

DRAFT

September 2017
Slough Northern Extension



Preface

As part of the Review of the Local Plan 2013-2036 Slough Borough Council produced an Issues and Options Document which was the subject of public consultation in January and February 2017.

The Consultation document identified objectives to clarify the Council's priorities and number of spatial options to deliver them. The first objective was, "To meet the Objectively Assessed Housing Need (OAHN) of 927 dwellings per annum within the Borough or as close as possible to where the needs arises within a balanced housing market."

The Consultation document recognised that even if all of the spatial options that were identified were implemented it would not be possible to accommodate all of Slough's housing and employment needs within the Borough. As a result a number of options were proposed which involved meeting this need elsewhere.

One of these, Option J1, involved the northern expansion of Slough into South Bucks in the form of a "garden suburb". A broad area of search was identified from Burnham to Richings Park but no further details were included in the Consultation.

A large number of objections were received from local residents and organisations, many of whom were opposed to the principle of development in land designated as Green Belt.

Respondents were not however able to identify any other reasonable option or combination of options which would enable all of Slough's housing and employment needs to be met sustainably within the Borough. As a result the Council has chosen to continue to consider options such as the northern expansion.

In order to inform discussions about this and begin to test whether this is a realistic sustainable option the Council commissioned Atkins to produce a high level spatial plan to illustrate how a northern expansion could help re-balance Slough's housing market and meet the potential shortfall of homes in the area over the Slough Local Plan period to 2036.

The draft proposals are set out in the following "Slough Northern Extension" document. It should be noted that the report has been published for discussion purposes only at this stage.

It is recognised that the area proposed for the northern expansion is on land designated as Green Belt and so development cannot go ahead unless it can be demonstrated there are exceptional circumstances to alter the Green Belt boundary to accommodate it. This document does not address the case for exceptional circumstances.

The proposed urban extension is also within South Bucks District Council Planning Authority and Bucks County Council Transport Authority, which means that Slough is not the Planning Authority or Highway Authority for most of the area. This means that any review of the Green Belt or development in this location could only be implemented through the Chiltern and South Bucks Local Plan or a review of that Plan.

South Bucks and Chiltern District Councils are not supportive of the proposals and have requested Slough Borough Council insert the position statement on the following page as a Covering Note and reference to that throughout the document to provide readers of their view of its planning context.



Councillor Sohail Munawar
Slough Borough Council
Leader of the Council and Cabinet
Member for Finance and Strategy



Councillor Zaffar Ajajib
Slough Borough Council
Cabinet Member for
Urban Renewal

Important Covering Note from Chiltern and South Bucks District Councils

Slough Borough Council is not the Local Planning Authority, Highway Authority or Education Authority for much of the area covered by this document. Those relevant authorities are South Bucks District Council and Buckinghamshire County Council.

Slough Borough Council commissioned Atkins to prepare the Draft Slough Northern Extension document (the document) to support its proposal in South Bucks District under the Duty to Co-operate in order to help meet Slough's anticipated unmet housing needs to 2036.

As such the document has no planning status and does not form part of the Chiltern and South Bucks Local Plan evidence base. It can however inform Duty to Co-operate discussions with Slough Borough Council.

South Bucks District Council is undertaking a joint Local Plan with Chiltern District Council, the Chiltern and South Bucks Local Plan 2014 - 2036, and is progressing towards Draft Local Plan consultation prior to Submission (Regulation 19 stage).

South Bucks District Council and Chiltern District Council are co-operating on an on-going basis with Slough Borough Council on the emerging Local Plan. However the Councils do not agree on the approach being taken by Slough Borough Council regarding its aspirations for a Northern Extension to Slough in South Bucks District. This disagreement on approach, from Chiltern and South Bucks District Councils' perspective (a position shared with Aylesbury Vale District Council, Wycombe District Council and Bucks Thames Valley Local Enterprise Partnership), is set out in a Duty to Co-operate Position Statement on the Councils' websites (under the Emerging Local Plan Evidence Base pages).

In addition the proposal in the document is contrary to the evidence base being prepared to support the Chiltern and South Bucks Local Plan particularly in relation to the published Green Belt Assessment work. As such the proposal includes land identified for development that has not been identified for potential release from the Green Belt as part of the Councils' Preferred Green Belt Options.

The Northern Extension of Slough proposal is therefore not supported by South Bucks District Council as the Local Planning Authority or Chiltern District Council in undertaking a joint Local Plan with South Bucks District Council based on current evidence base documents available. Further evidence base work including additional Green Belt Assessment evidence base work will inform on-going duty to co-operate discussions with Slough Borough Council.

Chiltern and South Bucks District Councils have provided officer comments on the Draft Slough Northern Extension document and these comments are published on their websites (e.g. again under Emerging Local Plan Evidence Base pages). Based on these comments the Councils have advised Slough Borough Council not to publish the Draft Slough Northern Extension document. Instead the Councils have requested that Slough Borough Council re-consider the document in the light of the Bucks Duty to Co-operate Position Statement and comments on the draft document; to publish a memorandum of understanding setting out respective positions; undertake a correctly ordered evidence base needed to be in place in order to be able to consider the Northern Extension proposal; and to continue with discussions under the Duty to Co-operate to hopefully arrive at an agreed outcome. However Slough Borough Council has decided to publish the document and has agreed to do so with this Covering Note so that readers of the document better understand its planning context.

Should more information be required on South Bucks and Chiltern District Councils position, duty to co-operate discussions and/or the Chiltern and South Bucks Local Plan then the Councils website pages should be a useful starting point otherwise the Council's Planning Policy Team should be consulted (ldf@southbucks.gov.uk or telephone 01494 732269).



Councillor Peter Martin
Chiltern Cabinet Member
for Sustainable Development



Councillor Nick Naylor
South Bucks Cabinet Member
for Sustainable Development



CHILTERN
District Council



SOUTH BUCKS
District Council

Stronger in partnership

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1. Introduction

Purpose

Slough Borough Council's (SBC) planning team have commissioned Atkins to provide a high level spatial plan illustrating the ambition for an urban extension to the north-east of Slough in the form of a "Garden Suburb". The main purpose of the urban extension is to help to re-balance the Slough housing market and meet the potential shortfall of homes over the plan period up to 2036. The scope of the work includes assessing the existing and proposed infrastructure connections, the scale of development, proposed number of homes, schools, employment space, community facilities and green infrastructure.

It is recognised that the proposed urban extension is largely within South Bucks District and outside of the control of SBC. SBC intends to use the development framework to respond to objections raised to its Issues and Options Consultation Document and in its duty to cooperate (DTC) discussions with Chiltern District Council / South Bucks District Council. SBC may in future submit the development framework as evidence to the Chiltern / South Bucks Local Plan examination. It will also feed into masterplanning work that will be carried out for the Heathrow Expansion area.

It is recognised that the proposed urban extension would be in Green Belt and so any development could only go ahead if there were sufficient exceptional circumstances. It is not the purpose of this document to make the case for exceptional circumstances for amending the Green Belt boundary. It does, however, take account of the purposes of the Green Belt in developing the "Garden Suburb".

The Council will continue to look at other options. However, due to the scale of future housing need in Slough and the limited opportunities for accommodating this within the existing built up area of Slough, it is SBC's view that planning of a large scale development in the form of an urban extension to Slough, following the principles of garden cities, remains a realistic, sustainable option that delivers a sufficient range and supply of good quality homes for Slough.

Study Area

Slough's Borough boundary is overall tightly drawn to the north-eastern urban edge of the town, and therefore the area of search for an urban extension extends beyond the Borough boundary to ensure that an urban extension of optimal scale (to meet housing needs in a sustainable manner, over a planned timescale) can be identified. Development in this location will make the most of planned nationally important infrastructure including Crossrail and Heathrow Expansion, as well as optimise use of Brownfield sites.

The area of search has been identified by the Council as the "most promising" location for meeting the overall objectives taking into account the Draft Transport Strategy. The boundary of the proposed area of search and study area for the urban extension is shown on the plan on page 2. It covers approximately 685 hectares and extends from the A4 to the west of Heathrow to Wexham Park Hospital to the north of Slough.

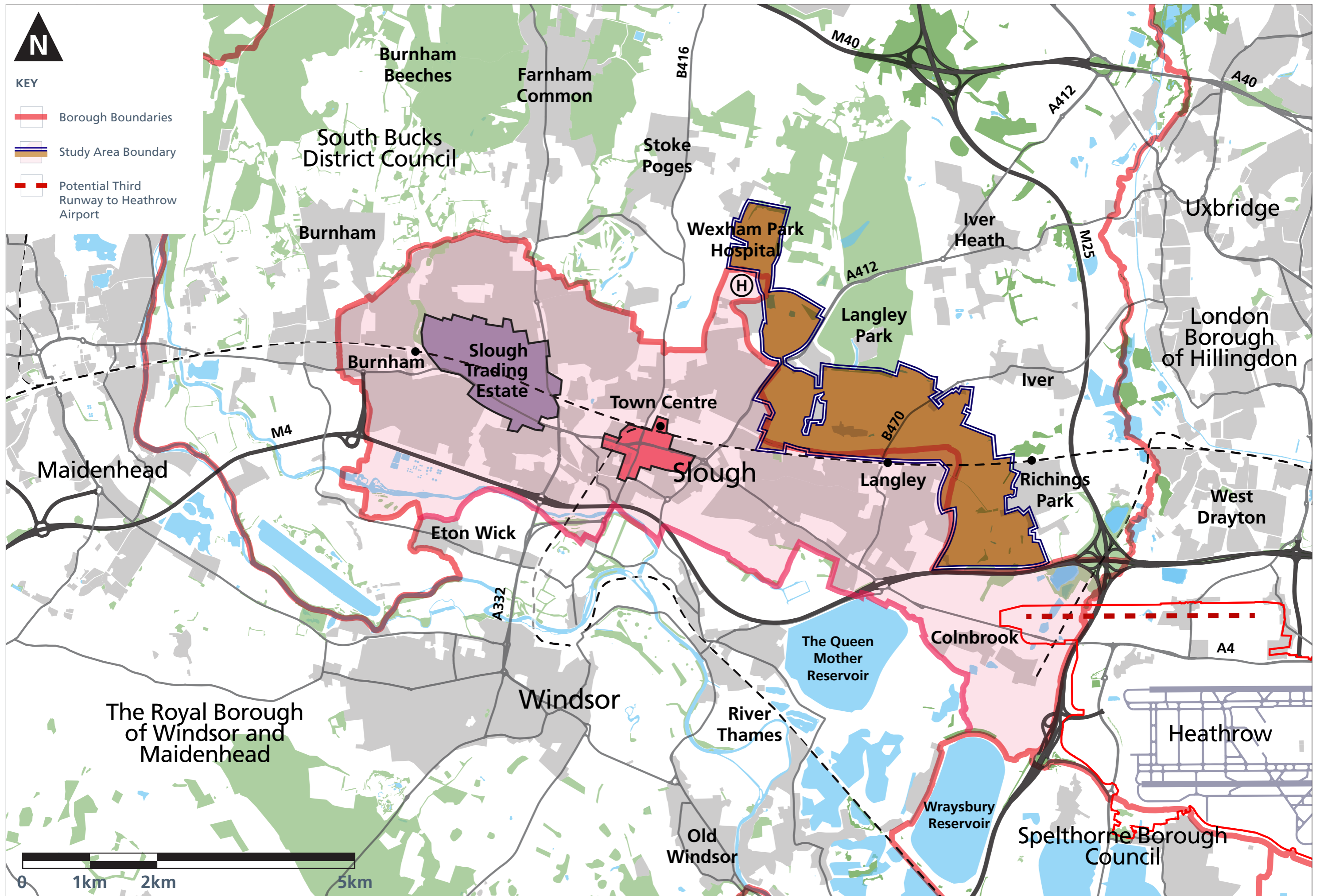


Figure 1.1 –Study Area

2. Vision and Guiding Principles

Vision

The following vision will guide the development of a garden suburb at Slough's northern extension:

The objective is to create a garden suburb of up to 10,000 homes to the north east of Slough that helps to meet the future housing needs for Slough providing a housing offer that is not currently available in Slough. The wide range of housing will include a mix of tenures and house types that are genuinely affordable. Developing in this location will make the most of the public and private investment that is planned for the area including investments in Crossrail, Heathrow Expansion and revitalisation of Slough town centre.

It will offer the best elements of town and country living, by being well connected to the jobs, services and leisure activities located in Slough's town centre, and being well connected to the surrounding countryside.

The garden suburb will have a distinct identity, whilst integrating with Slough. The garden suburb will have a high quality environment that respects and enhances the existing nature and biodiversity, landscape, visual amenity and heritage, and will encourage healthy and sustainable living. The garden suburb will be planned to positively enhance the beneficial use of the Green Belt by providing opportunities for outdoor sports and recreation and a net increase in public access to the Colne Valley Regional Park and other areas of open countryside for residents of Slough and South Bucks. The green infrastructure provided as part of the garden suburb would help in mitigating existing flooding issues in the area.

The necessary infrastructure to support the community will be delivered through land value capture in a phased manner alongside new homes, this will include a new multi-modal transport corridor that will help to improve the transport network for the town as whole, and community facilities including new primary schools and a secondary school that will help to meet some of Slough's existing educational needs.

Guiding Principles

To implement the vision, development will need to incorporate a set of guiding principles:

- **Comprehensively Planned** – work with landowners and developers to ensure that development is planned, coordinated and delivered across the whole site area rather than a piecemeal approach.
- **Well Connected** – the new garden suburb should be well connected through a range of sustainable transport modes with walking and cycling given the highest priority, and as far as possible an approach to development that is focused on public transport nodes. Embedding the principles of Transit Oriented Development (TOD) through the provision of a comprehensive and attractive sustainable transport network will achieve a high public transport mode share, maximise cycling and pedestrian travel and reduces dependence on car use.
- **Community Identity** – a distinct community identity for the area will be important, whilst ensuring the community is integrated and connects well with the existing settlement. Engagement with existing surrounding communities will be important in developing the vision and plans for the suburb. Mechanisms for community ownership or stewardship of community infrastructure and green space should be developed and implemented.
- **Mixed Communities** – the garden suburb will need to meet the housing needs of the existing diverse community in the Slough area, whilst also attracting new residents. To achieve this a range of size, type, design and tenure of housing will need to be provided. The aim will be to meet a range of different housing demands from the affordable to aspirational.
- **Healthy Living** – healthy lifestyles will be encouraged through the development of an extensive green infrastructure network that provides opportunities for leisure, active recreation, access to nature (and the surrounding countryside) and community food growing. The green infrastructure network will support the environmental and ecological functions of the natural environment by retaining and enhancing existing green infrastructure assets and enable the development of new assets.
- **Quality of Place** – the garden suburb should incorporate high standards of design to ensure that it is an attractive place to live. The garden suburb should incorporate existing heritage and landscape features within a landscape and public realm strategy. The urban form and density of development should maximise the efficiency of land use and will incorporate a range of densities up to 100 dwellings per hectare in areas around public transport nodes.
- **Access to Jobs** – it is not envisaged that the garden suburb will provide a commercial centre or significant levels of local jobs, good quality public transport connections to Slough's employment centres will enable residents of the suburb to access employment within a quick and sustainable journey to work.
- **Sustainable and Future Proofed** – the garden suburb should be sustainable now and for the foreseeable future. Aiming for: energy efficiency and zero carbon emissions, incorporating decentralised energy systems and smart grids; incorporate the principles of waste reduction and maximise re-use and recycling; and should be climate resilient, by aiming to mitigate climate change impacts through urban cooling and surface water management.
- **Viable Community** – the garden suburb will be developed with a range of local shops and services and supporting community infrastructure in order to allow people to "live locally". These facilities will be appropriate to the scale of population within each neighbourhood and the garden suburb as a whole. They will be funded and delivered in a phased manner that ensures the community is viable from the outset.

The urban extension will include a range of housing types and densities, these are illustrated below.



Bath Riverside



Kidbrooke, Greenwich



Wye, Kent



Hammarby, Stockholm

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Freiberg, Germany



Finberry, South Ashford



Finberry, South Ashford

This Document relates to land in South Bucks District – see page iii

3. Housing Need

Housing Land Supply

The Issues and Options Consultation Document was unable to identify any options that could between them accommodate the objectively assessed housing need (OAHN) within Slough Borough of 927 homes per annum. The results of public consultation have not produced any reasonable alternative options which could accommodate Slough's housing and employment needs within the Borough boundary. Whilst the exact shortfall has not yet been defined, it could be in the region of 6,000-8,000 homes over the plan period. As a result an urban extension of Slough of at least 5,000 dwellings, with the potential for up to 10,000 homes, is being considered by the Council.

Housing Mix

The majority of the new housing in Slough will be built in the urban area with a large amount of medium and high density housing including some high rise flats in the town centre. The Northern Extension provides the opportunity to help meet the rest of the objectively assessed housing needs that Slough's projected population and household growth will require up to 2036. The garden suburb also provides the opportunity to balance the mix of homes available helping to meet Slough's defined needs for different sizes and types of housing as set out in the Berkshire (including South Bucks) Strategic Housing Market Assessment (SHMA). To create sustainable, inclusive and mixed communities that enable Slough to maintain a balanced community the preferred development option for the garden suburb will provide a mix of types and sizes of homes that will encourage a range of households to live in the area, from single people both young and old, to couples and families.

There is a need to provide housing types that are currently under represented in Slough. Homes at the top end of the market are needed to create a more balanced mix of income levels and socio-economic groups within the town. Housing at the top end of the market, is likely to be detached, 4+ bedrooms, provide off street parking and large gardens.

The preliminary housing size mix for the garden suburb is set out opposite. This has accounted for the need to meet the needs identified in the SHMA, and the need to provide more high end housing. As well as develop a good mix of housing types it is important that densities are optimised, particularly in the areas of the development that are very well served by public transport, to ensure a sustainable pattern of development and to avoid urban sprawl. This factors are also reflected in the housing mix below.

Density	Bedrooms					Total
	1	2	3	4	5	
Low			375	1,050	75	1,500
Medium		450	2,100	450		3,000
High	1,200	1,800				3,000
Total	1,200	2,250	2,475	1,500	75	7,500
% of Total	16%	30%	33%	20%	1%	100%

The assumption is that high density homes will be apartments, while low and medium density homes are houses. This would provide 4,500 houses (60%) and 3,000 apartments (40%).

Dwelling Densities

Dwelling densities for the garden suburb will fall into three categories, low, medium and high. Each of these categories is described below and illustrated in the example images. Higher density residential development is proposed along the public transport corridors and adjacent to local centres. Lower density housing is located on the periphery of the urban extension leading to open fields beyond. It is expected that the average net residential density will be between 35 – 40 dwellings per hectare.

Low density:

- Housing typology - Detached, semi-detached and short terrace
- Typical mix - 70% 4 bed, 25% 3 bed and 5% 5 bed
- Density range - 10 to 30 dwellings per hectare (dph)
- Average density - 20 dph
- Height - 2 storey
- Parking - on plot typically with garage, 2 parking spaces per dwelling
- Private space - each home to have its own back garden

Medium Density:

- Housing typology - Terraces forming perimeter street blocks
- Typical mix - 60% 3 bed, 30% 2 bed and 10% 4 bed
- Density range - 30 to 50 dph
- Average density - 40 dph
- Height - 2 and 3 storey
- Parking - on plot and in courtyards, 1 or 2 spaces per dwelling
- Private space – each home to have its own small garden

High Density:

- Housing typology - Mid-rise apartment blocks
- Typical mix - 70% 2 bed and 30% 1 bed apartments
- Density range - 50 to 100 dph, highest densities close to stations
- Average density - 80 dph
- Height - 5 to 8 storey
- Parking - in basement or podium, reduced provision 1 space per 5 dwellings
- Minimum of 1 cycle space per dwelling
- Private space - in the form of balconies and roof gardens
- Communal space within courtyards

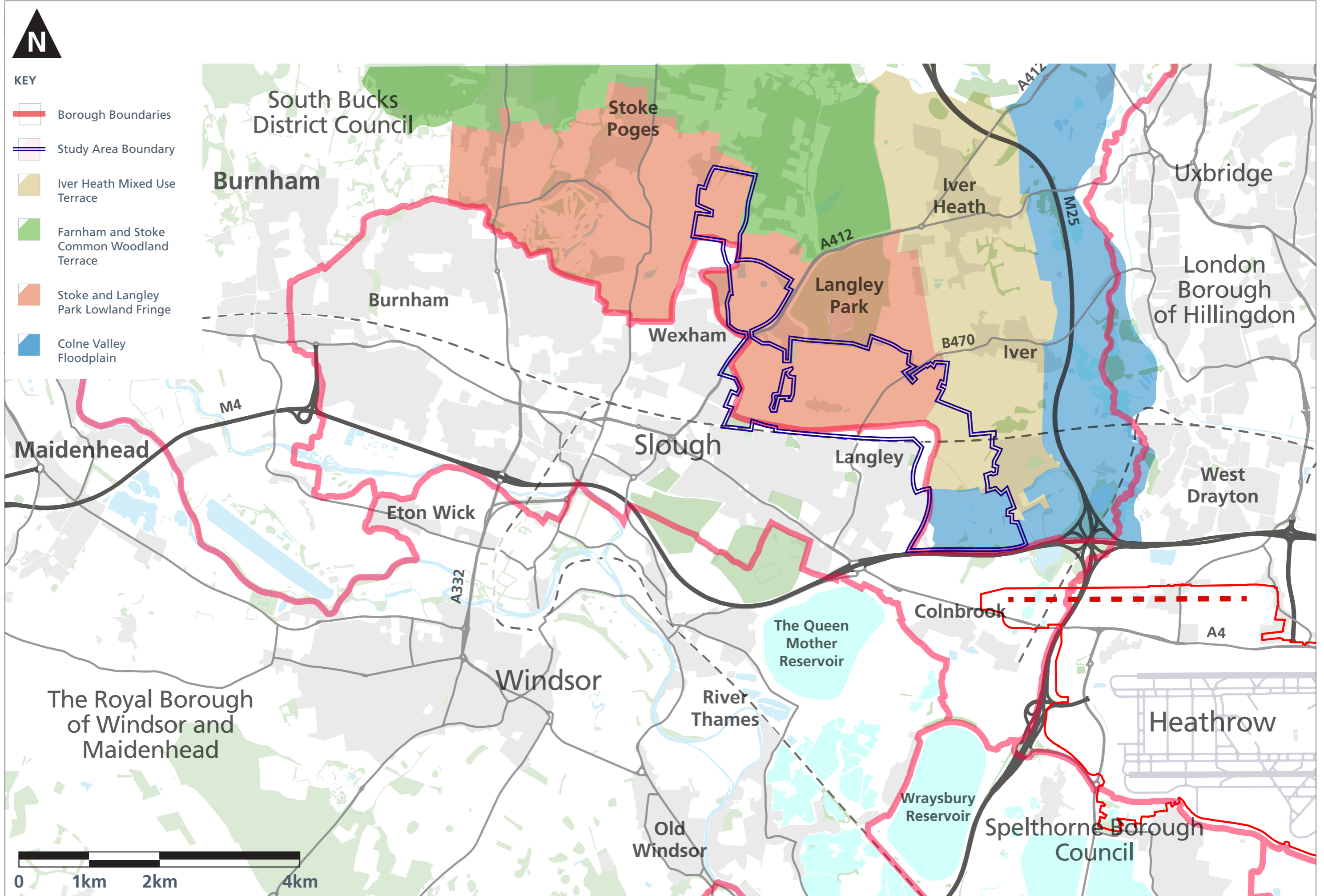


Figure 4.1 – Landscape Character

4. Site Appraisal

Landscape Character

Overall, there are no national designations for landscape and the study area has been heavily influenced by major infrastructure corridors, sand and gravel extraction, brick making and landfill operations. There are also overhead power lines and pylons. There are three golf courses Wexham Park, Iver and Richings Park. The study area includes an area of historic parkland which previously formed the southern part of Langley Park. The remaining areas of arable agriculture are generally of good quality and classified as Grade 1 or 2. Urban fringe activities such as mobile homes, horse paddocks and waste recycling are also present.

Recreational use and access is promoted within the Colne Valley Regional Park (CVRP), which covers most of the eastern part of the study area. The Colne Valley Trail is a 14-mile-long promoted trail from Rickmansworth in the north to Colnbrook in the south, it passes to the east of the site on the near side of Junction 15 of the A4. Groundwork South, is the managing agent for the CVRP community interest company and is responsible for implementing the objectives of the park. The objectives are broadly to maintain and enhance the landscape and historic environment; safeguard the park from inappropriate development; conserve and enhance biodiversity; provide opportunities for countryside recreation; to achieve a sustainable rural economy and to encourage community participation.

The study area falls within the Thames Valley National Landscape Character Area, this is recognised for its urban character, parts are valued for their relative tranquillity within parks and gardens (this includes the historic park, Langley Park and Black Park) and is noted as important for recreation.

Locally South Bucks landscape assessment has identified four character areas which influence the study area. Most of the site is within the Stoke and Langley Park Lowland Fringe character area, landscape guidelines for this area seek: conservation of the historic parkland; conservation of veteran trees; restoration of hedgerows; and considering opportunities for further tree and woodland planting. The eastern part of the site is within the Iver Heath Mixed Use Terrace character area, landscape guidelines for this area seek: appropriate management of arable farmland; conservation and management of hedgerows; considering opportunities for further tree and woodland planting; and maintaining open views across fields.

Character Areas:

Iver Heath Mixed Use Terrace

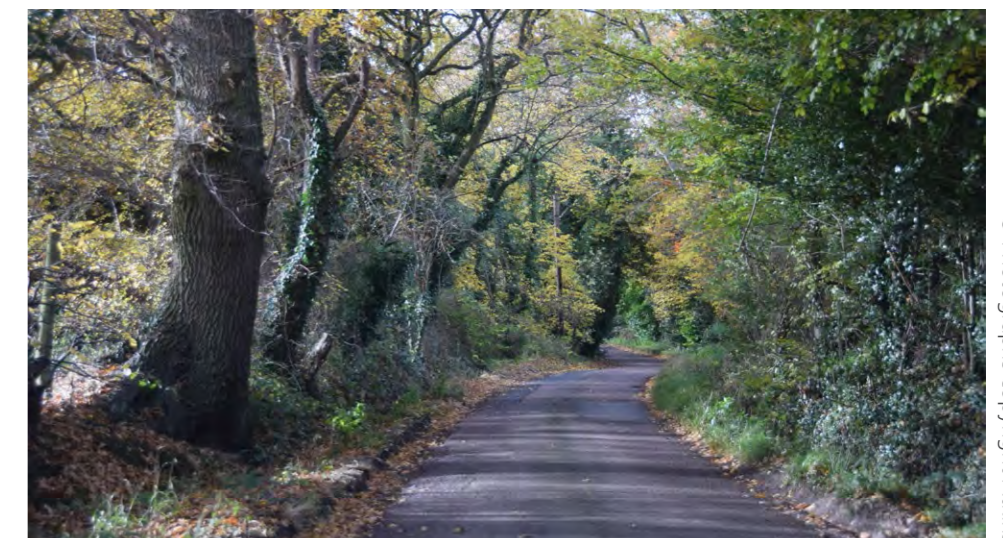
- Transitional lowland area with topography rising towards the north (40-70m AOD), characterised by loamy soil, high water levels and overlain by gravel and ancestral river terrace deposits.
- Water features are limited and tend to be farm ponds, the area is crossed east-west by the Grand Union Canal.
- Land use is varied with business and some industrial uses in the south, pylons and the landscape is heavily influenced by linear features such as roads, rail, motorways, pylons and the Grand Union Canal.
- Cultural interests include Pinewood Studios in the north, and there is a dominance of man-made features creating a visually discordant landscape.
- Visually, the landscape has long views and is influenced by settlement fringes, Iver and Iver Heath are the dominant settlements with large open arable fields divided by a network of hedgerows and hedgerow trees with some smaller subdivisions used for paddocks.
- There are two long distance routes which cross the area, Beeches Way and the Grand Union Canal Walk, important recreational corridors, in other places the access is limited with few public rights of way (PROWs).
- The strength of character and intactness of Iver Heath Mixed Use Terrace is weak.



Open arable fields

Farnham and Stoke Common Wooded Terrace

- A slightly undulating terraced landform underlain by Thames River terrace deposits and occupying higher ground, lying between Alder Bourne Valley to the north and the lowland fringe of the Thames to the south (50-60m AOD).
- Extensive woodland, heathland and grassland with a network of hedgerows/scrub field boundaries, the area has strong ecological importance (e.g. Stoke Common SSSI). These give structure to landscape mosaic of land cover and land use, creating a visually busy landscape, with varying levels of openness and enclosure.
- Water bodies and lakes are associated with the Black Park Country Park and Upton Wood.
- There are some busy road corridors which contrast with the relative rural tranquillity of the woodlands, wooded commons and heathland.
- Settlement patterns are dispersed with the village of Farnham Common, smaller nucleated settlements and farmsteads.
- An accessible and permeable landscape with a comprehensive footpath network to much of the landscape, creating good recreational opportunities and access to country parks such as Black Park.
- The strength of character and intactness of Farnham and Stoke Common Wooded Terrace is moderate.



Wooded lanes This Document relates to land in South Bucks District – see page iii

Stoke and Langley Park Lowland Fringe

- Flat Lowland topography underlain by gravel formations, Boyn Hill Gravel Formation and to the south a swathe of River Terrace Deposits, these deposits have been extracted over a significant proportion of the study area, particularly along the northern settlement edge of Slough.
- Topography rises to the north with an increasingly undulating smaller scale field pattern also to the north. The elevated sections of the study area do offer longer views across the study area to the south with long views across Slough towards Windsor beyond.
- In terms of vegetation there is an increase in woodland cover and tree belts, which increases to fuller woodland cover towards Black Park to the north of the character area.
- To the south woodland and tree cover is sparse and limited to parkland landscape, such as Langley Park and Stoke Park which have recreational value.
- A mixed-use landscape with settlement and interspersed farmland, market gardens, rough grazing, paddocks at edges of settlements which in places have a despoiled unmanaged appearance. This has an urbanising effect particularly around the smaller settlements and creates a strong human presence within the landscape.
- There are several tributaries of the River Thames which cross the study area from north to south and these have in places extensive floodplains and influence the landscape character and vegetation patterns. The Grand Union Canal runs east-west along the northern settlement edge of Slough, providing a significant recreational and landscape feature. There are several designed lakes and ponds within parklands and golf courses, including a lake designed by Capability Brown within Langley Park.

- Parkland landscape and golf courses occupy a significant proportion of this character area with Langley Park and Stoke Park notable registered parks and gardens. These provide important historic/cultural, ecological and recreational value and possess a strong rural character in contrast to the wider landscape which is very mixed in terms of use and character.
- There are two National Trails, The Grand Union Canal Walk and the Colne Valley Trail. Within the parkland areas, such as Langley Park there are good connections north-south to the settlement edge of Slough. Within the area to the south of the rail line, access is more limited due in part to barriers created by the M4 and M25.
- The overall structure of the landscape is fragmented by road corridors, golf courses, market gardens and associated horticultural structures, many now redundant or neglected in appearance.
- There are extensive views across open landscape particularly towards Windsor, particularly across lowlands.
- The northern part of the character area is elevated with views across Slough and towards Windsor. Increasing woodland cover in the northern part of the character area reduces inter-visibility for the land to the north of Slough.
- The strength of character and intactness of Lowland Fringe, Stoke and Langley Park is moderate.

Colne Valley Floodplain

- Occupying the south east corner of South Bucks, this character area is flat, 30-55m AOD, wide lowland floodplain, with very little topographic variation, on alluvium and loamy/clayey floodplain soils, with naturally high groundwater levels.
- Land use is dominated by rough grazing, pasture, with some arable fields; field patterns are geometric and tree cover is limited to the extensive network of hedgerows and some small pockets of ancient woodland closer to settlements. There are also several golf courses in the character area.
- Settlements are located to the north of the character area, elsewhere there are isolated farmsteads and hamlets.
- The landscape is dominated by a network of lakes, connected by rivers and streams which have been created as part of previous gravel extraction sites, many are now used for recreational purposes, angling, canoeing and bird watching.
- Transport corridors cut the landscape including the M25, M40, which have a strong visual and audible influence. Screening earthworks are associated with these in places. Two railway lines also cross the character area.
- The area lies within the Colne Valley Regional Park and a well-established network of public rights of way exists, including the Colne Valley Way, the Grand Union Canal Walk, the Beeches Way and the South Bucks Way.
- Urbanising elements within the landscape such as pylons and road corridors fragment the landscape and create a discordant landscape, views across the landscape are often interrupted by these features.
- Overall, the strength of character and intactness of Colne Valley Floodplain is weak.



Lake designed by Capability Brown within Langley Park



Grand Union Canal



Colne Valley Floodplain

Nature Conservation

There are no Sites of Special Scientific Interest (SSSI) within the boundary of the site, however, the site lies within seven SSSI Impact Risk Zones (IRZ). Certain types of development within the IRZ will require consultation with the Environment Agency (EA) to discuss necessary mitigation measures of potential harmful impacts. There is no specification for residential/rural residential developments to contact the EA.

The Habitat Regulations Assessment (HRA) scoping process assesses the potential effects of a plan or project against the conservation objectives of any European sites designated for their importance to nature conservation. These sites consist of Special Areas of Conservation (SAC, under the Habitats Directive) and Special Protection Areas (SPA, under the Birds Directive). ‘Candidate’ SACs or SPAs are treated as if they were designated. The first part of the HRA process is to scope and screen protected sites that may be affected by development. There is no prescribed geographical distance for assessing risk as this will vary e.g. for air, water or recreational impact but where a risk is identified additional work is required, as necessary, to avoid, manage and mitigate impacts.

The Council’s Screening Opinion for the Issues and Options consultation considered Spatial Option J1 even though it is outside of the Borough as it formed part of the Consultation. That assessed the impact of 5,000 additional dwellings on eight designated areas within 15km (or more for hydrological issues) concluding that the total annual visits would be 4,500 (of a total of 10,790 – 11,190+ additional annual visits, with approximately 4,800 dogs).

The HRA Screening report concluded that significant effects on the qualifying features of Burnham Beeches SAC could not be objectively ruled out based on the information currently available. As such Slough have been invited and attended the joint Natural England, City of London and South Bucks Burnham Beeches working group to understand potential impacts and mitigation. Natural England propose the use of their broad standard of 200m and 5km buffers for seeking mitigation for recreational impacts. This is supported by South Bucks Core Strategy. Part of the area of search for the Northern Extension is inside this area.

The Natural Environment and Rural Communities (NERC) Act (2006) requires every public authority to ‘have regard to’ the purpose of conserving biodiversity (which includes restoring or enhancing populations or habitats) (Sections 40(1) and 40(3)). This then is a general duty to preserve species but the Act focusses on a list of species and habitats of principle importance and includes 56 habitats and 943 species. It is drawn up in consultation with Natural England and draws upon the UK BAP List of Priority Species and Habitats.

It is recommended that a Phase 1 Habitat Survey is undertaken to establish requirements for further survey and impact assessment.

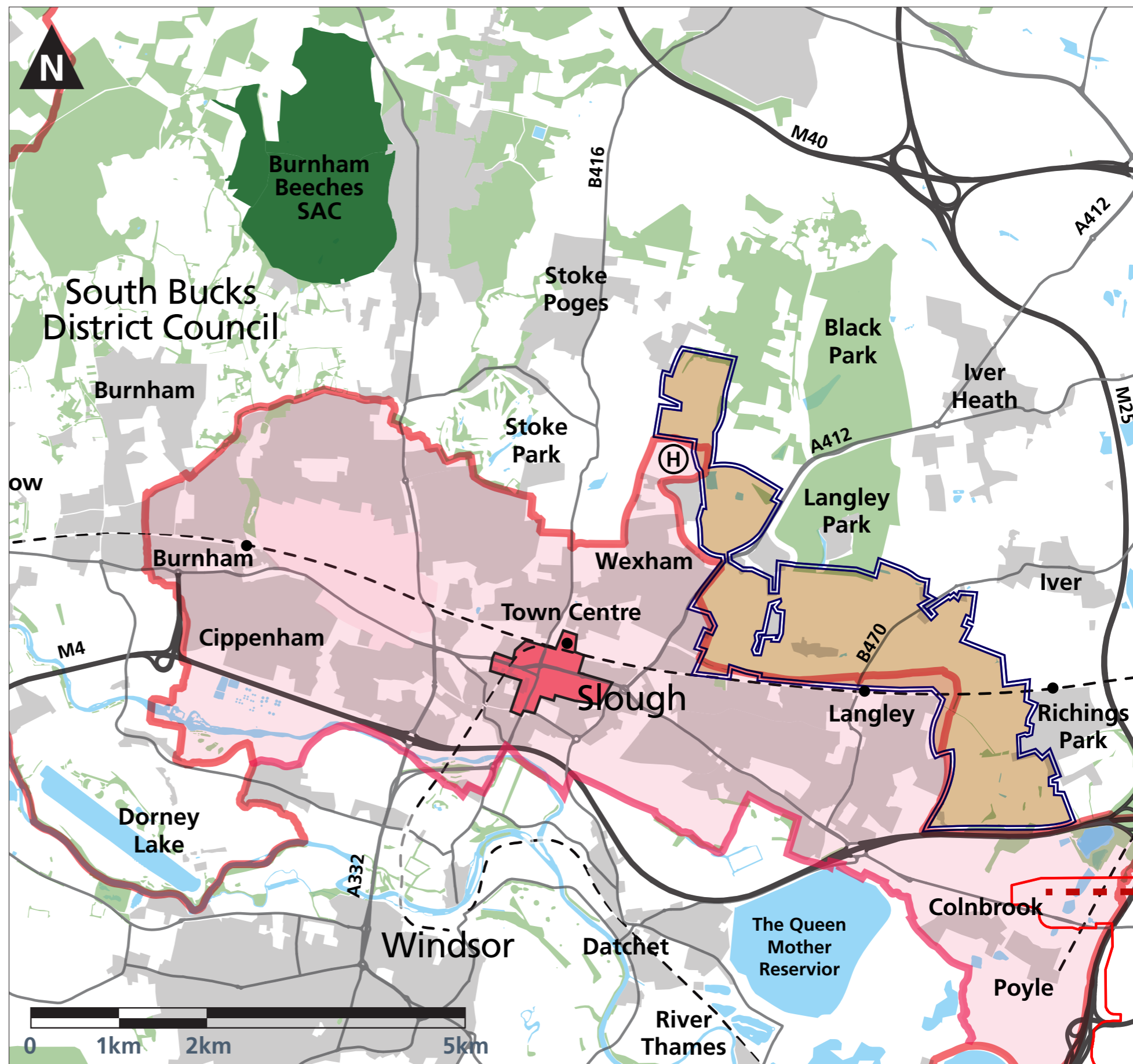


Figure 4.2 – Burnham Beeches Special Area of Conservation (SAC)

This Document relates to land in South Bucks District – see page iii

Heritage

A desktop survey was undertaken to establish the heritage designations on site using DEFRA's online open data mapping platform Magic Map.

There are no scheduled ancient monuments on study area.

There are listed buildings within the boundary of the study area and around the perimeter. The buildings are primarily located within two clusters around George Green and Middle Green, as well as Entrance Lodges and Gates to each corner of Langley Park. All the buildings are Grade II listed i.e. buildings of special interest. Any changes that are made to these buildings will need listed buildings consent. LPAs use these consents to balance the site's historic significance against other issues such as its function, condition or viability.

The site shares the northern boundary with Langley Country Park (Grade II listed). Policy L5: Historic Parks and Gardens has now been removed from South Bucks District Local Plan (Adopted March 1999 Consolidated September 2007 and February 2011), therefore the park has no specific local plan policies relating to development near or within the park. The draft emerging local plan is yet to be published and therefore offers no guidance on this.

The Iver Conservation Area lies to the east of the site, with no adjoining boundaries. Conservation areas are 'areas of special architectural or historic interest', the character or appearance of which it is desirable to preserve or enhance'. These are designated by the local council. The designation allows for stricter planning controls including restrictions on permitted development rights and demolition.



The Capability Brown Lake at Langley Park

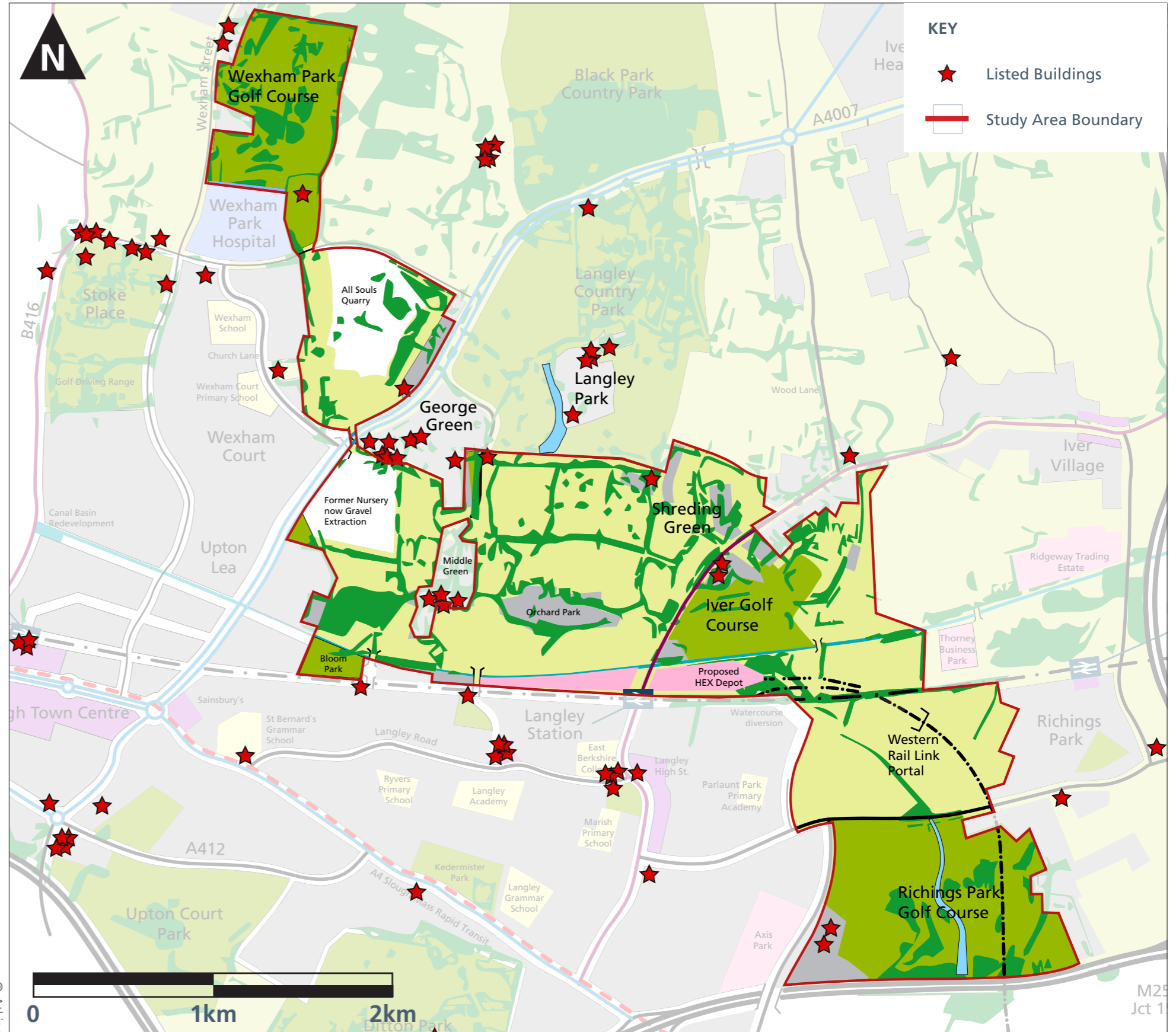


Figure 4.3 – Listed Buildings

Flood Risk

The main watercourse within the study area is Horton Brook. The brook flows in a north-west to south-east direction from close to the Orchard Residential Park to the ornamental dammed lake in Richings Park Golf Course. The construction of the Heathrow Express Depot and the Western Rail Link to Heathrow (WRLth) will require the watercourse to be partially culverted and diverted to the north of Crossrail. The proposed gravel extraction on the former Langley Airfield would require the existing brook to be diverted. The opportunity exists to divert the watercourse around the northern and eastern boundaries of the proposed Parlaunt Farm neighbourhood. It could take the form of a series of constructed wetlands and habitats.

The Environment Agency Flood Map shows land around the Horton Brook near the Orchards Residential Park and Middle Green as Zone 2 'Medium Probability'. This is determined as having between a 1 in 100 and 1 in 1,000 annual probability of river flooding. Land around the southern edge of George Green and to the south of the All Souls Quarry is also classified as Zone 2. There is also localised Flood Risk Zone 3 designation along water ways and drains. This is land having a 1 in 100 or greater annual probability of river flooding. Within zone 3 'more vulnerable' uses for example health care facilities, residential institutions and educational establishments will require an Exception Test to demonstrate that the flood risk will be suitably managed and that the sustainability benefits to the community will outweigh flood risk. The majority of these areas of potential flooding are areas of public open space in the Development Concept.

A flood risk assessment will be required at the next stage to demonstrate:

- What the flood risks are and how they could change;
- Whether the proposed development will increase the flood risk; and,
- Drainage strategies to manage any flood risk together with flood response plans, creating the potential for additional flood alleviation opportunities.

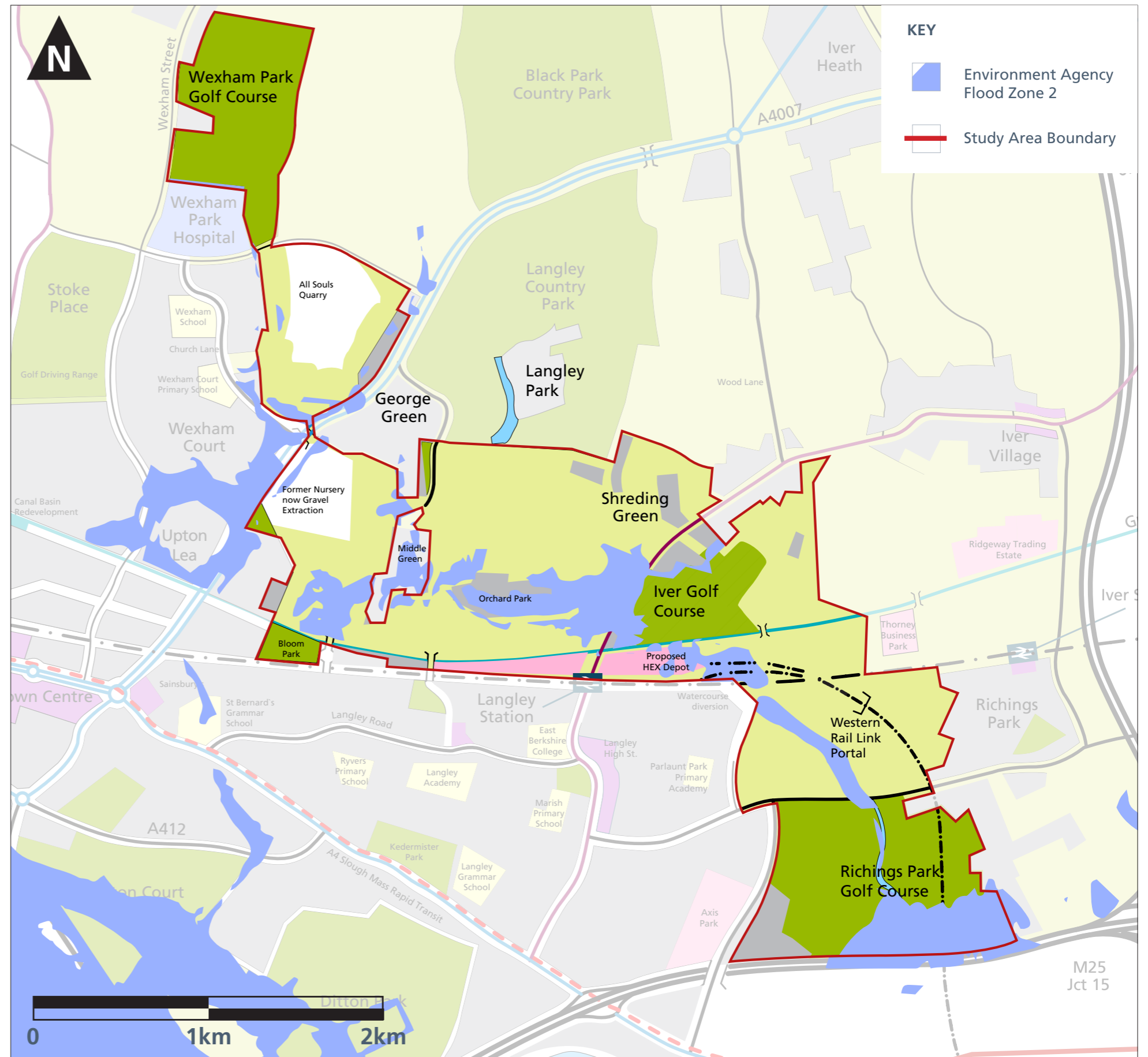


Figure 4.4 – Flood Risk

Waste and Minerals

The entire study area is within a Minerals Safeguarding Area (MSA) but much of it has been dug or is currently being worked. The area immediately to the north of Langley adjacent to the Grand Union Canal was previously the location of a large-scale brickmaking industry. The Grand Union Canal spur arrived in 1882 to service the industry which at its peak produced 14 million bricks per annum in 1908. The bricks were largely taken to London, railway sidings at Langley and Iver also serviced these industries and exported gravel. By the 1940s the deposits of clay, sand and gravels were becoming exhausted. The pits were then used for landfill. Twelve historic and authorised landfill sites have been identified across the proposed site area totalling approximately 90 hectares. The sites contain a combination of inert, industrial, commercial and household waste.

Most of the landfill sites are over 30 years old and have been restored to agriculture. A Contaminated Land Assessment will be required at the next stage to determine whether the former landfill sites are suitable to be built on and remedial work required. This could mean moving contamination, treating it so that it is safe or creating a barrier so that there is no possible link between contamination and future occupants. Landfills using inert waste are potentially more likely to be suitable for development as they do not undergo any significant physical, chemical or biological transformation.

CEMEX are seeking permission for a sand and gravel quarry on 53 hectares of land which until 1958 formed part of Langley Airfield. They want to excavate the minerals prior to construction of the (WRLtH). This may not fit in with the timescale for WRLtH which is expected to start construction in 2019. The land is classified as Grade 1 agricultural quality.

Further site investigation would be required (at detailed masterplanning stage) to confirm whether remediation of former landfill sites would be required, see Figure 4.5.

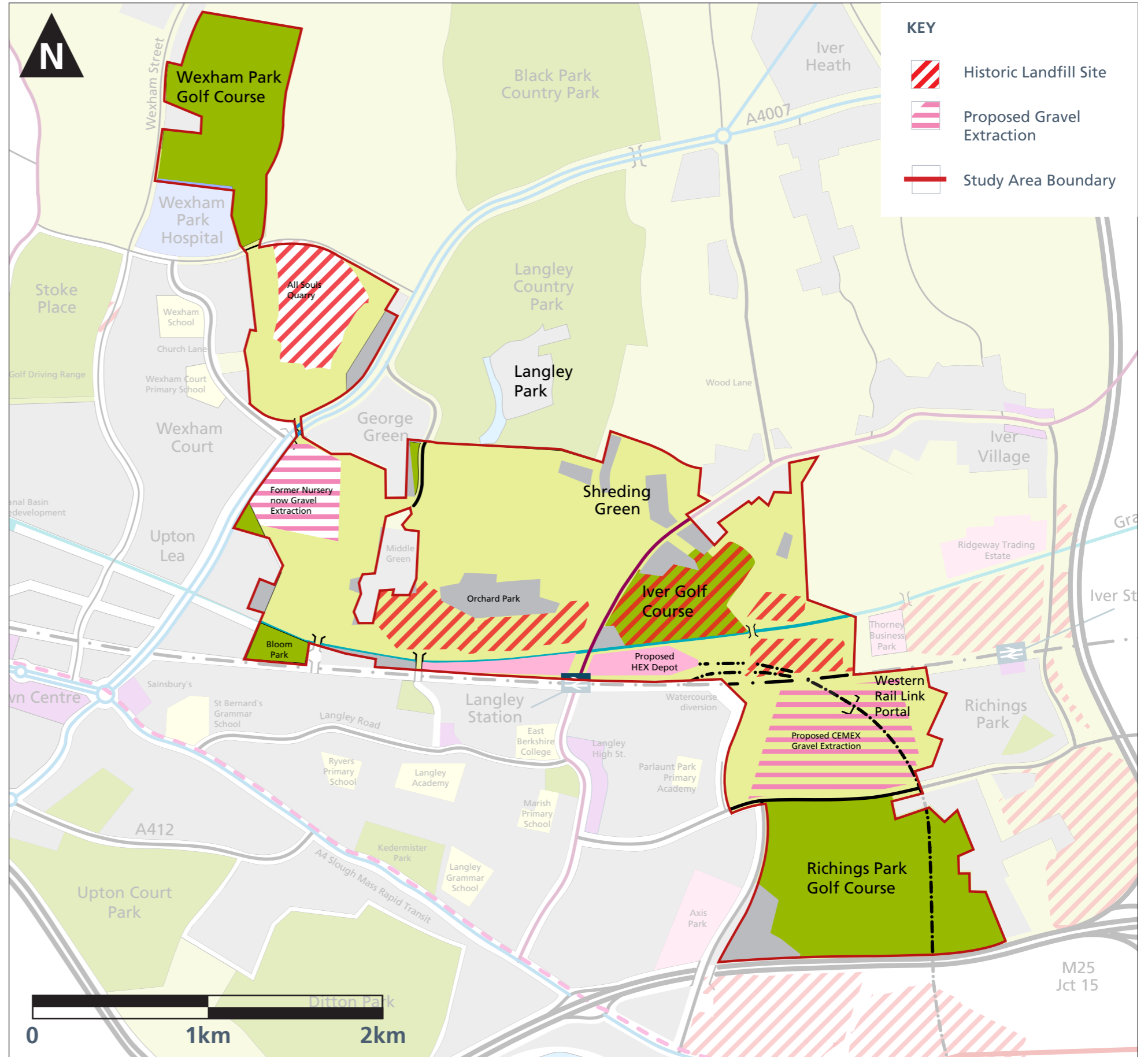
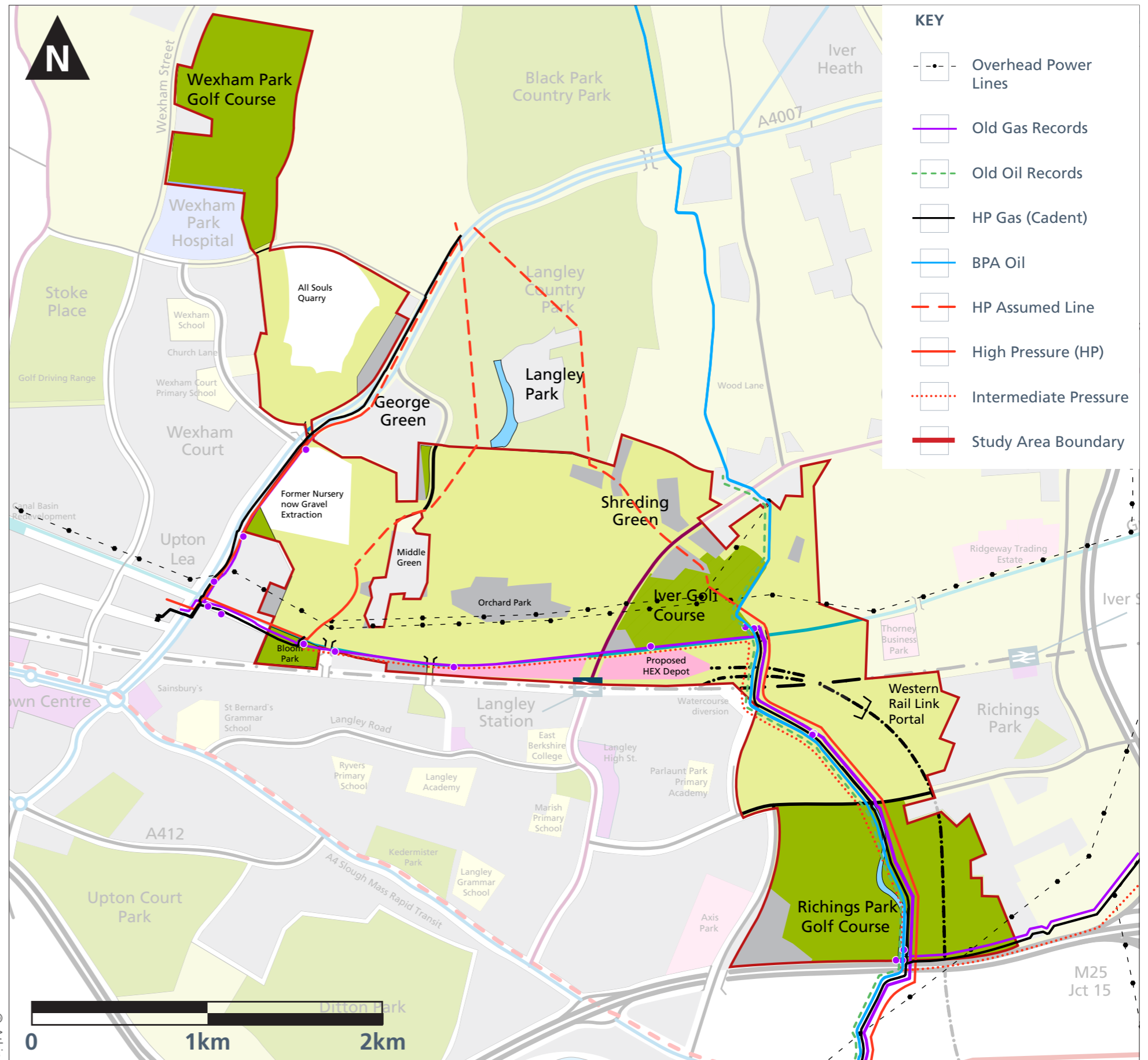


Figure 4.5 – Waste and Minerals

Utilities

An electricity substation is situated north of the A4007. From here a 275; 66/ 275kV overhead electricity line and an underground transmission cable run southwards to the east of the proposed site. The lines run approximately along the route of the M25 on either side of the carriageway, continuing past the site, before each line crosses the M25 just north of J15/J48 junction and south of Iver station before continuing southwards and diverging.

There are various oil and gas pipelines that go through the study area, these are shown on Figure 4.6, Utilities. Development areas are largely unaffected by the pipelines but there are areas of Parlaunt Farm, Shreding Green and Middle Green where detailed consultation with the relevant utilities providers would be required to ensure the pipelines are not affected by the development. There is sufficient developable land available to allow for green corridors or open space in these areas to account for any issues with developing over the pipelines.



Overhead powerline running to the south of Orchard Park

Figure 4.6 – Utilities

Existing Public Rights of Way

Footpaths/bridleways

The study area has comparatively few public footpaths and bridleways. The agricultural land at Parlaunt Farm to the east of Langley has no PRowS, similarly the golf course at Richings Park. The study area to the north of Langley has two north-south footpaths connecting with the existing bridges over the Grand Union Canal and the railway line.

Colne Valley Trail

The Colne Valley Trail starts at Rickmansworth and follows the River Colne southwards ending at Colnbrook. The 14 mile route is managed by Groundwork Thames Valley. Within the study area the trail runs north-south through Black Park and Langley Park Country Parks and then follows a country lane before joining the Grand Union Canal towpath.

National Cycle Route 61

National Cycle Route 61 is part of the National Cycle Network managed by the charity Sustrans. It runs for 34 miles from Maidenhead to Rye House Hertfordshire. The first section from Maidenhead to Uxbridge passes through the study area to the north of Langley then follows country lanes and sections of unsurfaced bridleway before joining National Cycle Route 6 on the towpath of the Grand Union Canal Walk at Cowley in Uxbridge.



Existing footpath following the towpath of the Grand Union Canal

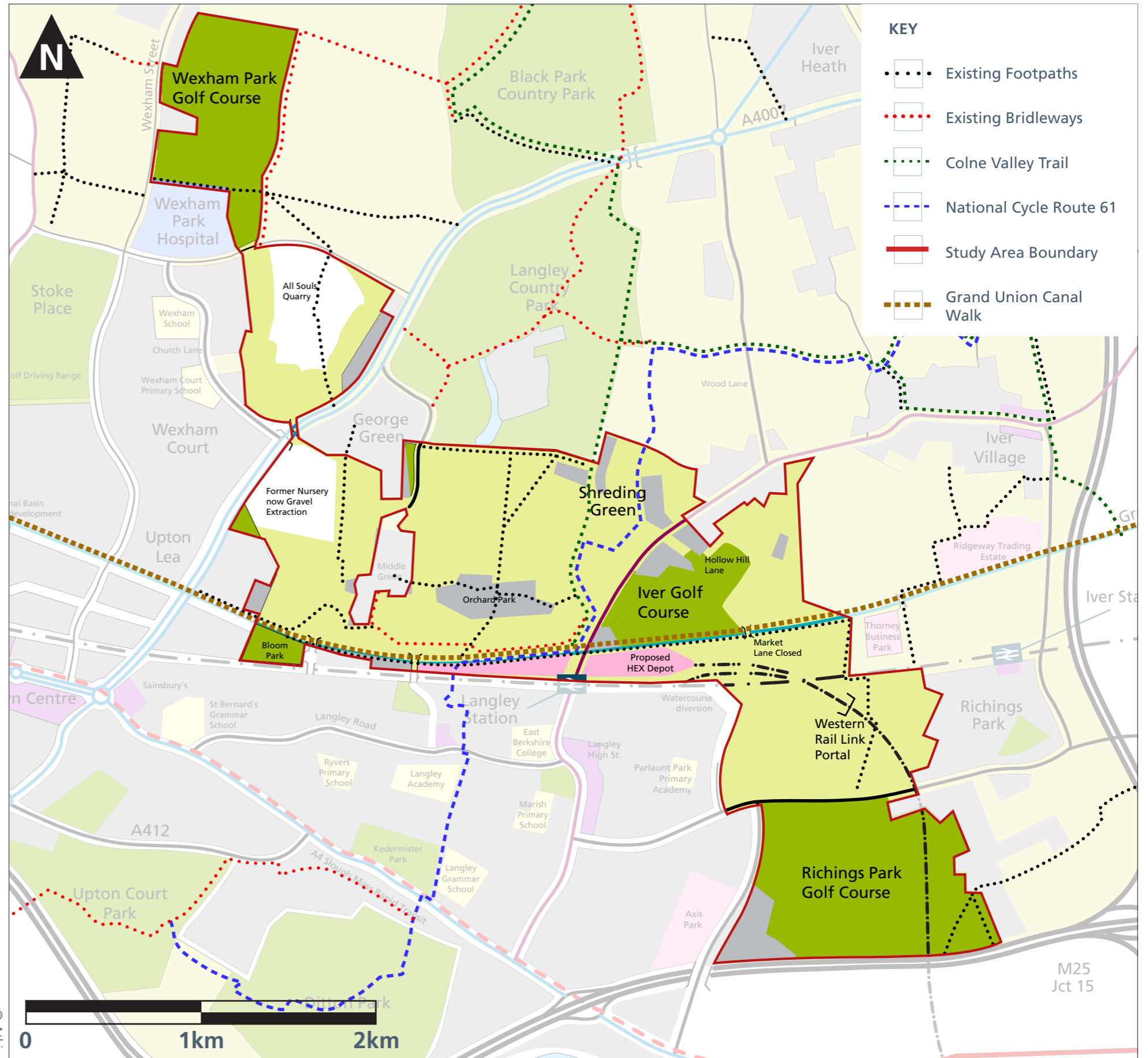


Figure 4.7 – Existing Public Rights of Way

5. Transport

Existing and Planned Transport Infrastructure and Services

The major roads in the vicinity of the study area are the A412 (Uxbridge Road) running south-west to north-east through the area; the B470 (Langley Park Road/Langley High Street) running north south; and to a lesser extent St. Mary's Road, and Middlegreen Road. Both of these roads join the A4 to the south of the study area. The A4 is the main east-west road through Slough and as such is important to provide connectivity to the M4 motorway, central Slough, Slough Trading Estate, and the Poyle/Colnbrook industrial area. The A4 is heavily congested at peak times and the junctions of the A4 with the A412 and Langley High Street could be a constraint on delivery of more housing. As it passes Langley the A4 is just a single lane in each direction, with separate bus lanes for the majority of its length.

Langley is currently served by two main bus services (the No. 3 and No. 7) which connect Langley to central Slough, Heathrow Airport and Uxbridge. Service No. 7 has a high frequency operation of 6 services per hour in each direction, service No. 3 has three services an hour in each direction.

Slough Mass Rapid Transit (SMaRT) is a project to promote a fast, reliable and high quality bus service that connects Slough Trading Estate, Slough town centre, and the east of the Borough, with the potential to connect onwards to Heathrow Airport. The first section of SMaRT along the A4 to the west of Slough town centre is currently being built. Slough Borough Council has aspirations to extend SMaRT along the A4 to the south of the Northern Extension and towards Heathrow Airport. This provides an opportunity for public transport services for the garden suburb to link into existing planned SMaRT services.

Langley Station is currently served by four trains per hour per direction by local Great Western Railway services between London Paddington and the Thames Valley. The rail station is well located for the future extension to the north. From December 2019, the station will be served by Crossrail (Elizabeth line) services which will replace existing services and provide up to four trains per hour per direction to central London and Reading. Crossrail services will also stop at Iwer Station which is less than 3 kilometres to the east. Proposals are currently being developed for Western Rail Link to Heathrow (WRLtH) – a new rail link that will provide a direct route in to Heathrow Airport from Slough and the west.

Cyclists and pedestrians are catered for within Langley, albeit the provisions for cyclists are often restricted due to a lack of space. The Canal also provides an east-west pedestrian and cycle link.

Network Performance

SBC does not wish to see any deterioration of the current performance of the road network as a result of the garden suburb. Therefore, appropriate mitigation will be required to minimise the demand for travel by car, with selective enhancements to the road network where additional capacity is critical to connectivity and access.

Traffic congestion is already a challenge in Slough, particularly at peak times. The existing road network is currently under significant strain with approximately 450 million vehicle kilometres being travelled in the Borough each year (excluding M4 traffic). It is estimated that congestion is costing the town £34 million each year in wasted travel time and that travel speeds are being reduced by 8% on average.

Congestion results from the network having insufficient capacity to deal with the demand for travel by car and other motorised vehicles. As with car mode share, there are several factors which result in such a high level of demand including:

- High car ownership and mode share;
- High levels of commuting by car to and from the Borough;
- Availability of parking at workplaces in the Borough;
- North-south through traffic, for example between the M4 corridor and M40 corridor; and east-west through traffic, especially when there are incidents on the M4; and
- High volumes of school-related traffic.

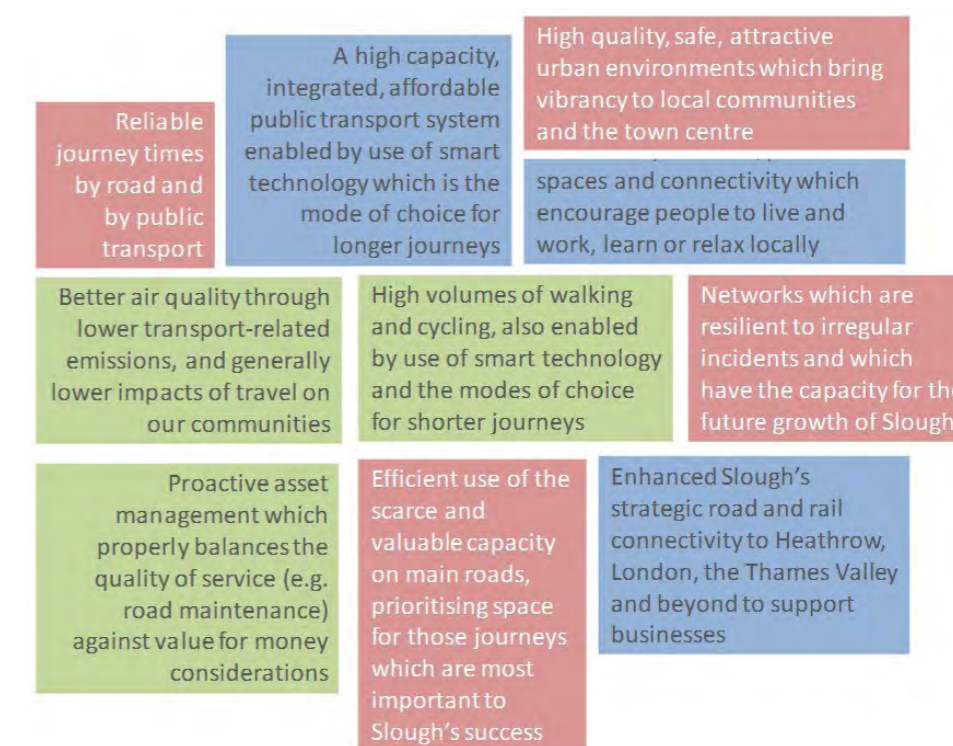
Work is underway to improve knowledge about locations of congestion through development of a new traffic model. Broadly the roads in the vicinity of the garden suburb are less congested than some roads in Slough, but there are some congestion hotspots which will require addressing including Langley High Street and the A4 junction with Uxbridge Road.

Recent trends suggest that these challenges are likely to become more acute in the future. In particular, the demand for travel is expected to increase as a result of anticipated commercial and residential development; and a high, and rising, birth rate, manifested in a 50% increase in school places in Slough in the last five years.

Forecasts suggest that total traffic could increase by 10% between 2015 and 2027, resulting in an increase in congestion of 15-20%. This will equate to a total queueing time increase of 20% during the morning peak period and a 14% increase during the evening peak.

Transport Led Development

Slough's major road network is congested at peak times; current forecasts suggest that congestion will worsen further as demand for travel continues to increase, in part due to the growth in housing and employment set out in the Local Plan Review. Slough's draft Transport Strategy Vision includes an aspiration for Slough to become a highly connected town characterised by:



To achieve this vision, the Council must either, maintain traffic at existing levels, but ideally, reduce traffic below current levels. To achieve this vision there is a need to both reduce the underlying demand for travel by private car amongst current road users, and seek to minimise the number of new car trips associated with additional homes and jobs.

In planning the garden suburb, it is imperative to reduce the need to travel and provide high quality alternatives to the car. In addition to supporting the Slough-wide vision, minimising the use of private cars, especially for shorter journeys, will reduce the impacts on the current road network in the vicinity of the garden suburb, and reduce the need for expensive new capacity.

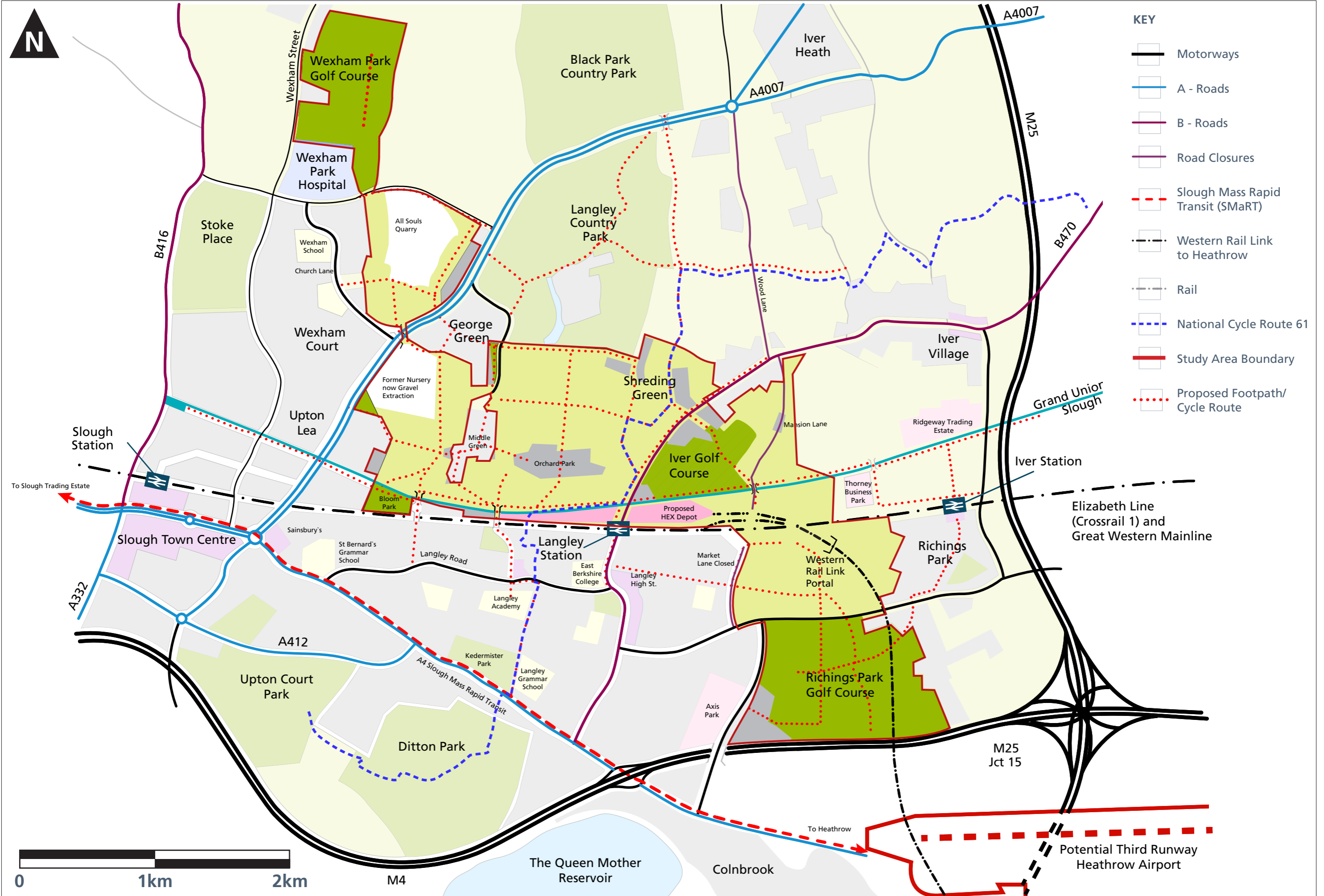


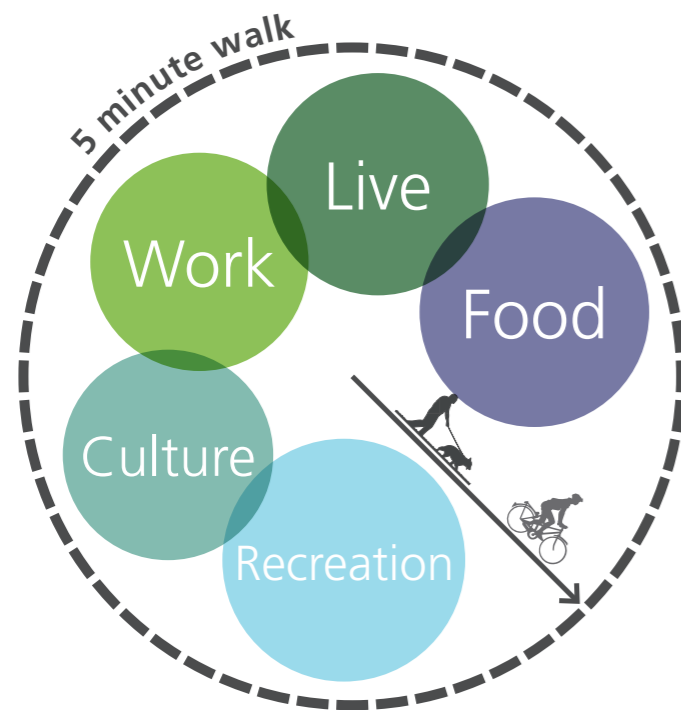
Figure 5.1 – Existing and Planned Transport Infrastructure

Walkable Design

International best practice encourages mixed use developments which are permeable by all modes, with the potential for residents to “live and work” within the same area. This type of development enables residents and workers to choose to walk and cycle, rather than requiring them to drive or use public transport due to prohibitive distances between different land uses.

The quality of public realm is widely acknowledged as being essential to the creation of environments that people wish to live and work within. Developments that enhance the public realm for users, particularly for pedestrians, can produce measurable benefits to the local economy, health, social wellbeing and safety.

The development should integrate walkable design, placing pedestrians and cyclists as the highest priority. To support this, pedestrian and cyclist routes would link the transit network to the wider development and existing origin / destinations including Black Park and the canal as well as the proposed green corridors.

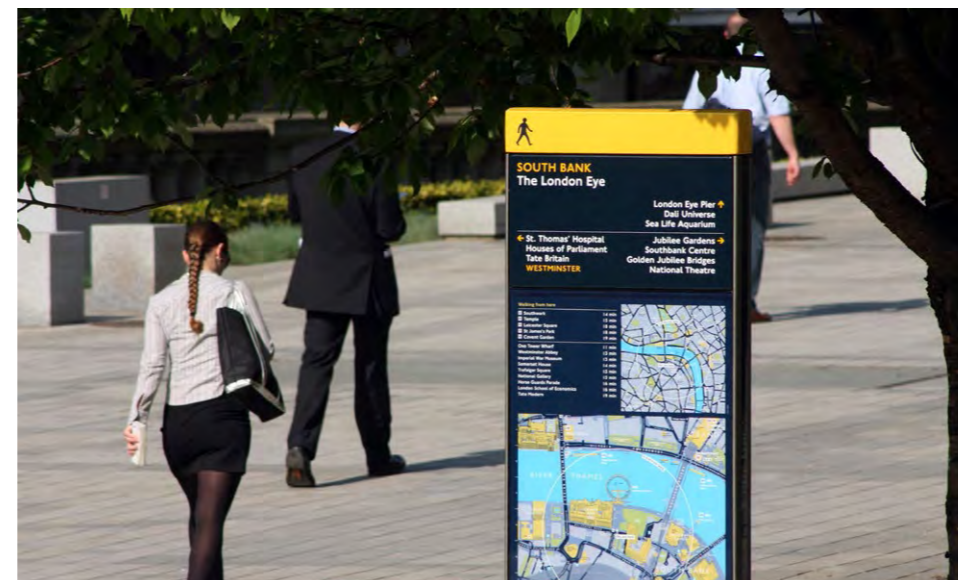


5 minute living

Wayfinding Signage

On-street wayfinding signage in the form of map-based totems and fingerposts have been very successful, particularly in London, at encouraging walking and giving pedestrians the confidence to navigate to destinations in their near vicinity. Map-based products provide indicative journey times, helping users understand their destination is a walkable distance away. Wayfinding products are particularly effective when combined with public transport service information at key interchanges. As well as navigational assistance, map-based products help to promote facilities and services in the local area.

Innovative technology can be applied to cycle and pedestrian routes to further encourage travel by these modes, incorporating lighting features which may also work towards diminishing the perceptions of personal safety issues.



On-street wayfinding signage

Cycle Friendly Design

New cycle infrastructure would be a combination of off-road cycleways and kerb segregated on-road cycle lanes creating a cycle network of Mini-Holland standard. The infrastructure would be a step change in quality to what generally exists currently in the Borough.

Additional pedestrian footpaths and cycle routes will be provided to connect to key destinations such as schools, public open space, local facilities and Langley Station. Outline proposals for the main pedestrian and cyclist routes are shown on the development concept plan.

New strategic cycle routes would either be constructed or existing routes enhanced and extended. These routes would connect into Transport Hubs and seamlessly connect into the wider existing cycle network. The routes are as follows:

- The existing cycle route along the Slough branch of the Grand Union Canal from Uxbridge would be enhanced through the Canal-side developments and be extended to connect directly to Slough Station and the town centre;
- A new south-north route would connect the A4 London Road, Langley village centre, Langley Station, the new secondary school, Langley Country Park and Black Park;
- A new green corridor would connect Black Park, All Souls Farm, and Wexham Secondary School, before following existing connections along Norway Drive and Wexham Road to Slough town centre and Slough Station; and
- A new route connecting Langley Station to Heathrow following the multi-modal corridor, Parlaunt Farm, Axis Park and joining existing routes along the A4 Colnbrook Bypass.



Cycle hub at stations

© Cyclehoop

Transit Network

At the heart of the transport proposals is a new transit network running through the garden suburb. The transit network would form part of a broader Slough-wide network built on the current SMaRT proposals to provide an integrated network which links the development sites to:

- key employment locations (such as Slough town centre, Slough Trading Estate, the Poyle / Colnbrook industrial area, and Heathrow Airport);
- Elizabeth line (Crossrail) and WRLtH services at Langley and Slough stations;
- London Underground and bus services at Heathrow and Uxbridge; and
- strategic Park and Ride sites on the edge of Slough to capture trips to the Borough from further afield.

At this stage, we are not specific about the exact form of the transit technology; other than that it should run on dedicated infrastructure through development sites as a minimum to enable vehicles to run uninterrupted from general traffic. Vehicles must be capable of operating on all parts of the network, so in the first instance this may be SMaRT buses which run on a guideway or bus only road through developments. However, our vision for a very high quality public transport network means that in time we may examine tram, Public Rapid Transit (PRT) Pod Cars or other options.

The proposed routing of the transit network is shown in Figure 6.2 - Development Concept. This shows a network running from Slough Station (although services could begin further west) via the Akzo Nobel development site to the east of the station and onto Uxbridge Road. On Uxbridge Road, services could be segregated through use of some of the existing carriageway space although there are options to divert the network off-road and into the development sites at Middle Green.

At Middle Green, the network splits, with one line branching north via George Green, and the All Souls Farm development site to Wexham Park Hospital (which could also be home to a strategic park & ride site and further development to the north). The other branch would head east, running south and east to the high density Canal Side development, also serving Langley Station and High street.

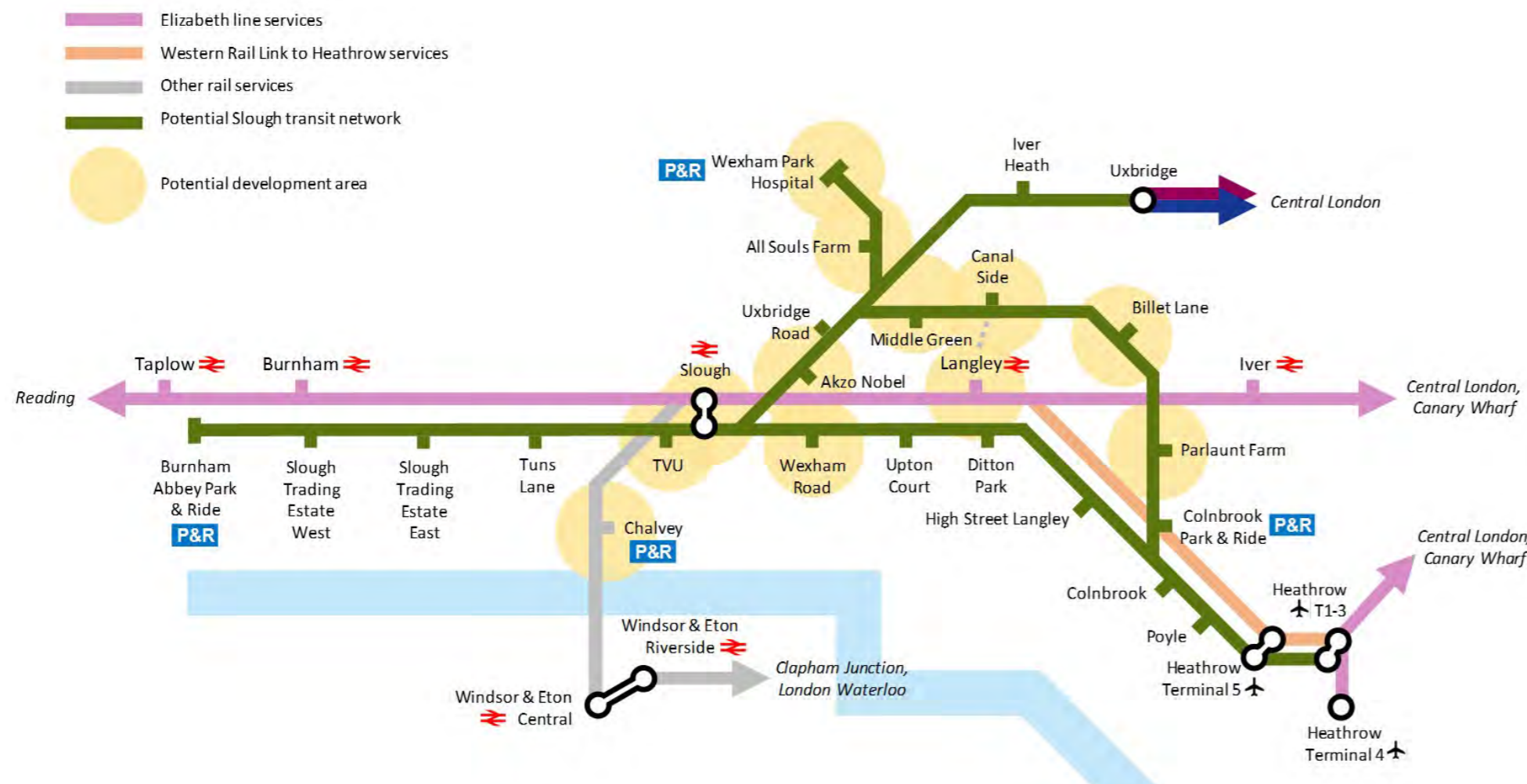
East of the planned Heathrow Express depot, the transit network would turn south, crossing the Grand Union Canal and Great Western Mainline before serving the new Parlaunt Farm development. The services would continue south, crossing the M4 on a new bridge into another strategic park and ride site on the current Biffa landfill site. From here services would interchange onwards along the A4 towards Slough town centre or continue south and east towards Heathrow Airport.

The extent of segregation is assumed to be significant to ensure fast and reliable services which are unaffected by general traffic congestion. There are opportunities to run services partly on and partly off the core network however, for example some services could run on street (possibly with some priority) via Langley High Street and Parlaunt Road instead of via the new canal and railway crossings.

Some investigation of the feasibility of these crossings has been undertaken. Two options may be feasible but both require significant further investigation:

- Bridging both the canal and railway. Given that the rail line is above ground level the proposed bridge will require substantial ramps to reach the required safe clearance over the rail line. The route would need to be designed to accommodate buses and so the maximum gradient should be restricted to 4%. It is likely that the bridge over the canal will be contiguous with the bridge over the railway.
- A low opening bridge over the canal and passing under the Great Western Main Line to the east of the WRLtH lines but in the same box structure. The transit would then pass back over the WRLtH lines when they drop into cutting south of the Great Western Main Line.

As owner of the segregated infrastructure, the Highway Authority would grant access rights to it, and therefore would be able to negotiate service specifications with operators. In addition to services using the core infrastructure, other services, such as those via Langley High Street, may also use parts of the busway. For example services could operate as far as Langley before travelling on-road to Iver and then north to Uxbridge. In a deregulated environment, operators may also choose to operate other bus services entirely off the busway.



Highway Network

A key feature of the masterplan is a traffic 'watershed' which prevents private vehicles passing east-west through the main part of the garden suburb between Middle Green and Shreding Green and Canal Side. As such, it is proposed that access to/from Middle Green will be via Uxbridge Road only.

Access to All Souls Farm will also be predominately from Uxbridge Road although some may access via Church Lane. Road access to the development to the north of Wexham Park Hospital is more problematic due to the heavily congested Church Lane/Wexham Street roundabout. Stoke Green, Church Lane and the roundabout suffer from east-west rat-running traffic. Further work will be required to investigate if this traffic can be accommodated elsewhere to enable the Wexham Park development.

The transport aspects of the masterplan seek to minimise traffic impacts on Langley, so it may be necessary to close or limit use of Middle Green Road and St Mary's Road where they cross the railway. Ideally as redevelopment of industrial sites along the railway occurs, these crossings could be replaced with landmark pedestrian and cycle crossings.

There is also potential for a second north-south traffic 'watershed' north of the Canal Side development meaning that traffic to/from the north of Canal Side is unable to use Langley High Street. This would assist in protecting Langley from additional traffic, increase the road space available for bus priority for services diverting off the busway at this point to directly service Langley, and also increase options for improving the public realm around Langley station, perhaps through a shared space scheme.

Access to Shreding Green, Canal Side would be from the east only due to the proposed traffic watershed between Middle Green and Shreding Green. The main existing routes to the east are Wood Lane, which joins the A412 west of Iver Heath, and the B470 Langley Park Road towards Iver and Hillingdon. Both these roads are likely to be retained, but may need enhancement.

The development concept therefore includes a new road running north/south east of Langley, through the Parlaunt Farm development to the A4 at Colnbrook. The road would be integrated with the transit network at this point, forming a multi-modal corridor with potential for a high quality, continental style boulevard. The road could either share the proposed transit bridge over the M4 or deviate

from the transit network north of the M4 to re-join the existing road network at Sutton Lane. Further investigation of these options is required.

Options to deter through traffic will therefore need consideration: both engineering-led options to make the route unattractive for longer trips, and measures which penalise through traffic, for example a localised congestion charge from which local residents are exempt.

In broad terms, it appears possible to provide appropriate access to the garden suburb from the existing road network. However, the additional vehicle trips generated will impact existing roads and are likely to require enhancements to them, such as on the A4.

The following principles will need to be considered as the design becomes more detailed:

- Gradation in amount of parking per home based on density and location in relation to public transport and facilities;
- A minimum of one electric charging space per house;
- High quality cycle parking for houses and individual cycle storage for flats;
- The right balance between requirement to minimise car use with requirement to make dwellings attractive to residents;
- Parking supplemented with on-street car club bays;
- No footway parking to be allowed – measures required to discourage this such as tree planting, double height kerbs (see Kings Reach for example) and defined on-street parking bays and off-street car parks; and
- Additional parking restrictions will be required where close to key amenities e.g. Wexham Park Hospital affecting development around Stoke Green/All Souls Farm.

The requirements of pedestrians should be considered first, then cyclists, public transport users, service vehicles and lastly other vehicles. Well-connected street networks should be designed in harmony with local context, and a full range of pedestrian-orientated design strategies incorporated within the road design.

Transport Hubs

Three new Transport Hubs are proposed as part of the Development. These are proposed at Wexham Park Hospital, Langley Station and the A4 London Road Park and Ride site. The Transport Hubs will enable interchange between several modes of transport:

- Public transport using the transit network;
- Park and Ride;
- Other local bus services;
- Rail at Langley Station;
- Walking and cycling routes;
- Cycle hire facilities; and
- Car parking facilities.

Potential Development Impact

Trip generation

The TRICS database has been used to estimate the number of vehicle trips that may be generated by, and attracted to, each of the six neighbourhoods at peak times. The calculations assume that each of the neighbourhoods would have a moderate level of access to traditional public transport (e.g. local bus routes and Langley Station with current services) and typical quality pedestrian and cycling environments. The car mode share assumed here is 63% of trips, with 16% travelling by public transport.

Based on a total of 7,500 dwellings, the entire Northern Extension could generate over 36,000 vehicle trips per day (07:00-19:00) i.e. approximately 18,000 vehicles arriving and 18,000 departing. Note that as this is based on traditional quality and access to public transport and therefore could be considered a worst-case scenario.

An alternative forecast has been derived based on a higher share of trips being made by public transport, walking and cycling (and therefore a lower share of trips made by private car). This higher mode share reflects the aspiration for a much higher quality public transport system based around the concept of a transit system, and a network of walking and cycling routes promoting use of these modes within the developments and for short trips to, for example, Slough town centre.

North West Bicester was the first "Eco Town" in the UK. Its current target is to reduce car mode share to 50% (from 67.5%) through sustainable travel measures such as the provision of local bus services, a comprehensive network of high standard walk and cycle routes and electric car club initiatives (amongst others). With similar provision proposed for the Northern Extension, in addition to improved rail services, it is considered that this target would also be appropriated for this development.

Under this scenario, the total number of daily trips by car generated falls from over 36,000 to under 30,000. The provision of highly accessible non-car modes could therefore have a large impact on the number of vehicle trips generated by the development – potentially removing over 500 vehicles from the road network in each peak hour.

Based on the TRICs trip rate data, approximately 20% of daily trips are expected to occur in the morning peak hour and 22% in the evening peak hour. Based on the daily trips above, the number of vehicle trips in the peak hours is shown in Figure 5.2 below. The ranges reflect the two scenarios described above.

This analysis therefore shows that there could be between 2,175 and 2,575 vehicles leaving the Northern Extension area in the morning peak hour, and between 2,150 and 2,550 vehicles arriving in the evening peak hour. These figures represent an increase in total commuting trips in Slough of 7-9% (assuming that 50% of existing commuter trips to/from Slough occur in the peak hours).

Having established the volume of trips to/from the neighbourhoods, 2011 Census Travel to Work data has been used to broadly estimate the origins and destinations of existing commuting trips to better understand the potential routing and network impacts of trips associated with the Northern Extension.

Vehicle Trips – Routeing and Impacts

The Census data shows that trip origins/destinations could be broadly as follows:

- 13% to the east (via the A412 and/or Wood Lane and/or Langley Park Road);
- 46% to the south/south-east (via Langley, London Road, the A412 and or the new southern link road);
- 29% to the south/south-west (via Wellington Street and/or Wexham Road and/or the A416 and/or Stoke Poges Lane); and
- 12% to the north/west on the local road network to the north of the sites.

Based on site observations, it is anticipated that the additional trip generation would require mitigation of the junctions around the A412 and Langley Road.

It should be noted that the distribution does include trips which are predicted to be internal e.g. between destinations within Slough, which make up almost 40% of the total number of trips estimated. This equates to approximately 1,400 trips in the AM Peak Hour and 1,650 in the PM Peak Hour.

Non-car Trips

Using 2011 Census mode share information, the vehicle trips have been extrapolated to estimate trips by sustainable travel modes. Initial analysis, assuming no change from the 2011 travel characteristics, indicates that the development could generate up to 500 rail trips in the peak hour, 475 bus or coach trips, 150 cycle trips and 600 pedestrian trips.

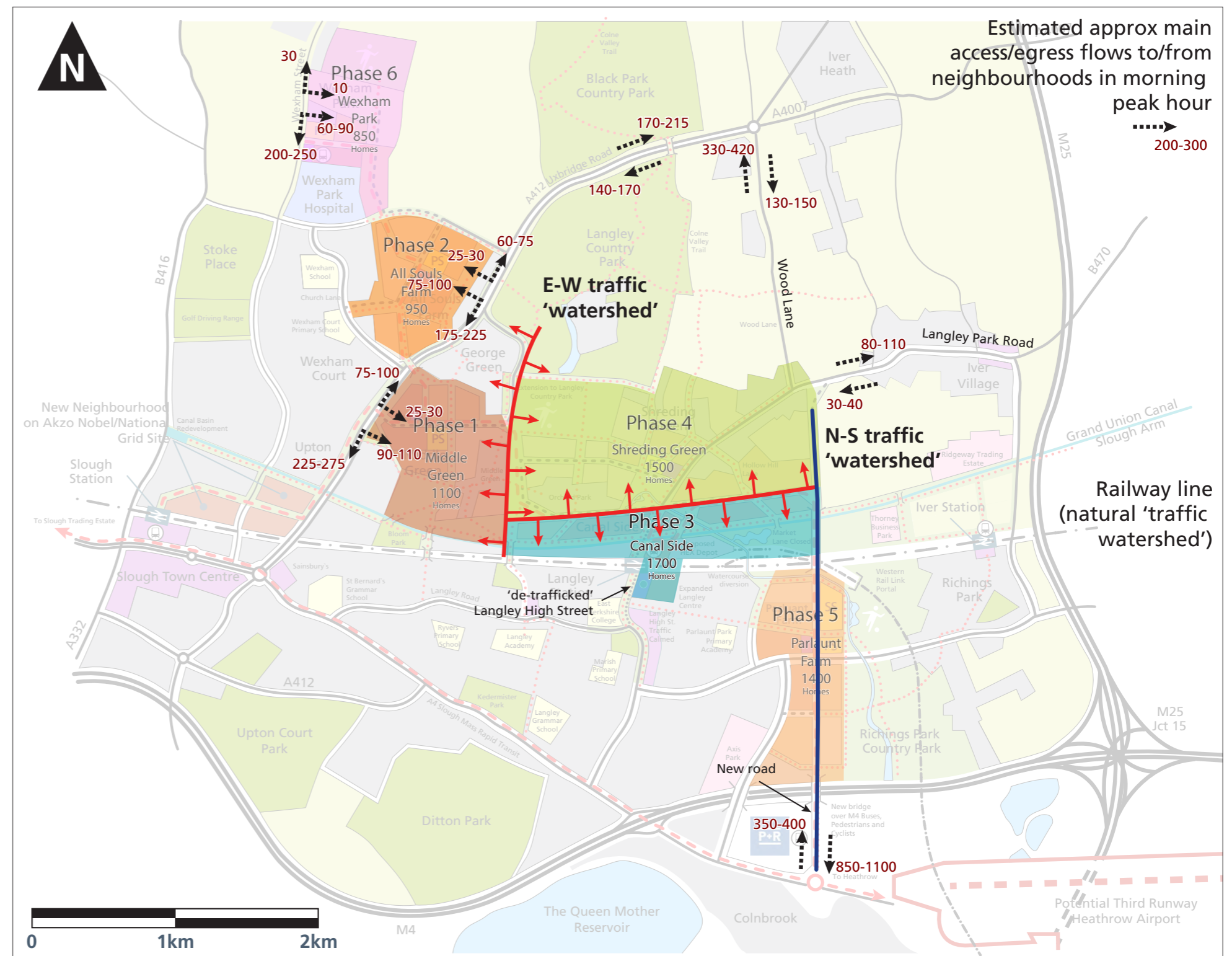


Figure 5.2 – AM and PM Peak Hour Estimated Traffic Increases

6. Development concept

Introduction

The development concept is to create a “Garden Suburb” that is made up of six distinct neighbourhoods. Each neighbourhood would have a degree of self-sufficiency and would have at its heart a primary school within 10 minutes walk of each home. Next to the school would be a small local or neighbourhood centre with a convenience foodstore and community hall. Space would also be provided for a doctor’s surgery, public house, place of worship and small scale employment uses. The neighbourhoods would range in size from 900-1700 homes.

Linking the six neighbourhoods would be a high quality bus rapid transit (BRT). This would follow two main routes from Slough Town Centre north to Wexham Park Hospital and from the town centre in an arc around the east and north of Langley, via the new Crossrail station at Langley to the A4 at Brands Hill. Here it would connect with the rapid transit link to Heathrow.

A traffic ‘watershed’ to prevent private vehicles (but not public transport vehicles) passing east-west through the main part of the garden suburb and a second north-south traffic ‘watershed’ will restrict private vehicle movements from Canal Side to Langley High Street. This approach will help to support the use of sustainable transport modes.

The development concept maximises the links to existing facilities in Slough and Langley, with the Canal Side area of the Northern Extension being served by an expanded and enhanced Langley High Street that would act as the District Centre for the new urban extension.

The development concept is designed to create a garden suburb that is sustainable supporting walking and cycling and an urban form that is compact and optimises density around transport hubs, and therefore is not sprawling whilst providing some lower density homes to meet the need for a balanced mix of housing, including family homes.

The garden suburb will lead to the loss of some Green Belt land. However, the layout of the garden suburb has been designed to ensure that strategic gaps between Slough and the settlements of Richings Park, Iver and Iver Heath are retained. Retention of strategic gaps means that the Green Belt will maintain its purpose of preventing neighbouring towns merging into one another.

Neighbourhoods

The six new neighbourhoods are described below in the potential sequence in which they would be developed based on the phasing of public transport infrastructure.

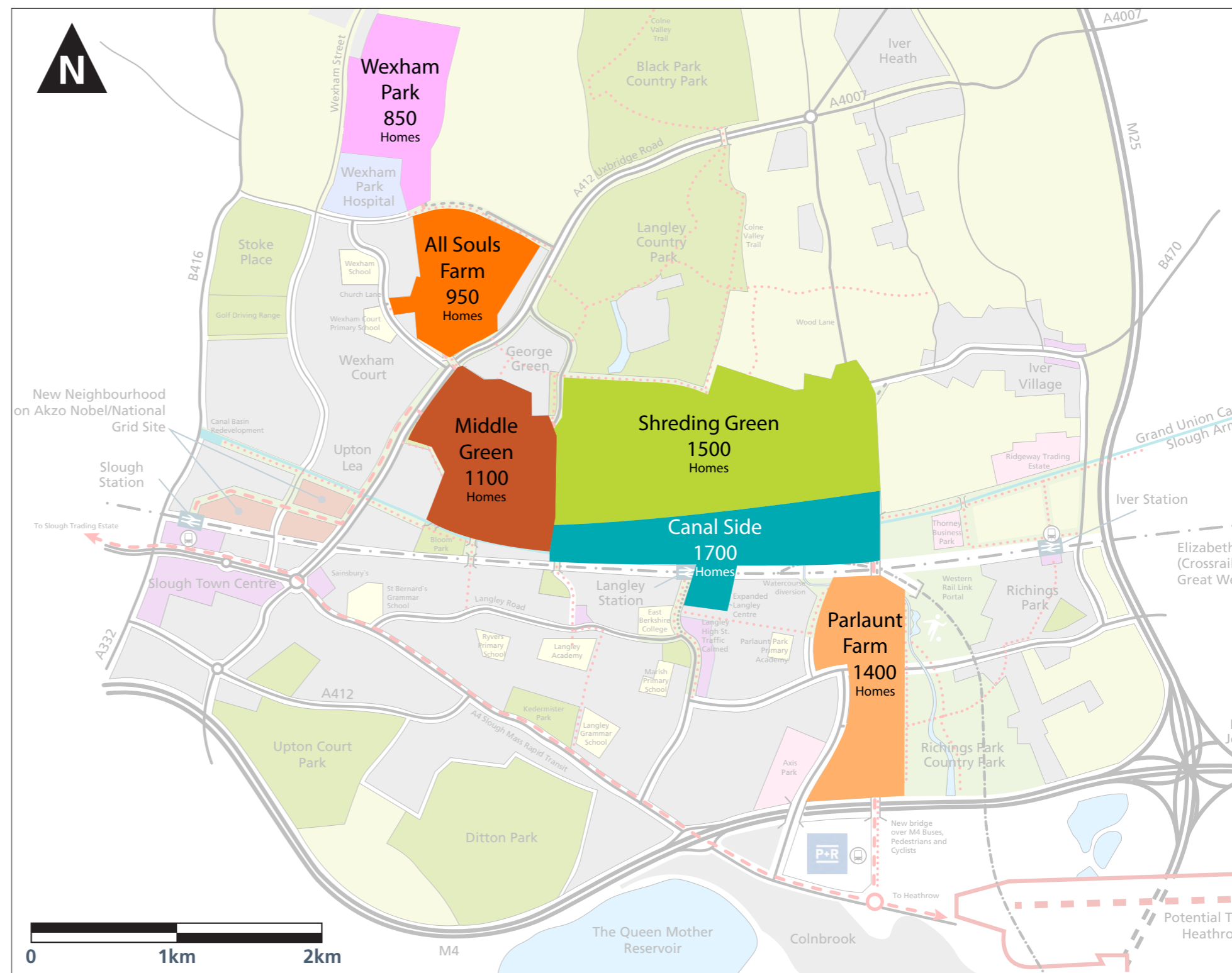


Figure 6.1 – Neighbourhoods

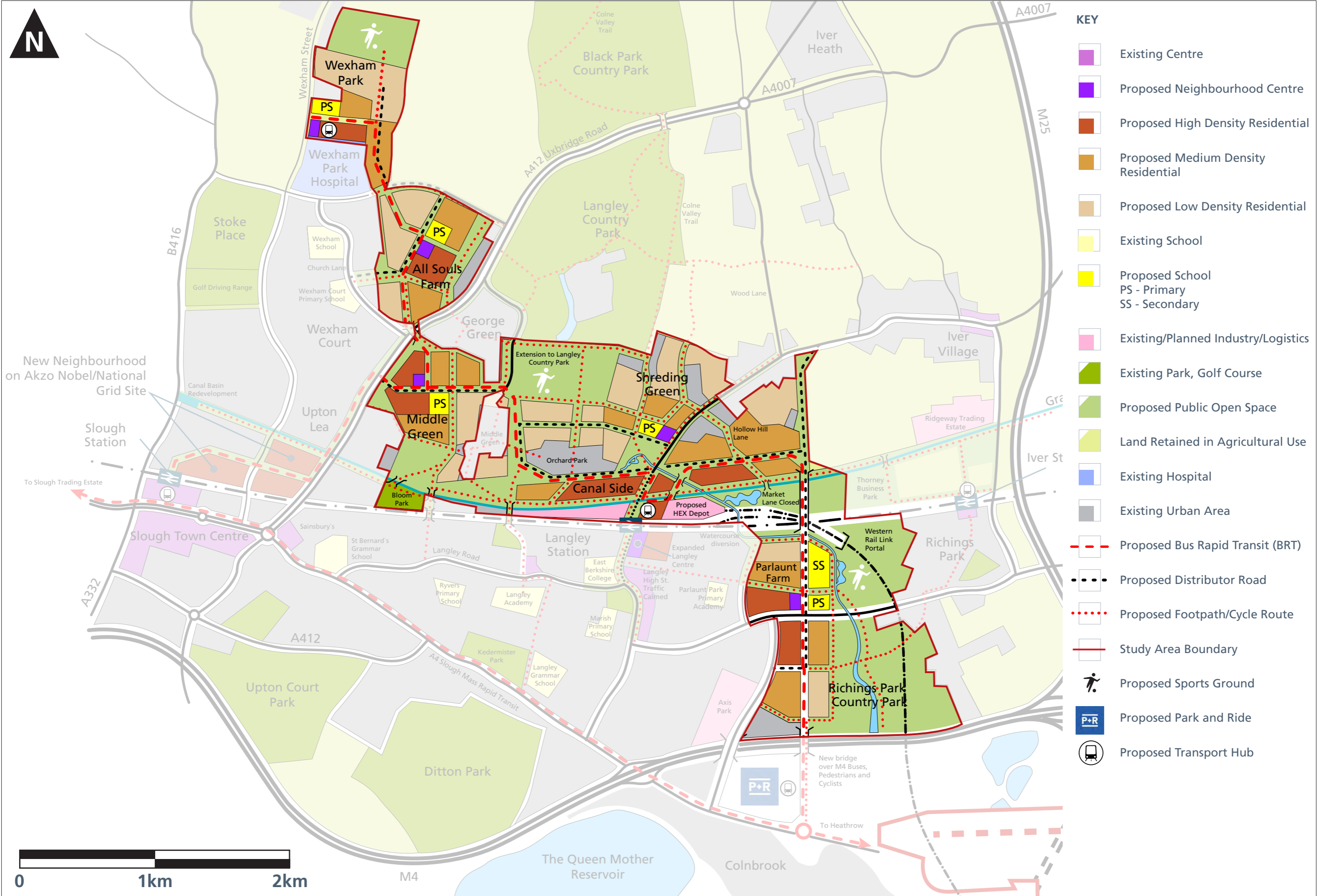


Figure 6.2 – Development Concept

Middle Green

The proposed neighbourhood at Middle Green is located immediately north of Slough and to the east of the A412 Uxbridge Road and to the west of the small hamlet of Middle Green. The village of George Green to the north contains a farmhouse and several cottages dating from the 16th and 17th centuries. However, the majority of the settlement has been built since the Second World War.

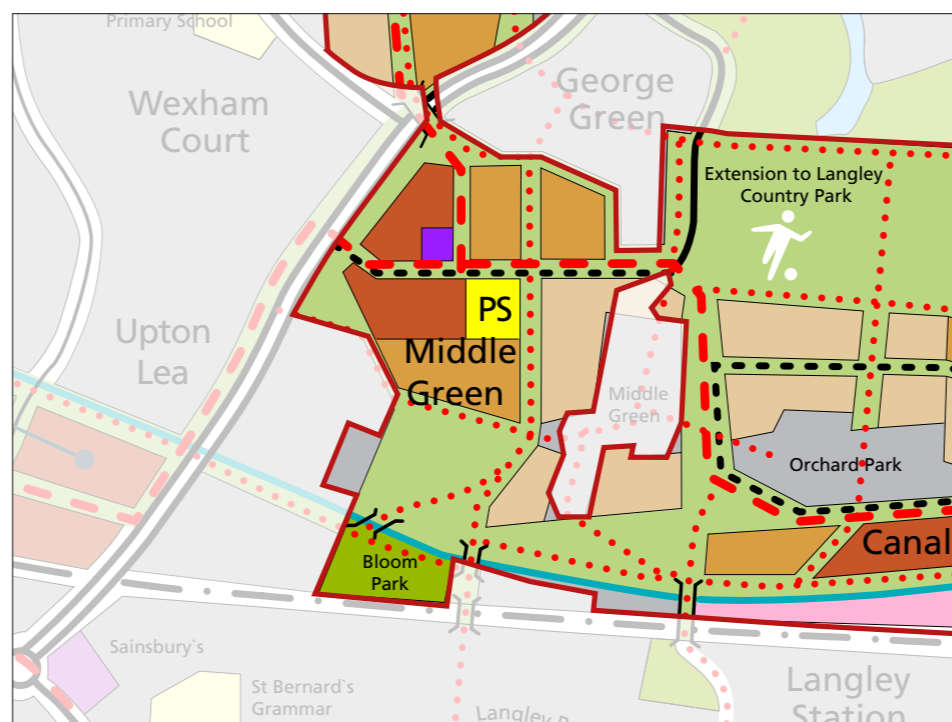
The first phases of the proposed BRT would run west through the new development towards Uxbridge Road, where it would split with an arm heading south to Slough town centre and station, and north over the A412 to Wexham Park Hospital. A later phase would connect east to Langley Station.

The land east of the Uxbridge Road was formerly a market garden, it is now in the early stages of being excavated for gravel. The western edge of the site is adversely affected by the Uxbridge Road which is a dual carriageway along the extent of the site. A former access to the market garden has recently been reinstated on/off the A412. The south-eastern edge of this site is dominated by overhead pylons which cross small scale fields and Nursery Lane.

The existing hamlet at Middle Green has several listed buildings and is developed at a low density. The character of the hamlet would be retained, by taking through traffic out of the area (creating residents' access only lanes), and adjacent new development would be of a similar density to the existing settlement.

The existing public right of way north-south through the area would be retained as pedestrian and cycle access within a green corridor of open space. Where this crosses the proposed BRT, the primary school and neighbourhood centre would be located. There is an opportunity (given the good access to Slough town centre) to get some high density residential on the west of the neighbourhood around the local centre, with medium density development to the north and south of the BRT route.

In total, there is a net developable area of 27 hectares for residential development and there would be a total of 1,100 dwellings.



Existing hamlet of Middle Green



View looking south towards former nursery which is in the process of being excavated for gravels

All Souls Farm

All Souls Farm Quarry is a former sand and gravel quarry operated by Tarmac that since the early 2000s has been infilled with inert waste and restored to agriculture.

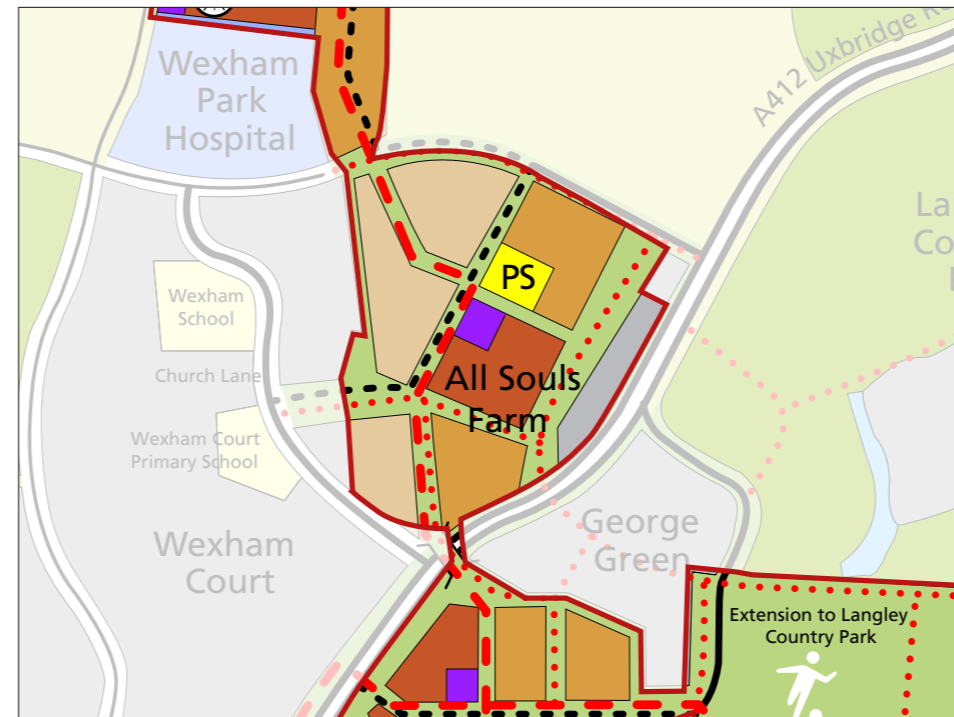
The site for the proposed neighbourhood is bound by Wexham Park Lane to the north, the A412 to the east and several small holdings to the west and south which are accessed by Church Lane, which in turn leads onto the Wexham Park hospital complex located to the north west of the site. In terms of relationship to Slough, the site is contiguous with the settlement edge and is located between two existing neighbourhoods of Slough, Wexham and George Green.

The BRT would be implemented in the first phase and run north south through the neighbourhood before heading north west up to Wexham Park Hospital.

The potential development area is 65 Hectares in total with all land parcels included as one site. The neighbourhood would include a range of dwelling densities, with lowest density development located around the existing development on Church Lane, high density residential would be located around a small local centre and adjacent to a new primary school, with medium density development to the north and south of the high density development.

In total, there is a net developable area of 24 hectares for residential development and there would be a total of 900 dwellings.

The land east of Wexham Park Hospital could be developed as part of this phase.



View over restored former sand and gravel workings

Canal Side

The Canal Side neighbourhood consists of a linear string of land parcels which adjoin the Grand Union Canal (Slough Arm). Many of these sites are brownfield in nature with light industrial/employment uses or have been subject to landfill/extractive uses related to the former brickworks.

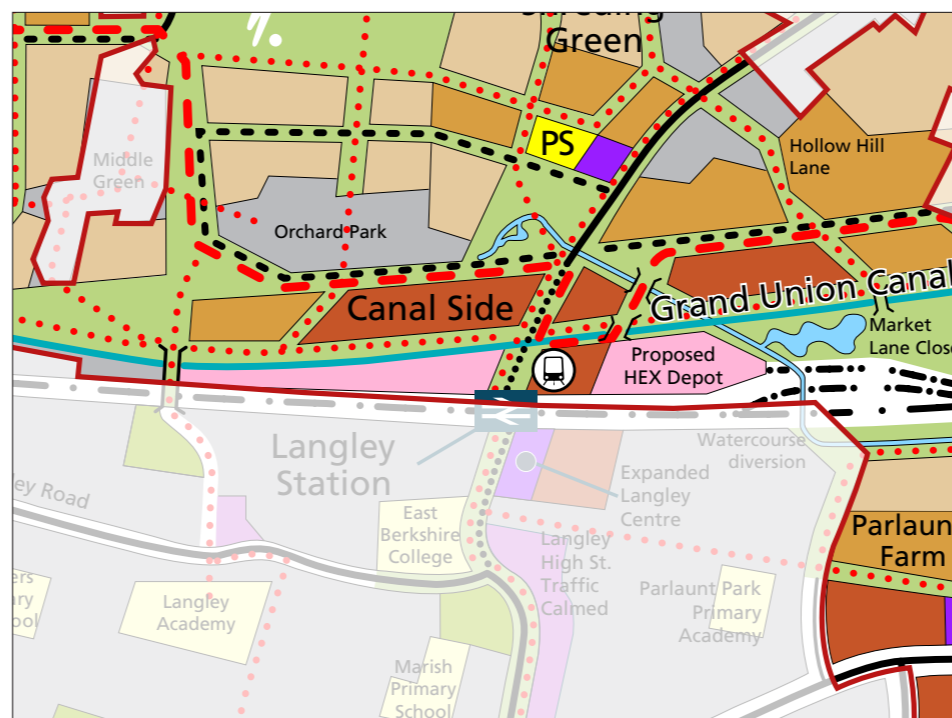
The BRT would run to the north of the neighbourhood following the corridor between overhead power lines with residential development between the canal and the BRT. This section of BRT route would connect the new neighbourhood at Middle Green with Langley Station.

High density residential is proposed either side of the Great Western mainline Crossrail station at Langley, along Station Road converting the existing Langley Business Centre with a mixed use extension to the High Street. Station Road would be traffic calmed and potentially closed to all vehicles except buses and emergency vehicles. This provides an opportunity to transform the character and appearance of the district centre and create a pleasant walking and cycling environment.

The neighbourhood would not include a local centre, as the area would be served by the district centre at Langley. There is scope to expand facilities at Langley on existing business areas either side of the station. The neighbourhood would be predominantly high density residential development (up to 6 storeys), with the highest densities within 5 minutes' walk of the station, and with some medium density development at either end of the neighbourhood. Development would be car free or have low levels of parking.

In total, there is a net developable area of 25 hectares for residential development and there would be a total of 1,700 dwellings, which would be largely apartments. The area would be walking and cycling friendly with good links to Langley and Slough town centre.

The Orchards Park is immediately north of Canal Side. The residential park home is for the semi-retired and retired. The development is enclosed by a mature tree belt on its northern boundary. This area around Middle Green and Shreding Green was historically given over to orchards. Residents would have views south over the canal and a Canal Side linear park.



Grand Union Canal



View looking west over area proposed for Canal Side higher density neighbourhood within walking distance of Langley Station

Parlaunt Farm

The neighbourhood at Parlaunt Farm is located to the east of Langley and would stretch from the M4 in the south as far as the Great Western/Crossrail Line to the north. It consists of two parts north and south of Parlaunt Road/North Park Road.

The northern part consists of the arable fields north of North Park Road. The WRLtH will pass through the arable fields to the north of North Park Road, partly in a cut-and-cover tunnel before entering the portal of the main tunnel.

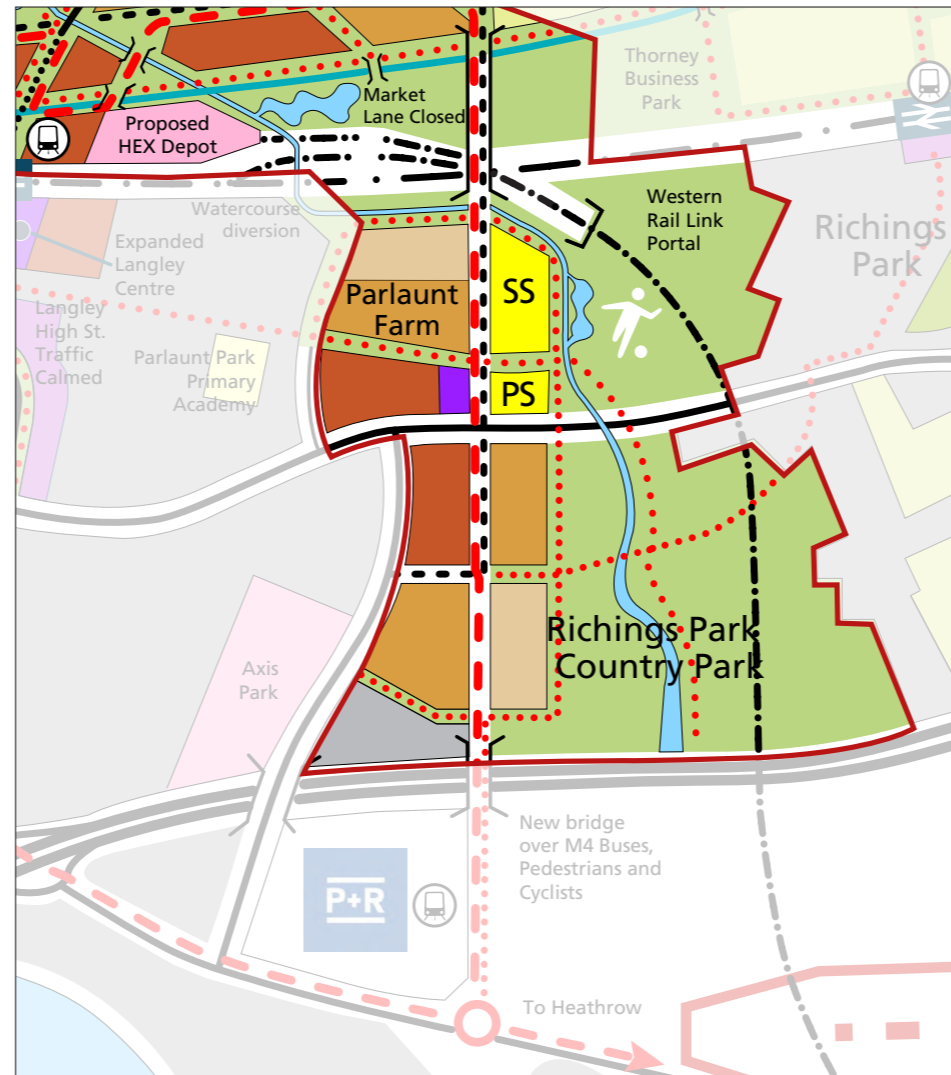
The southern portion of the site includes a portion of Richings Park Golf Course, which adjoins Sutton Lane. Richings Park was once the estate of Lord Bathurst, he laid out the park in the landscaped romantic style of the period with avenues of trees and a boating lake, vestiges of which remain in the golf course today.

The BRT would run north-south through the neighbourhood with medium density residential development to the east and west of the BRT. The BRT would connect with the A4 to the south via the existing Sutton Lane bridge over the M4.

The neighbourhood would include a local centre on the junction between Parlaunt Road and the BRT, with some adjacent high density residential. Development densities would be predominately medium density.

In total, there is a net developable area of 30 hectares for residential development and there would be a total of 1,400 dwellings.

A primary school and secondary school would be provided located in the north east of the neighbourhood and adjacent to the new Country Park and a sports hub. The sports hub (with sports pitches and indoor facilities) will be dual use for the both the community and school pupils. It would also serve the existing community at Richings Park. Residents would have access to and views across green space to the east.



Existing bridge over M4



View looking north across Parlaunt Farm, the site of the former Second World War Langley Airfield

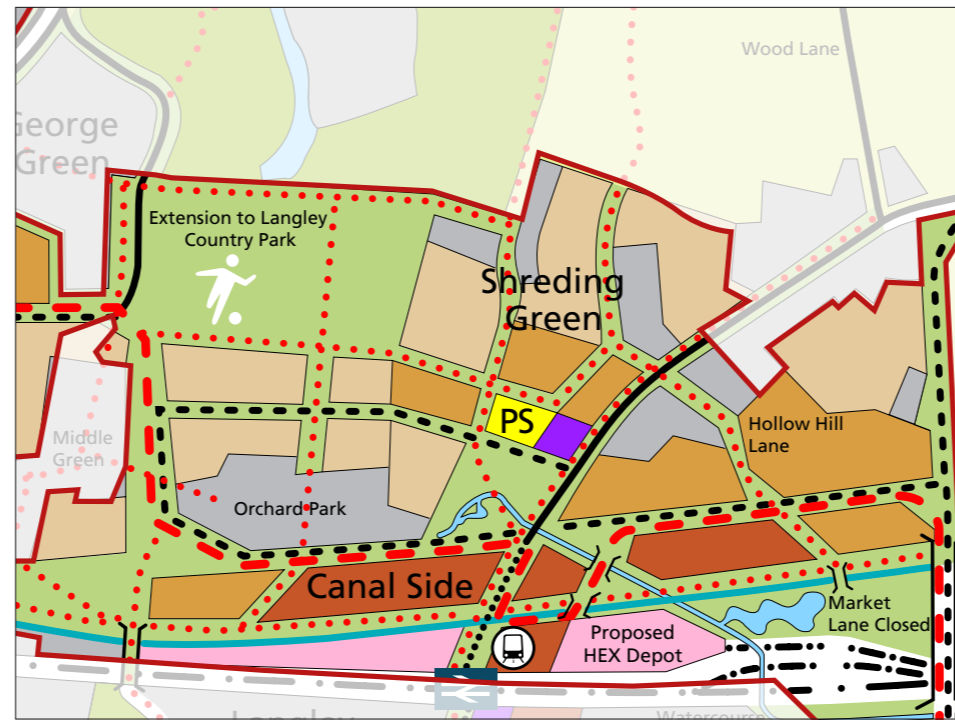
Shreding Green

The settlement of Shreding Green is developed in a series of clusters around the B470 and the intersection with the north-south routes of Mansion Lane and Wood Lane. The site includes arable agricultural land market gardens and the Iver Golf Course. There are also some employment areas clustered around Hollow Hill Lane and a boatyard adjacent to the Grand Union Canal.

The character of this area is generally small scale enclosures with well wooded tree-belts along field boundaries. It relates closely to the Grand Union Canal and includes a section of overhead powerlines which cross the main part of the Iver Golf Course, an urbanising feature which detracts from the wider area.

The neighbourhood would include a range dwelling densities, with very low density development (as low as 5 dph) located to the north and east of the existing development, and to the north of Orchards residential park. Medium density development would be located along the BRT route, adjacent to Langley Park Road, the new village green, primary school and potentially a pub and small convenience store.

In total, there is a net developable area of 53 hectares for residential development and there would be a total of 1,600 dwellings.



Iver Golf Course



Area of former parkland

Wexham Park

The new neighbourhood at Wexham Park is located to the north of Wexham Park Hospital. The neighbourhood would include land to the east and north of the hospital that is currently occupied by Wexham Park Golf Course. Half of the golf course would be developed for residential use with the remaining half retained as parkland.

The site comprises a well maintained 27-hole golf course with a floodlit driving range. The landscape is mature and relatively well contained by woodland and tree belts on the eastern and northern site boundaries, with Wexham Street from the western site boundary and some employment units/former nursery gardens which front onto Wexham Street.

The BRT would run north through the area of medium density development and would then head west to Wexham Street, serving the local centre. A new primary school would be located to the north of the local centre, adjacent to the transport hub.

The neighbourhood would be served by a local centre located to the north of Wexham Park Hospital. The centre would front a park and ride car park (3-4 storeys high similar in height to the hospital buildings) and would be adjacent to some high density development, which would provide key worker housing. Medium density development would be to the east of the high density development along the BRT. The northern part of the neighbourhood would include low and very low density homes on the existing golf fairways.

In total there is a net developable area of 22 hectares for residential development and there would be a total of 800 dwellings.



Wexham Park Hospital



Wexham Park Golf Course

7. Green Infrastructure

Approach to Green Infrastructure Provision

Green infrastructure combined with the development of sustainable transport corridors will form key underpinning design principles for the structuring of the garden suburb. There are several key elements to the green infrastructure network that will help to define the character of the area and create a healthy and sustainable community, these include:

- Setting aside of at least 50% of the site area for green infrastructure based on a strategic network of green wedges and green corridors.
- The creation of a new country park to the east of Langley using the historic core of the Richings Park golf course which will help to retain a gap between Slough and Richings Park.
- The creation of a Grand Union Canal linear park.
- Extension of Langley Country Park restoring the former parkland as a setting for informal recreation.
- North-South pedestrian and cycle connections linking Langley Country Park and the Grand Union Canal linear park by retention of country lanes.
- Pedestrian and cyclist bridge over the canal at Bloom Park and to the east of Langley Park Road.
- New links to Black Park Country Park including a new pedestrian bridge over the A412.
- The conservation and enhancement of biodiversity within the Colne Valley Regional Park through the protection and management of its species and habitats.
- Providing opportunities for countryside recreation and ensure that facilities are accessible to all, an improved network of PRow with dedicated cycleways would increase access to the wider Colne Valley Regional Park.

Colne Valley Regional Park

The eastern edge of the proposed urban extension would be in the Colne Valley Regional Park (CVRP) which extends from Rickmansworth to Staines. On London's doorstep, the Park is very important for wildlife and countryside recreation, especially for water-based activities. It is a breathing space for many living in the towns close by. The Park's Community Interest Company (CIC) is responsible for implementing the objectives of the Park. The development of the garden suburb has sought to minimise the impact upon the Park and provide an opportunity to increase public access to the Colne Valley for leisure and recreation, by enabling access to land that is currently inaccessible or has limited access.

Grand Union Canal Linear Park

The 5-mile-long Slough Arm of the Grand Union Canal travels in a fairly straight line from the Grand Union Canal at Cowley Peachey Junction into Slough terminating by Stoke Poges Road. It was originally constructed to serve the brick-making industry. It is now a significant walking route.

The corridor between the Grand Union Canal and the Great Western Mainline is generally not developable due to flood risk from the Horton Brook. This area, will form part of the proposed Grand Union linear park and could include constructed wetlands which would help to provide flood storage areas that will be displaced by the development along the Canal Side.

The linear park would stretch along the canal linking Iver with Slough, creating pedestrian and cycle routes and providing amenity areas for relaxation and children's play. The linear park provides an ideal setting for high density development to front on to it (this could potentially also be replicated at Iver).



Proposed Grand Union Canal linear park

Richings Country Park

The proposed new neighbourhood at Parlaunt Farm will be created by building on part of Richings Park Golf Course, however much of the golf course will be retained and a new country park will be created. Creating a country park enables the strategic gap between Slough and Richings Park to be retained. The golf course already has an existing lake and this heritage asset will be retained and restored. Much of the land here is in the floodplain, so the parkland will be managed for Sustainable Urban Drainage (SUDs). The parkland would include a diversion to the existing brook and restoring it to create wetland habitats.

To the north of Richings Park Golf Course CEMEX are proposing a sand and gravel quarry on 53 hectares of flat arable land. Following these developments, the land would be restored to open space and would be the site for outdoor sports pitches and other sports facilities (including indoor sports facilities) as part of a sports hub, that would be a dual use facility for the community and students of the adjacent new secondary school.

The new country park at Parlaunt Farm would be a substantial addition to the Colne Valley Regional Park providing valuable open space in an area that is currently inaccessible to the public. It will also help resolve the quantitative and qualitative deficiencies of publicly accessible open space around the settlement of Richings Park identified in the Buckinghamshire Green Infrastructure Strategy.



Richings Park Golf Course

This Document relates to land in South Bucks District – see page iii

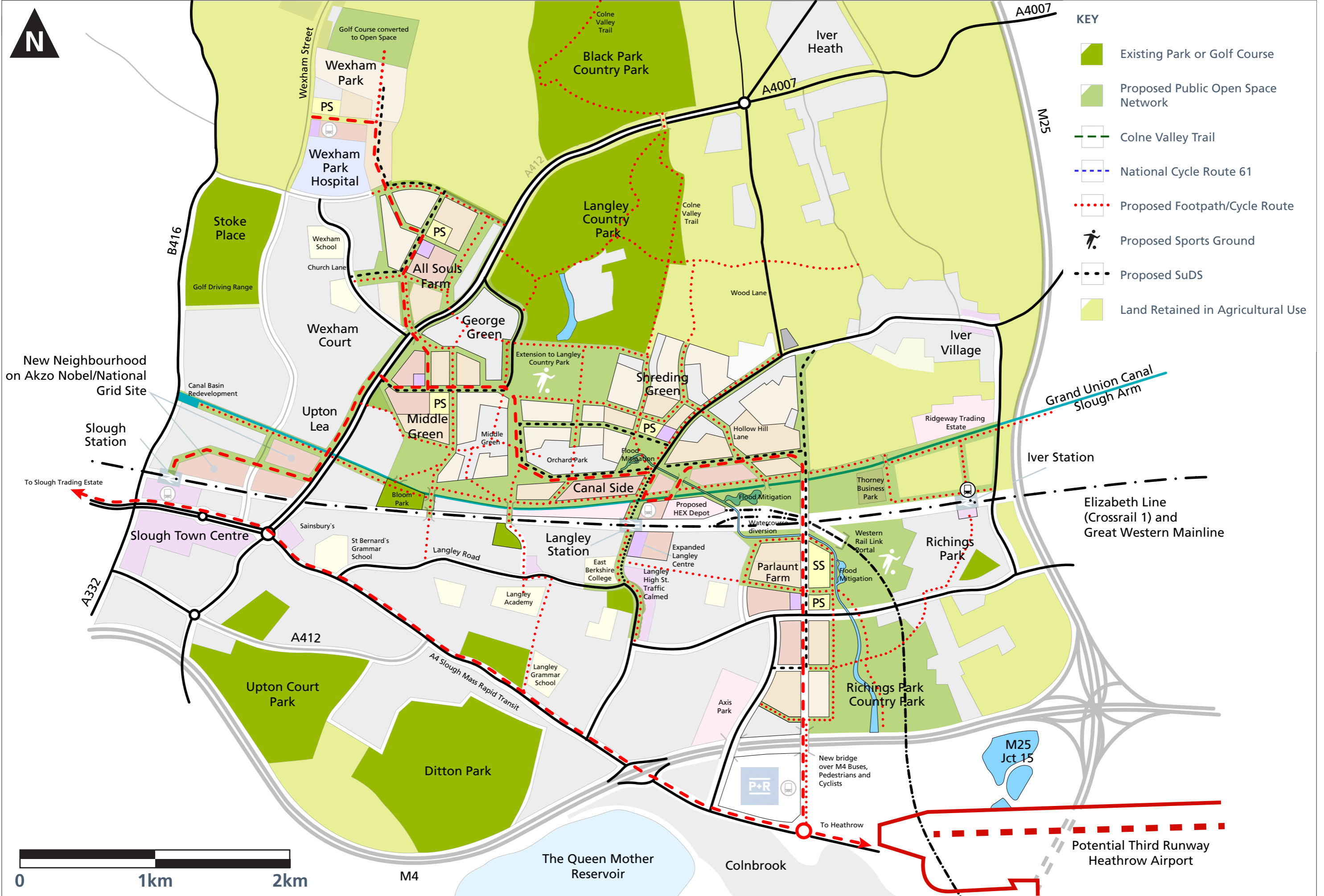


Figure 7.1 – Green Infrastructure

This Document relates to land in South Bucks District – see page iii

Langley Park Extension

The former Langley Park Estate was made up of the historic Langley Park, Black Park and the adjoining Rowley Farm. Langley Park includes avenues, ancient parkland with veteran trees, an arboretum and a lake designed by Lancelot Capability Brown in 1758. It is now in divided use, with a country park open to the public.

Langley Country Park would be extended southwards, helping to protect the views from the Capability Brown designed lake that has been recently restored. The new parkland would be managed as an urban common with meadows and used for informal recreation. Grass sports pitches could be included. Historic boundaries and features would be retained and restored. This area of parkland would be fronted by very low density high end housing.

The Grade II Langley Park House, an important Palladian mansion house dating from the 17th century, is in the process of being converted into a luxury 5-star hotel and spa. The house sits within 12 hectares of private grounds within the country park.

Wexham Park

The proposed neighbourhood at Wexham Park will be developed on 50% of the existing golf course. The golf course is well vegetated at present, and this would be retained as much as possible creating homes on the fairways. The northern part of the golf course would become a new park which would be replanted with a woodland buffer created to shield the existing settlements at Wexham Street from the new development.

Pedestrian and Cycle Network

The existing lanes in Middle Green would be traffic calmed to allow residents access only together with pedestrian and cyclists. To the south west an area of existing woodland off Middle Green Road would be retained. To the south of the Grand Union Canal is Bloom Park and this would also be retained and pedestrian and cycle paths improved (via Middle Green Road) to create better links with the area of woodland and the new linear park to the east.

The network of country lanes at Shreding Green would be retained and used for pedestrian and cyclists, the National Cycle Route 61 and the Colne Valley Trail passes through Shreding Green so there is an opportunity to link into these wider regional and national networks.



Example of existing country lane in Middle Green that could be traffic calmed for pedestrians and cyclists with vehicles restricted to residents access only.



National Cycle Route 61 passes through Shreding Green

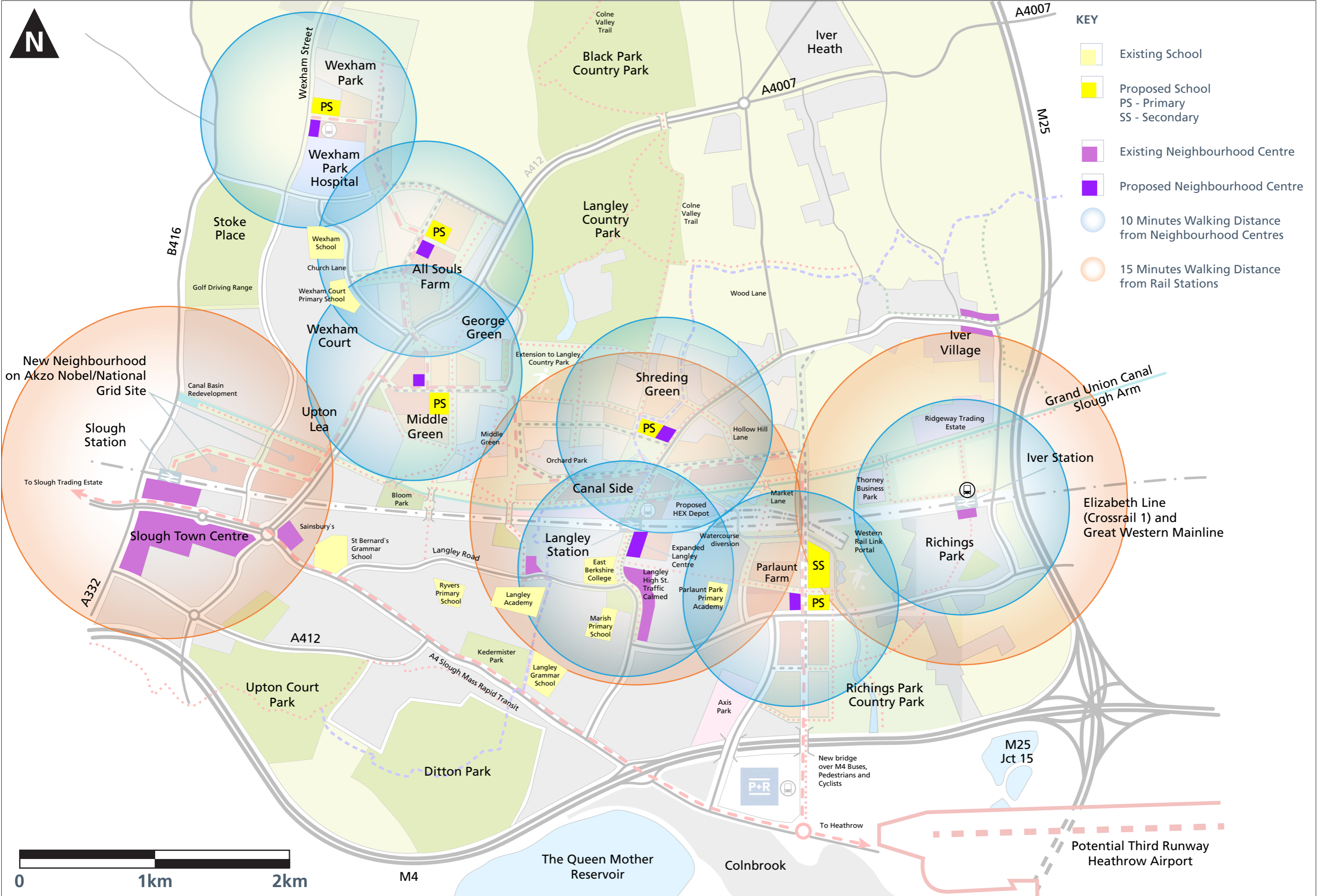


Figure 8.1 – Community Infrastructure

8. Community Infrastructure

Projected Future Population

To achieve the aim of a viable community and a good quality of life the garden suburb will be developed with a range of local shops and services and supporting community infrastructure. The starting point for planning these facilities is to ensure that they will be appropriate to the scale of population envisaged at the garden suburb. To establish the projected future population for a garden suburb of 7,500 homes, two methods have been used:

- Applying the projected 2036 average household size for Slough to the 7,500 homes in the garden suburb – generates a population of 18,505
- Applying the 2011 population household size splits for Slough to the 7,500 homes in the garden suburb – generates a population of 19,808

Amount of Community Facilities Required

The average of these two methods is 19,200 (rounded to the nearest 100), and has been used as the total population for the garden suburb for the purposes of planning the community facilities required.

There are no nationally defined standards of provision for community facilities. The National Planning Policy Framework (NPPF) sets out as one of its core planning principles that plan making should 'deliver sufficient community and cultural facilities and services to meet local needs'. Neither the NPPF or the National Planning Practice Guidance (NPPG) set out what a sufficient level of community facilities is or how the level of facilities should be defined. Planning guidance assumes that infrastructure (including community infrastructure) required to support the future growth set out in a local plan will be defined in a local authorities' infrastructure assessment. Local needs for the garden suburb would need to be defined through a local infrastructure needs assessment, which given the cross-boundary nature of the garden suburb would need to be undertaken jointly between SBC and CDC / SBDC councils.

Given the above to define an appropriate level of community facilities at this early stage of planning we have assessed good practice guidance on neighbourhood planning, to define a level of provision. The table below sets out the indicative population (as set out in good practice including: Shaping Neighbourhoods: a Guide for Health, Sustainability and Vitality (Barton, Grant and Guise); Urban Design Compendium (HCA); An Urban Renaissance (Urban Task Force)) for a range of community facilities. We have taken an average from across the three sources and applied this to the total population of 19,200 people.

Facility	Indicative Population per facility	Facilities based on total housing
Nursery	2,000	10
Primary School	4,000	5
Secondary School (large)	16,000	1
Health Centre	10,000	2
Pharmacy	5,000	4
Local Shops	1,750	11
Pub / Restaurant	6,000	3
Post Office	5,000	4
Community Centre	4,000	5
Local Centre	6,000	3
District Centre	24,000	1
Leisure Centre	24,000	1

Location of Community Facilities

The NPPF advises that to deliver the social, recreational and cultural facilities and services the community needs, requires planning policies that 'ensure an integrated approach to considering the location of housing, economic uses and community facilities and services.' The location of community infrastructure within an urban area is an important consideration for various reasons that include the need to:

- Encourage movement by sustainable modes of transport
- Promote healthy walkable neighbourhoods
- Create vibrant urban areas
- Promote efficient use of land through co-location of facilities.

The location of community facilities has therefore been designed to help achieve these aims, by ensuring that facilities are clustered in a neighbourhood centre located within easy walking distance of all residents, as shown on Figure 8.1 and described below.

Langley District Centre

The garden suburb as a whole would be served by the existing district centre at Langley, rather than providing an entirely new district centre. Development in the east and centre of the garden suburb would help to improve the vitality and viability of the existing centre, whilst providing for the higher order needs of the residents of the garden suburb as a whole. Residents in Wexham Park, All Souls Farm and Middle Green have good access to Slough Town Centre and residents are likely to make more use of the town centre. However, the BRT would allow residents in these neighbourhoods to also access and use Langley.

Neighbourhood Centres

For the above reasons and to ensure that the garden suburb is following good practice, community facilities will be located within a 10-minute walk of all residents. The facilities (such as Doctor's surgery, pharmacy, community centre etc.) will be located within a neighbourhood centre along with a small cluster of local shops. Three of the six neighbourhoods would have a neighbourhood centre, whilst the neighbourhoods at All Souls Farm and Shreding Green would have a small cluster of shops. Shreding Green and Canal Side would be served largely by the expanded district centre at Langley, whilst residents of All Souls Farm could use facilities at Wexham Park or Middle Green Local Centres.

Secondary Schools

A single secondary school will be provided to serve the needs of Slough and the new garden suburb community. This will be in Parlaunt Farm so that it serves Langley and the eastern half of the development, whilst other parts of the garden suburb are close to existing secondary schools. The secondary school would be located next to the Richings Park sports hub and pupils can make use of these sports facilities. The demand for secondary school places can be refined in liaison with Bucks County Council taking account of the needs of the South Bucks District population.

Primary Schools

Primary schools would be located in five of the neighbourhoods. Canal Side would largely be made up of apartments, and therefore residents are less likely to be families that require school places. However, for those Canal Side residents that do require a primary school place, the primary school in Shreding Green would also serve their needs.

Affordable housing

Affordable housing will also need to be provided within the garden suburb. Developers would be expected to provide 40% of units as affordable. The affordable housing will need to include a mix of tenures and home sizes to accommodate a range of housing needs.



The Cambridgeshire Guided Busway, known locally as The Busway, connects Cambridge, Huntingdon and St Ives. It is the longest guided busway in the world. Two guided sections make up 16 miles (25 km) of the route. The busway is designed for buses travelling at 55 miles per hour (90 km/h), slowing to 30 miles per hour (50 km/h) where it crosses public highways. Guidance is achieved using the guidewheel-on-concrete-kerb method.

9. Phasing and Delivery

Introduction

Phasing the development of the garden suburb will be important to ensure that housing is delivered in the right location and at the right rate so that existing infrastructure can cope, and to ensure that new infrastructure is delivered at the right time. The key elements that will determine the phasing of the development will include:

- Landownership and landowner aspirations.
- The delivery model that is adopted for the garden suburb and the extent to which the public sector will be involved.
- The need for land remediation.
- The timing of upgrades to existing infrastructure such as the existing road network.
- The timing of the delivery of new infrastructure, including the new roads and the BRT.
- Securing sufficient funding for the new infrastructure through developer contributions potentially through a CIL or other mechanism.

The following sets out the broad phasing for the garden suburb by neighbourhood. It is likely that some phases will overlap and or be developed in parallel by different developers, but this provides an indication of how development might build up over time.

Phase 1 – Middle Green

Middle Green served from A412 (vehicle access) with BRT to Slough Station. Development to start after current gravel extraction on the nursery is completed.

The phase will deliver 1,100 residential units.

Phase 2 – All Souls Farm

All Souls Farm served from A412 (vehicle access) with extension of BRT in Phase 1 to Wexham Park Hospital. Development to start after current mineral and waste operations by Tarmac are completed. This phase could also include the site to the east of Wexham Park Hospital which is within Slough Borough.

The phase will deliver 900 residential units. Any development on the Hospital site would be in addition to this.

Phase 3 – Canal Side

Langley Station and Canal Side with BRT connection west to Middle Green and Phases 1&2. Vehicle access via existing road network. Development on former landfill sites will require remediation first.

The phase will deliver 1,700 residential units.

Phase 4 – Parlaunt Farm

Parlaunt Farm and crossing of rail corridor and canal. BRT to connect from A4 Park and Ride to Canal Side. New vehicle access to A4 Colnbrook Bypass and to A512 Uxbridge Road.

Development to follow gravel extraction and construction of Western Rail Link. Requires purchase of Richings Park golf course.

The phase will deliver 1,400 residential units.

Phase 5 – Shreding Green

Shreding Green served by new district distributor roads connecting to B470.

The phase will deliver 1,600 residential units.

Phase 6 – Wexham Park

Wexham Park, development of golf course and extension of BRT in Phase 2. Possible new east-west link road to serve development.

The phase will deliver 800 residential units.

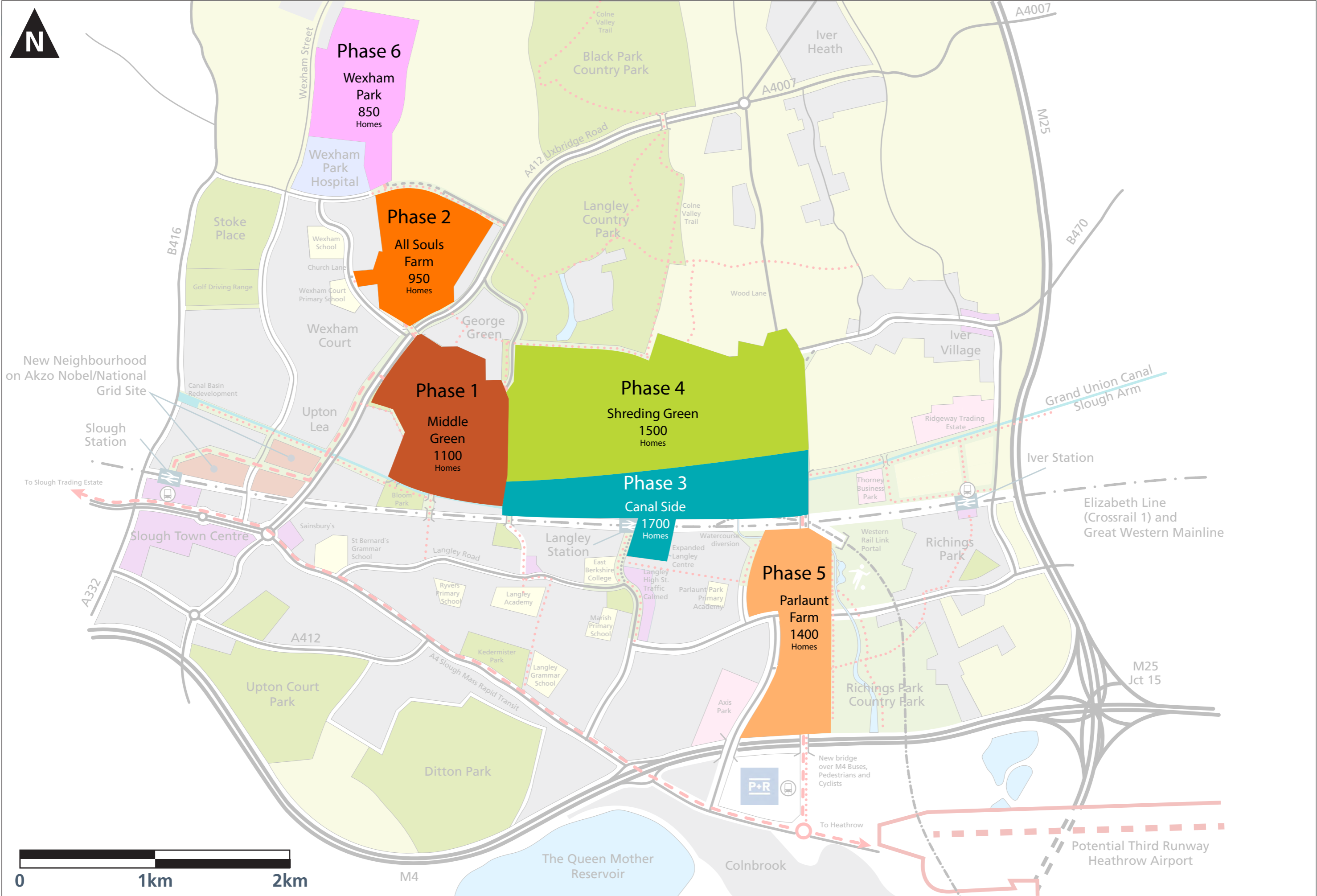


Figure 9.1 – Phasing

Landowners and Developers

Land ownership for the study area has been identified using Land Insight software. There are a total of 142 land titles, for some areas of land no land title information is available. Many of the titles are for relatively small land holdings, although there are some substantial land parcels. The landowners with the most significant holdings by area are set out in the table below. Delivering the garden suburb comprehensively will require land to be assembled and developers to work together.

There were several responses to the recent Slough Local Plan Issues and Options consultation from landowners and developers with an interest in land in the study area, these are identified by Neighbourhood in the table below.

Neighbourhood	Substantial land holdings	Known developer interest*
Middle Green	Curson Rochford Ltd Liability GTC Property Ltd Middle Rigg Nominees Ltd Slough Borough Council Official Custodian for Charities	Land East of Uxbridge Road is being promoted by Sworders on behalf of Curson Rochford LLP, for 1,107 dwellings. The land is also in the IM land proposal (see below). Land at Middle Green Road is being promoted by Carter Jonas on behalf of Taylor Wimpey. 8.5ha of land.
All Souls Farm	Tarmac Stoke Poges United Charity	All Souls Farm Quarry promoted by David Lock Associates on behalf of Tarmac. 65ha in total identified for mix of housing, primary school, local centre and open space.
Canal Side	Buckinghamshire County Council Thorney Lane LLP Best Holding (UK) Ltd)	IM Land proposals cover Canal Side, Shreding Green and Land East of Uxbridge Road. Promoted by Turleys on behalf of IM Land with a masterplan prepared by Terence O'Rourke.
Parluant Farm	CEMEX UK Operations Ltd Deer Park Hotel & Golf Course Slough Borough Council Buckinghamshire County Council Official Custodian for Charities	
Shreding Green	Buckinghamshire County Council London Ballast Company Ltd Red Lane Sites Ltd Brett Aggregates Ltd	Land at Iver golf course is being promoted by the landowner for housing. Land also covered by the IM Land proposals (see above).
Wexham Park	Frimley Heath NHS Foundation Toureen Properties Ltd	

*identified through SBC's Issues and Options Consultation

Infrastructure Funding

Delivery of the garden suburb is dependent on delivering new road and public transport infrastructure, as well as new community infrastructure and green infrastructure. To deliver this infrastructure developer contributions will be required. Given the strategic nature of the development, it is considered that a Community Infrastructure Levy (CIL) or some form of mechanism for developer contributions would need to be in place.

The recently published Housing White Paper 'Fixing our Broken Housing Market', set out a commitment to review the current system of developer contributions, including CIL to ensure exploration of options for reforming the system so that it is fast, simple, certain and transparent. The review was originally intended to report during the autumn budget (2017). Until it becomes clear whether the new Government intends to continue with this review (and depending on the outcome of the review), the existing system of S106 contributions and CIL will continue to offer the most likely way of securing the necessary funding towards infrastructure that the garden suburb needs.

The land for garden suburb falls within both Slough Borough and South Bucks District, as such the local authorities will need to work together to develop an approach to CIL or developer contributions that ensures funds are secured for the necessary infrastructure. At present Slough Borough council are not implementing CIL. Chiltern / South Bucks have agreed to the principle of developing a CIL but are currently not undertaking work on preparing a CIL pending the outcome of the review referred to above.

Value Capture

Land that is granted planning permission for residential development increases the value of that land considerably, but the benefit of this uplift in land value is often not fully realised by the local communities, and often the current approach to making development acceptable (through Section 106 agreements) can be problematic for large scale developments (such as urban extensions) in delivering infrastructure required in a timely manner.

An alternative approach is harnessing land value uplift more effectively into building infrastructure and long term maintenance of the area. The Town and Country Planning Association (TCPA) key principles for garden city development include 'land value capture for the benefit of the community', and approaches to using land value capture (within the limits of current legislation and policy) will need to be explored in developing a delivery and funding mechanism for the Slough garden suburb.

10. Next Steps

Introduction

This development framework provides an initial high level view of how a garden suburb could be developed at the Northern Extension to Slough. Further work is required to provide further detail to the development concept and generate support for the proposals. The key next steps are set out below.

Stakeholder Engagement

There are a number of key stakeholders that need to be engaged on the development framework. SBC is not the Local Planning Authority for much of the land in the Northern Extension as such SBC will need to work closely with Chiltern / South Bucks District Councils and Buckinghamshire County Council to plan the garden suburb to ensure that it provides maximum benefit for the residents of both Slough and South Bucks.

Landowners will need to be engaged to align them around the vision and guiding principles that are set out in this document and to begin to develop the thinking behind the delivery model that would be required to bring forward the garden suburb in a co-ordinated manner.

There are various other stakeholders that will also need to be engaged including Colne Valley Regional Park, Heathrow Airport, Parish Councils and community groups.

Transport Modelling

Work is underway to improve knowledge about locations of road congestion through development of a new traffic model for Slough. The modelling will also help to test in more detail the traffic impacts of planned developments including the garden suburb and developments elsewhere in Slough. This work will help to detail what the strategy should be for minimising car use and providing attractive alternatives to the private car in both the garden suburb and Slough as a whole.

Transport Infrastructure Option Feasibility

At this stage of planning, the exact form of the transit technology for the BRT and the extent of segregation from other modes of transport is still to be decided. There are different options for providing a high quality public transport system and further work to examine these options will need to be carried out. The exact routeing of the transit network will also need to be explored and informed by the transport modelling work.

The development framework has identified new crossings over the canal and railway, some investigation of the feasibility of these crossings has been undertaken, with two options identified: bridging over the canal and railway; or a low bridge over the canal and passing under the Great Western mainline to the east of the WRLtH in a box structure. These options will require further feasibility assessment to consider the engineering implications, cost and other issues.

Survey Work

There is a range of survey work that will need to be undertaken prior to the masterplan being developed that includes:

- Contaminated Land Survey
- Phase 1 Habitat Survey
- Flood Risk Assessment

Masterplanning

Detailed masterplanning will need to be prepared for the garden suburb, this will be informed by the transport modelling work, the transport infrastructure feasibility work, survey work and the discussions with key stakeholders.

ATKINS

Member of the SNC-Lavalin Group