underground. The Masterplan proposes two options for this area – one with the overhead cables remaining, and a variant proposal with the overhead cables removed and placed underground.

Existing 400kV EHV overhead cables run on an east-west alignment just beyond the northern boundary of the proposed development. These cables do not affect the Masterplan directly, and all proposed development, including the proposed secondary school, lies well outside of the stand-off zone. Existing 33KV overhead cables run across the site from south west to north east, with part of the cable in the vicinity of the Burgess Hill Golf Course already underground. An existing 11 KV overhead power line runs across the River Adur and Freeks Lane from the north west to the south east. To facilitate the proposed development, it is intended to divert or underground the 33KV and 11KV overhead power lines.

UKPN has indicated that there is available capacity within the 132KV network but no spare capacity in the 33KV lines. However, installation of an additional circuit in the 132KV line is recommended by UKPN to provide back-up system in place. The cost would be shared between Homes England and UKPN as both parties will benefit from this investment.

Following correspondence between AECOM and UKPN in August 2018, a suitable connection strategy for the proposed development to existing infrastructure has been identified. The preferred option involves creating a mesh of 11KV network across the Masterplan area. Each of the phases would have their own 11KV sub-station(s). The added benefit of having 11KV line is that the 11 KV uses a loop system. Therefore, if one network is down, the other side would be able to ensure continuity of supply.

Further consultation with UKPN will be carried out in relation to the diversion of the overhead cables and required upgrade and potential new connection to electricity supply infrastructure

Foul Water and Sewage Treatment Works

Sewerage services in the area are provided by Southern Water. Existing foul water from Burgess Hill are discharged into a public sewer network and are pumped from Fairplace Hill Waste Water Pumping Station (WWPS), to the east of the site via a 450mm rising main, to Goddards Green Wastewater Treatment Works (WWTW), located immediately to the west of the site.

As part of the review of foul drainage network location, capacity and potential connection points AECOM is currently in consultation with Southern Water. From the available information it is understood that

the existing foul sewer network (including pumping station and rising main) and the treatment plant has limited capacity and would need to be upgraded to serve the proposed development. Responsibility for upgrade works lies with Southern Water, with the cost covered by the Infrastructure Charges.

Due to the topography and river crossings, the proposed foul water network serving the development would be a combination of gravity and pump assisted system discharging to Goddards Green WWTW.

Potable Water Supply

Potable water supplies in the area are provided by South Eastern Water (SEW). Asset Record Plans provided by SEW show an 8 inch PVC water main which runs along Cuckfield Road (A273). This main spurs out into one 3 inch Cast Iron main running north along Cuckfield Road and one 400mm Cast Iron main running across the site to the A2300/Jane Murray Way (A273) roundabout and towards the northeast.

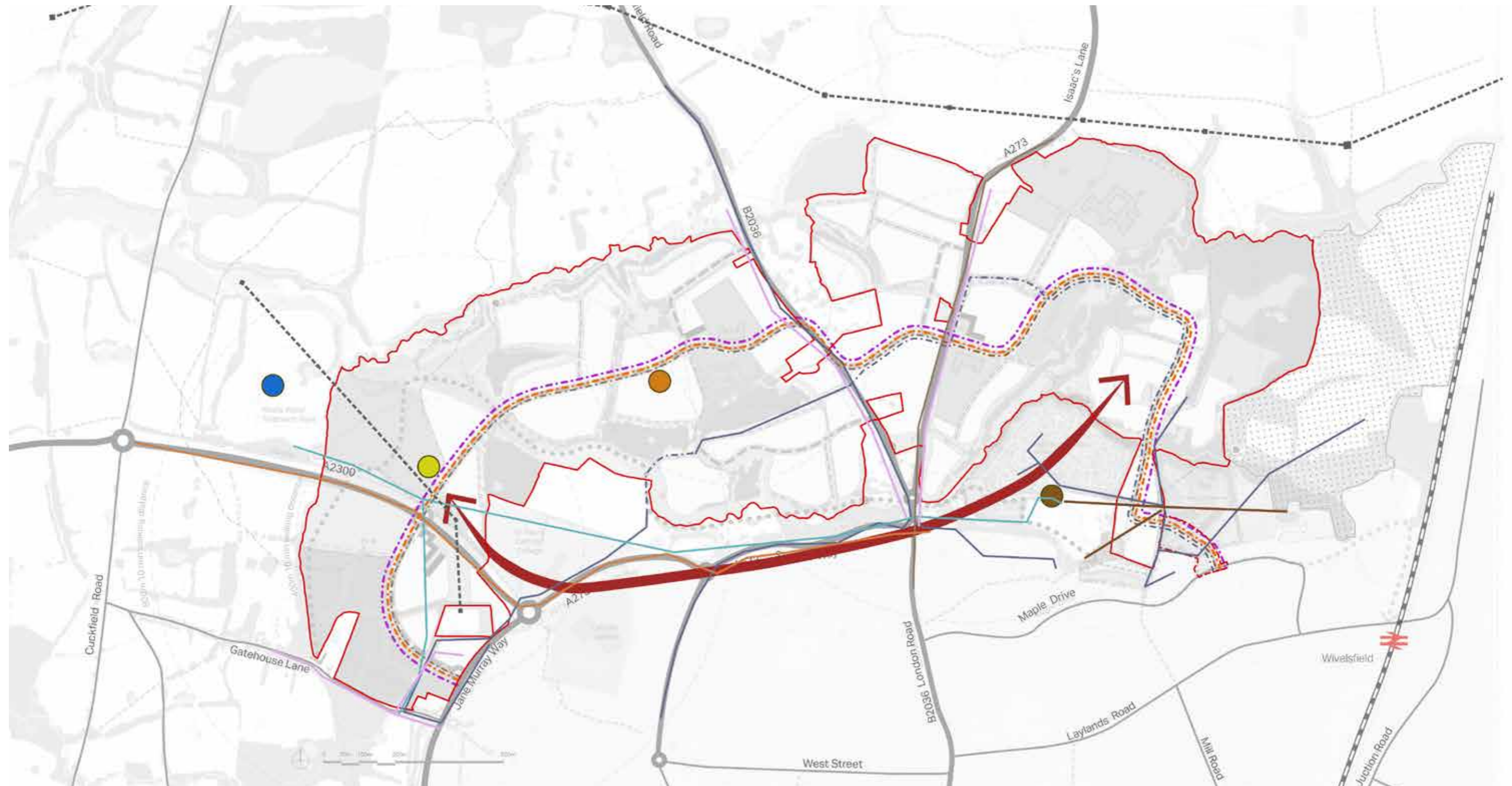
Wherever possible the Masterplan respects the existing alignment of these water mains. However, it is likely that some section of the water main would need to be diverted to accommodate the proposed development. Easement access for the water mains is not required if the main is running along adopted roads. Easement access is ~3m from the centre of the pipe and protection cover may be required if there is any loading over the mains.

Potential reinforcement of the network is likely to be required for the overall Masterplan area. Under the New Charging Rules which were introduced on 1 April 2018, the offsite network reinforcement will be covered by South East Water, and the water Infrastructure Charge will increase per connection to reflect the cost of upgrade works

Telecommunication

Telecommunications infrastructure in the area is provided by British Telecom (BT) and Virgin Media Asset Record Plans were obtained. Virgin Media underground cables are located at Sussex Way, Jane Murray Way (A273) and A2300. No Virgin Media assets are present within the Masterplan area. BT underground cables are located along Cuckfield Road (B2036), Sussex Way and Jane Murray Way (A273). No BT assets are present within the Masterplan area.

A Mid Sussex District Council project called 'Dig Once' to promote investment in gigabit-capable full fibre infrastructure has been funded by the Government through the Local Full Fibre Network (LFFN) fund. The Burgess Hill project will see the public and private sector working together to install the gigabit-capable full fibre infrastructure in Burgess Hill as part of the broader regeneration of the town. This project will deliver utility ducts network which can be rented by utilities providers to accommodate utilities without having to excavate to service an area. This will improve the availability of broadband networks, reducing the time and cost taken to deploy fibre, and reduce future disruption to residents when utilities are upgraded or repaired. The intention would be for the Northern Arc development to be served by this gigabit-capable infrastructure.



| KEY | | Major proposed utilities infrastructure - indicative potential location | | Existing utilities infrastructure - indicative location | |
|-----|---|---|------------------------------|---|--|
| | Site boundary | | New 133kV primary substation | | Fairplace Hill waste water pumping station |
| | Land for Freeks Farm site access and open space | | New foul pumping station | | Goddards Green Wastewater Treatment Works |
| | New 11kV along A273 | | Electricity | | 132kV Overhead powerline |
| | | | Telecommunication | | Telecommunication - Virgin Media |
| | | | Gas | | Rising main |
| | | | Clean Water | | Gas line |
| | | | | | Clean Water |
| | | | | | Telecommunication - BT |





Next Steps

07

7. Next Steps

Following approval of this Masterplan Report, together with the IDP (and Phasing Strategy), the next steps for the Northern Arc development are set out in Table 1.1 below (timescales are indicative only). Further details of the wider phasing of the development are provided within the IDP and Phasing Strategy.

Table 1.1. Indicative Table of Next Steps

| | |
|---------|--|
| Q4 2018 | Determination of the Freeks Farm Outline Planning Application (ref.) for 460 dwellings following assessment of the proposals against the Masterplan Report, IDP and Phasing Strategy. Any approval would be subject to a planning condition requiring the subsequent Reserved Matters Application (RMA) to be accompanied by a Design Guide in accordance with Section 5 of this Masterplan Report. |
| Q4 2018 | Submission of Northern Arc Sitewide Outline Planning Application (excluding Freeks Farm), to be accompanied by a Design Guide in accordance with Section 5 of this Masterplan Report. |
| Q1 2019 | Submission of a Full Planning Application for the Freeks Farm bridge and link road to Isaac's Lane. |
| Q2 2019 | Determination of the Northern Arc site wide Outline Planning Application and the Full Planning Application for the Freeks Farm bridge and link road to Isaac's Lane. |
| Q3 2019 | Submission of Freeks Farm Reserved Matters Application. |
| Q4 2019 | Determination of Freeks Farm Reserved Matters Application. |
| Q1 2020 | Construction commences on Freeks Farm (including the bridge and link road to Isaac's Lane). |

