JCS
Joint Core Strategy

Tewkesbury Area Draft Concept Masterplan

CONCEPT MASTERPLAN REPORT

JANUARY 2018

BDP. urban flow alder king PROPERTY CONSULTANTS HJA HARDISTY JONES

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01. Introduction

Introduction

Purpose of this report

Tewkesbury Borough Council has commissioned BDP - and subconsultants Urban Flow, Hardisty Jones and Alder King - to prepare a concept masterplan and delivery strategy for the Tewkesbury area with the following aims:

- Provide a holistic spatial growth strategy for the area
- Support the strategic level development plan making process for Ashchurch and the surrounding areas
- Stimulate the delivery of homes and employment to meet Tewkesbury's need
- Provide assistance for determining planning applications for this area.

Drawing from the baseline analysis and stakeholder consultation carried out in the previous months, this report sets out:

- a set of development principles specific to Ashchurch and complementing the Tewkesbury "place story" visioning exercise completed by thinking place
- a high level overarching spatial approach responding to the current situation and future aspirations
- a phasing strategy responding to the initial timeline proposed by the Gloucester, Cheltenham and Tewkesbury Joint Core Strategy (JCS)
- Supporting approaches to transport, landscape, community infrastructure and economic growth.

Study Area

The indicative boundary of the study area and key elements are shown in Figure 1, which is the Tewkesbury area centred around Ashchurch. Based on flooding and other constraints, this is considered to be the principal part of the Tewkesbury area with future development potential. However the relationship to the existing settlement of Tewkesbury is important and the concept masterplan contained within responds to the opportunities of the wider area.

Tewkesbury is an attractive rural market town with a high-quality historic environment. It forms part of a wider area, incorporating Northway, Ashchurch and smaller villages.

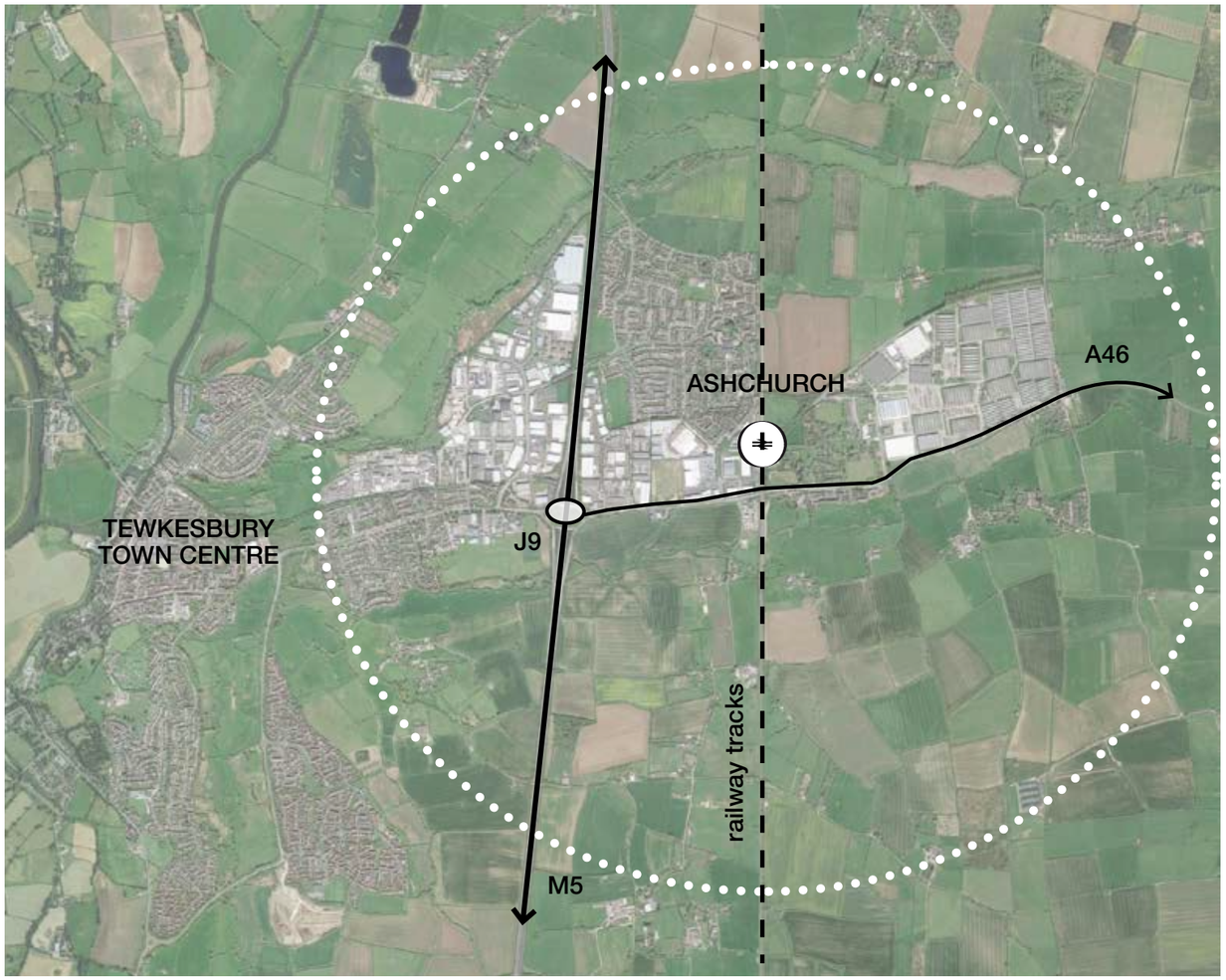


Figure 1: The Study Area

1.1 Growth Context

Overarching Growth Vision

The M5 corridor acts as a key location for targeted growth, providing access and connectivity between strategic urban areas in the West of England. Located approximately midway between the key urban centres of Bristol and Birmingham, the Tewkesbury area offers excellent access to the national road network via Junction 9 of the M5 motorway and the A46. The high accessibility of the area means that it is well placed to provide connectivity for people travelling between the wider area such as Cheltenham, Gloucester, Worchester, Birmingham, Bristol and Bath.

The area is located in the Gloucestershire First Local Enterprise Partnership (GFirstLEP) M5 growth zone. The primary aim of the GFirstLEP is to drive sustainable economic growth whilst improving transport connections and opening up new sites for employment and housing. Having achieved funding for an initial five year growth deal, the GFirstLEP will enable greater opportunities for enhanced economic growth along the M5 corridor. There is also further potential to investigate a connection with the Worcestershire LEP to link to opportunities in the north. The Tewkesbury area is therefore well placed to accommodate this growth and help to drive forward the sustainable development of the area, with the delivery of jobs and housing.

The vision outlined in the Joint Core Strategy is for the three local authorities of Gloucester, Cheltenham and Tewkesbury to be recognised nationally as enjoying a vibrant and competitive economy with increased job opportunities, and being an attractive place to invest. The JCS sets out a spatial strategy to provide 35,175 new homes and 192 hectares of B class employment land to support 39,500 new jobs by 2031. Tewkesbury town and its wider area is identified in the JCS as a key location for significant housing and economic growth. The JCS identifies the provision of 9,899 new dwellings and around 40 hectares of B class employment land within the Tewkesbury area in the plan period.

To support this, the JCS Strategic Allocation site A5 designates 14 hectares lying to the south of Ashchurch and the A46 for the provision of employment land, a green infrastructure network of around five hectares and high quality public transport facilities to and within the site. The delay in the release of land at previous Strategic Allocation A8, the MoD Ashchurch site, has resulted in its removal from the local plan, causing a shortfall of 2,450 dwellings in the Tewkesbury housing supply and 20 Ha of employment land.

Given this shortfall, the Council is in the process of evaluating the development potential in the Ashchurch area, and it is intended that a strategic, comprehensive and plan-led approach will be adopted.

It is the view of the JCS authorities that the Tewkesbury area has a sufficent five year housing supply, and to deal with the requirement after 2024-2025, an immediate housing supply review is being undertaken following the adoption of the JCS in December 2017.

The Tewkesbury area is bounded to the north by the South Worcestershire Development Plan (SWDP) area which is the joint development plan of the three local authorities of Malvern Hills, Wychavon, and Worcester City. The SWDP

(2016) plans for 280 hectares of employment land over the plan period from 2016-2030, 28,400 dwellings and an increase in retail provision of around 50,000m2 net floorspace.

It is clear that Tewkesbury as well as the surrounding region is planning for significant growth needs in housing and employment, with the strategic aim of creating sustainable development.

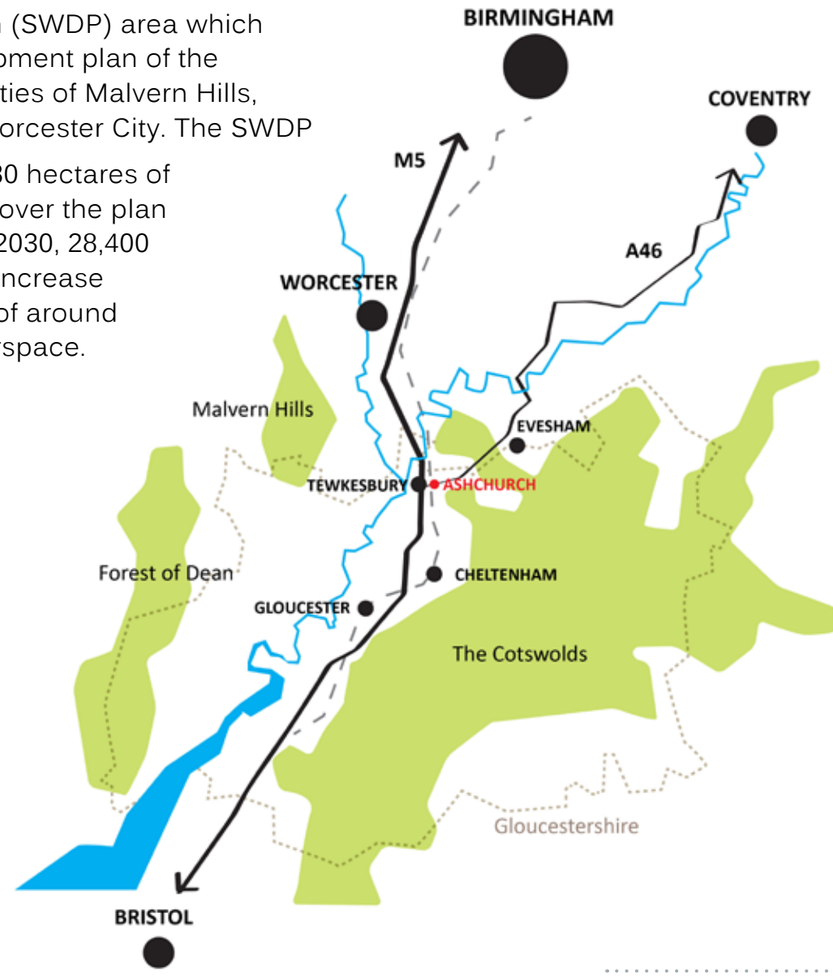


Figure 2: Tewkesbury regional context

1.2 Site Analysis

A Baseline Analysis report was completed by BDP in September 2017, which analyses in detail the existing conditions and opportunities that have been used to guide the development of this concept masterplan. The key characteristics are summarised here.

Character of the area

Ashchurch lies to the east of Tewkesbury market town. The two areas are physically separated by a green gap, and they have varied urban characters. Tewkesbury is a historic market town with a concentrated settlement pattern, while the Ashchurch area consists of more modern development. It comprises two industrial areas, Tewkesbury Business Park and Ashchurch Business Centre; the MoD Ashchurch site; and the residential district of Northway, all of which have developed in a linear form along the north of the A46. The area is bisected by the M5 and the mainline rail line from Birmingham to Bristol, which presents severance issue. The two areas have a functional relationship, with Tewkesbury providing town centre functions for these outlying suburban areas. The identity of the area as a whole could be strengthened to enhance its identity as a location for living and working.

Employment location and potential

Ashchurch is regarded as a prime employment location. It supports a range of high skilled companies working in high tech and innovation sectors. It is also close to universities.

The current supply of employment premises in the area is extremely limited. One of the JCS aims in planning for strategic economic growth is to enable existing businesses to expand/combine their locations, and attract similar kinds of businesses to move to the area.

The setting of Tewkesbury and its surrounding countryside, along with its excellent transport connections, offers an attractive quality of life to companies looking to locate and to workers looking for homes. By balancing jobs and homes, the masterplan offers people an opportunity to live and work in the same area.

MoD Ashchurch site

The 64.4ha army base site was due to be released by the MoD for the delivery of up to 2,125 new homes. However, the ModD will now be retaining the site for another 10 years, with a smaller portion (15.8ha) potentially to be disposed of earlier. It is anticipated that the site will come forward in the longer term. The based is bounded to the north by a railway spur from the mainline, which serves the base with intermittent train use.

Transport issues

The area enjoys excellent proximity to Junction 9 of the M5; however there are severe capacity and congestion issues at this junction and along the A46 which must be addressed to facilitate strategic development and provide site access. This is discussed fully in Section 3.3.

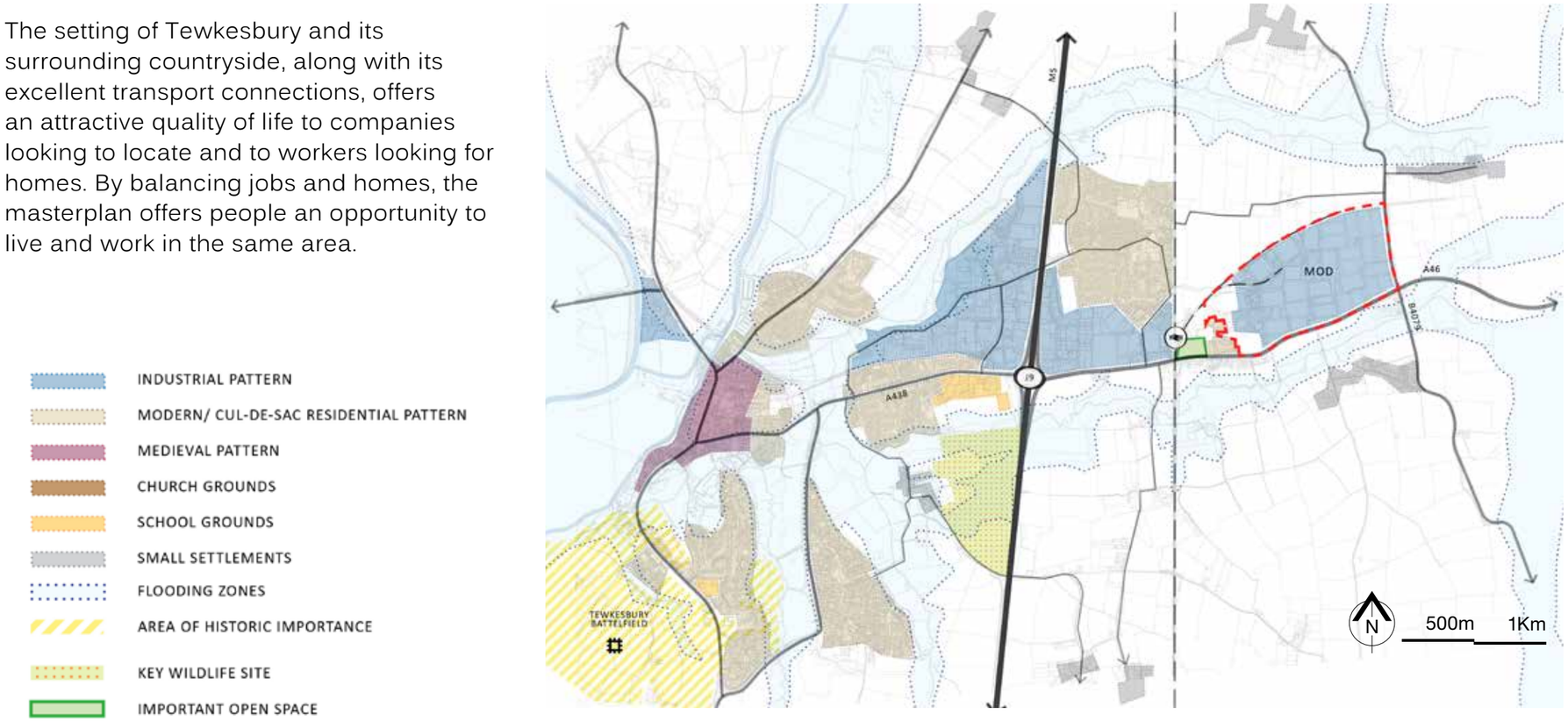


Figure 3: Urban form and environmental constraints

1.3 Benchmarking

Small towns with strategic growth

A number of small rural towns in England are undergoing strategic growth. The following examples have been chosen as relevant illustrative benchmarks for the Tewkesbury area due to their relative location, size of the existing population, potential for growth in both employment and housing, infrastructure strategies and overarching aims of creating sustainable development. Many of these places are aligned with the government's initiative to promote housing delivery through new garden towns, garden villages and eco towns.

Didcot Garden Town

Didcot is located near North Wessex Downs AONB, within a growth corridor with good existing transport links. However, significant infrastructure is required to realise its growth potential.

The Didcot Garden Town Masterplan (to 2031) brings together landscape, infrastructure, housing and economic principles of a 'garden town' into a plan for the next 20 years. It envisages 15,000 new homes for a range of occupants, and 20,000 new jobs.

The similarities between Ashchurch and Didcot lie in their connectivity, high quality landscape and fundamental drive for sustainable growth. Didcot Garden Town aims to attract visionary science and advanced technologies, whilst inspiring green living for its residents. While the level of growth is significantly greater, the aims of Didcot therefore resonate with the essential vision for Ashchurch in driving sustainable economic growth in a green, well-connected location.

Bicester Eco-Town

Bicester has been chosen due to its overarching aim of achieving growth for a sustainable community as an exemplar Eco-town. The masterplan identifies large growth areas, a town centre action area and a strategic transport and movement network.

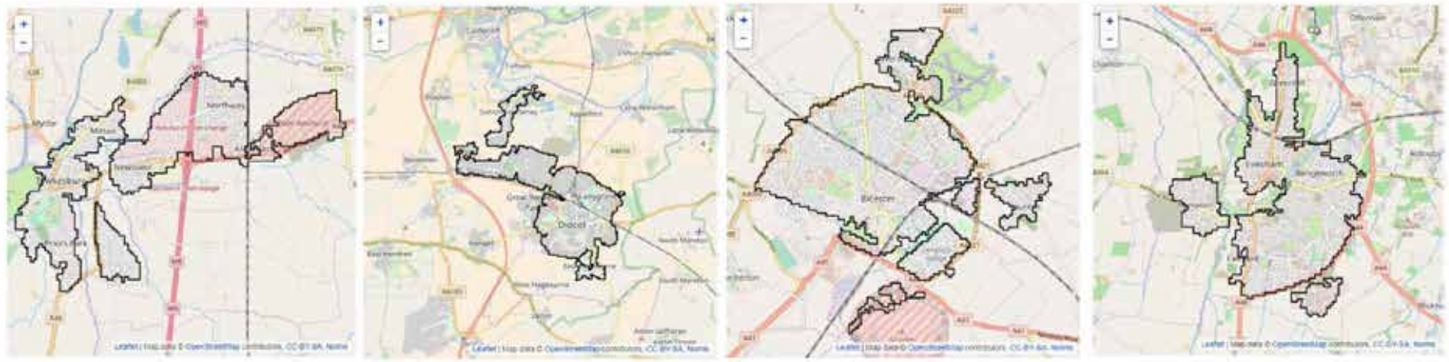
The masterplan envisages a total of 10,300 new homes: 6.579 new homes up to 2031 and a further 3,581 by 2040, between 15,000 to 20,000 new jobs on land allocated for business, manufacturing, industrial and research employment.

Evesham

In addition to additional housing growth, Vale Business Park is a three phase development which started with 41 hectares of employment land in the late 1990s, was extended by 25 hectares with phase two in 2006, however, parts of this outline permission remain undeveloped. A further 34 hectares of employment land have recently been identified with development recently commenced.

Figure 4: Benchmarking other strategic town growth

	Tewkesbury	Didcot	Bicester	Evesham
Existing Population	19,778	29,341	33,846	23,567
Housing Growth	2500 – 5,000 – 7,500	15,000	10,000	1,500
Employment Growth	35 ha – 85ha – 120ha	20,000 new jobs	20,000 new jobs	34 ha
Future Population	26,000 – 32,000 – 38,000	68,000	59,000	27317



High tech employment parks

The following employment areas provide examples of the type of businesses, quality of environment and mix of uses that could inform the Tewkesbury area:

- Amsterdam Science Park: 70 Ha of accommodations for science, business, housing and leisure. It shares with Ashchurch the advantage of being in a very accessible location (next to the A10 ring road) with excellent road and transport connections, close to a historic centre and next to natural features such as the Amsterdam Canal and Flevopark.

Figure 5: Amsterdam Science Park

- EPFL Innovation Park, Lausanne: Bio or chemical laboratories plus modular office space for a total of 5.5Ha. The park hosts more than 160 companies, over 120 startups, 23 large companies and around 20 services providers, over 2000 people mainly engineers, researchers, scientists and administrative staff work for companies in the Innovation Park. Similar to Ashchurch, the area hosts high tech/cybernetic businesses and enterprises. The park is located near public transport and car parking is based on the principle of sharing. A variety of building typologies range from light industrial to office/startups. A richness of architectural character is achieved by some iconic buildings (e.g. library and learning centre) that contribute to the identity of the place.

Figure 6: EPFL Innovation Park, Lausanne

- High Tech Campus, Eindhoven: The ‘smartest’ km² in the Netherlands, with more than 160 companies and institutes, 11,000 researchers, developers and entrepreneurs working on future technologies and products. The campus is designed around a social hub known as The Strip, housing a conference centre, restaurants and shops, which allow people from different companies and fields to meet. The area shares with Ashchurch the location “at the edge” of town, near a motorway junction and the way it has been designed to work within the landscape, creating a stimulating yet peaceful working atmosphere. It has a “rural” look, but it is not a “fenced” development. It links visually and physically with the surrounding areas.

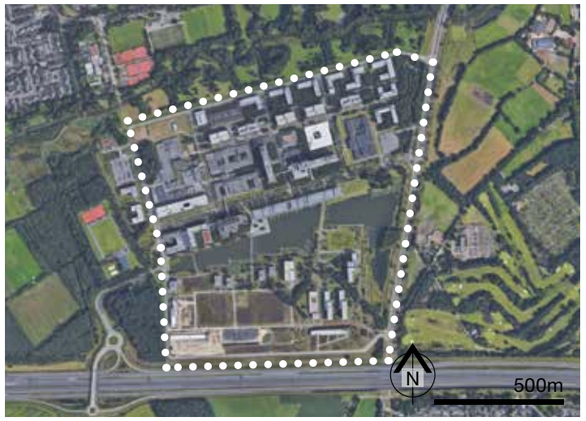


Figure 7: High Tech Campus, Eindhoven

- Green Park, Reading: 78 Ha hosting different businesses from major global to smaller niche companies. The park’s location, architecture, landscaping and amenities are designed to encourage productivity. It spreads along the Foundry Brook, with lush natural settings that are integrated within the wetland and parkland, sensitively landscaped and planted to create a topography of natural contrasts that encourages biodiversity (more than 50 bird species have been observed, while Longwater Lake is home to an abundance of fish). All Green Park buildings have solid ‘green’ credentials.

Figure 8: Green Park. Reading

02. Future potential of the Tewkesbury area

The development opportunity

Ashchurch currently functions as a suburb of the main historic town centre of Tewkesbury. Ashchurch itself is regarded as a prime employment location with two existing business areas and has become renowned over the past 30 years for technology based industries, high tech engineering and distribution. Junction 9 of the M5 in particular has been recognised as an important business location, with access to Tewkesbury town centre in the west, Cheltenham and Gloucester in the south and Worcester in the north. The area is accessible by public transport via the Ashchurch for Tewkesbury rail station, which has been identified for enhancement in the JCS (December, 2017) in order to provide good quality services and facilities for the area.

The Thinking Place emerging visioning exercise has highlighted how Ashchurch is very much considered as a part of Tewkesbury but at the same time it keeps its own identity as the less historic and more commercial part.

With the existing residential community at Northway and a number of sites to the south and east which are ideally placed to accommodate new housing development, there is potential for the area around the station and St Nicholas Church to be re-envisioned as the local centre for Ashchurch. The aims of the Sustainable Communities Strategy for each local authority within the JCS area has been summarised as the following “a sustainable natural and built environment, a thriving economy, and a healthy, safe and inclusive community.”

Ashchurch possesses the foundations to help deliver the vision of a sustainable community which essentially encourages people to live and work locally.

Why Ashchurch?

In terms of the location of strategic growth Ashchurch offers the following advantages:

- Good existing and potential transport connections in terms of a junction on the M5 and train services;
- Few landscape/environmental protections in the immediate area;
- Close proximity to 3 Areas of Outstanding Natural Beauty;
- Large brownfield MOD site which is likely to come forward for redevelopment;
- Existing established historic town and town centre;
- Existing employment area with a range of businesses; and
- Large areas of land not located within flood plains.

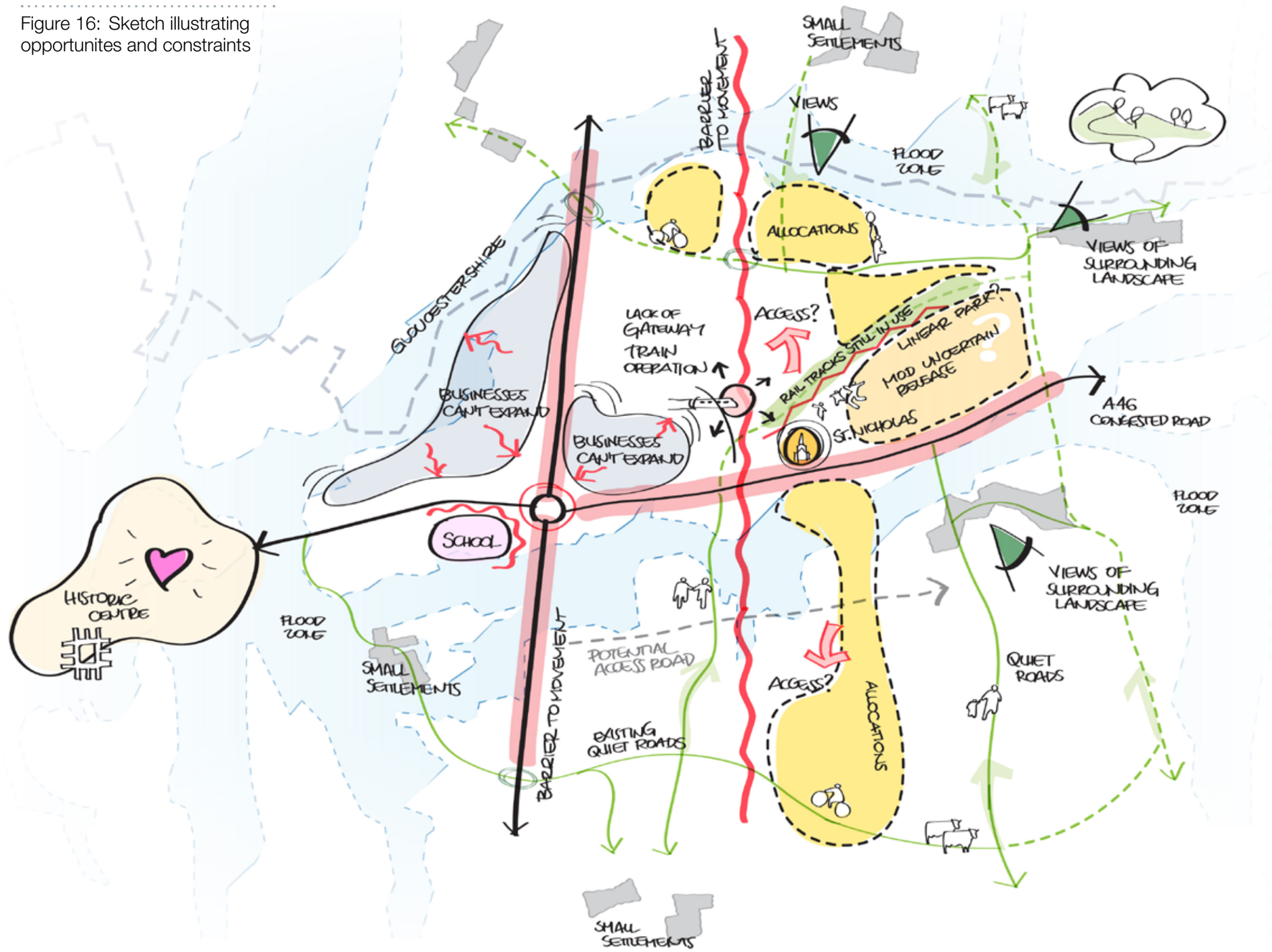
While there are a range of challenges to delivering growth in Ashchurch, the potential of the area when compared to other locations is significant.

Figure 14: View of the MOD from Aston Fields Lane

Figure 15: View of the surrounding hills

2.1 Opportunities and constraints

Figure 16: Sketch illustrating opportunites and constraints



With its outstanding natural assets and transport links the Tewkesbury area makes a fantastic location for people to work and live.

To realise its potential for future growth, the area needs to build upon the following identified strengths and opportunities:

Strengths

- Proximity to major vehicular transport links (M5, A46) and railway station
- Outstanding natural settings, picturesque views of the surrounding hills
- Proximity of historic Tewkesbury town centre and rich heritage
- Rich wildlife areas
- Inclusion in the JCS as a strategic location for development
- Growing businesses want to expand/ combine their sites and businesses willing to move to the area
- Growing population seeking housing
- High percentage of population cycling

Opportunities

- Create a new community heart / character for Ashchurch, based around St. Nicholas Church
- Improve train operations
- Reduce the impact of vehicles, improve and promote sustainable transport offer
- Presence of small settlements that could be integrated in the main network
- Create an extensive network of cycle and quiet routes and green infrastructure using existing natural assets, canals and landscape features

At the same time a successful strategy must take into account the issues and constraints presented by the area:

Issues

- Perception of Tewkesbury as a “detached” place and a place affected by flooding
- A46 is a busy road and cuts through Ashchurch
- Pressure to deliver housing and employment space
- Sites in multiple ownerships
- School accessed by major vehicular road
- Railway tracks and M5 cause severance and prevent east-west movement
- Lack of green belt/AONB protection risks piecemeal and speculative development without a guiding masterplan framework

Constraints

- Severely limited transport capacity at J9 and on A46
- Delayed release of MOD site (uncertain)
- MOD rail spur line still in use (uncertain) causing severance
- Extensive flood zone areas along the brooks running east-west
- Flood zones between Ashchurch and Tewkesbury

Figure 17: St. Nicholas Church from the Railway Station side

Figure 18: Significant shortcomings in service frequency at Ashchurch Station

2.2 Development principles

The vision for the masterplan is for the sustainable growth of the Tewkesbury area, building on the existing market town and its outlying neighborhoods and employment areas, and balancing the delivery of jobs and housing while respecting the natural, rural character of the area. The masterplan must embed sustainable movement habits from the outset.

A set of development principles underpins the masterplan. These seek to address the constraints currently faced while embracing the opportunities for redevelopment.

01. Define a local character for Ashchurch

Draw upon the existing built and natural assets around St Nicholas Church to form a local centre / village green that creates an identifiable sense of place for Ashchurch. Preserve and enhance the unique quality of the natural and built surroundings.

02. Put Tewkesbury on the map

Strengthen the functional relationship and physical connections between Tewkesbury market town and its surrounding suburban areas, Ashchurch and Northway, to integrate and raise the profile of the area as a whole. Enhance the function of the railway station, through greater service frequency and potentially changing its name.

03. Build a sustainable community

Create a desirable place that attracts people to live and work locally, meets the diverse needs of existing and future residents, and is sensitive to their quality of life and environment. Provide community uses such as schools and local services in neighbourhood centres, with “bumping spaces” where people can interact and meet. Deliver the right balance of jobs and housing, attracting graduates and young families to locate in the area.

04. Transformation to a sustainable movement environment

Prioritise modal shift at the heart of the development strategy, through the integration of homes, jobs and facilities and delivery of high quality walking, cycling and public transport infrastructure, centred around a new ‘Sustainable Corridor’.

05. Support infrastructure delivery

Supplement the sustainable movement principle with necessary managed increases in road-based travel. Deliver a new southern development road to relieve the A46.

06. Promote an active, healthy quality of life

Encourage access to the area’s excellent natural assets. Support the local community to take part in outdoor activities, sports and leisure, food production, environmental protection and active maintenance of all green spaces and innovative “green living” projects.

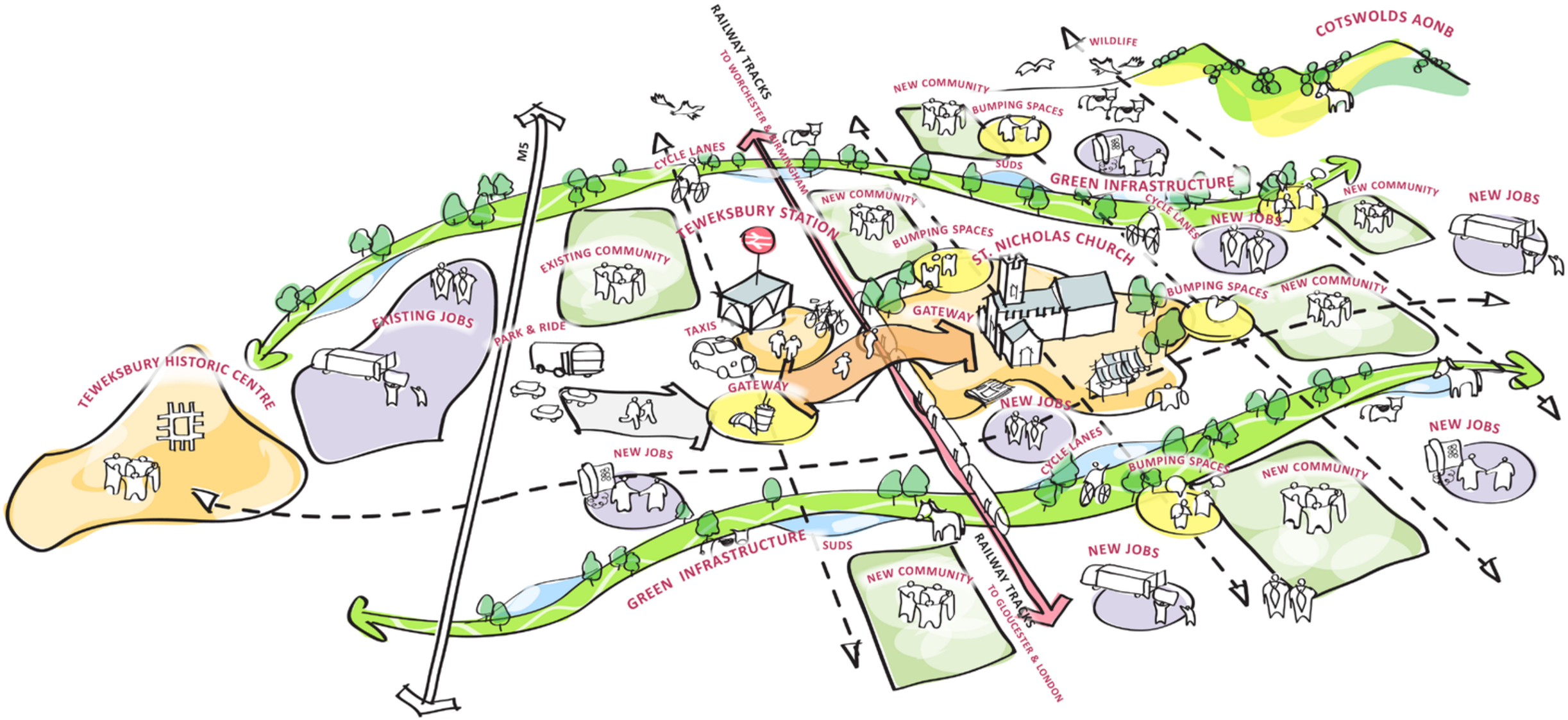
07. Create a place within a landscape

Create an extensive network of green infrastructure, incorporating existing natural assets and planning for their expansion. Preserve existing features of the area such as trees, stream courses, vegetation and small settlements, and use the existing brooks as flood storage areas. Promote further wetland creation and restoration. Protect ecology and biodiversity and defining strong environmental strategies.

08. Create a flexible framework that guides development

Guide the delivery of development sites in a spatial pattern that is informed by key existing landscape features, and a network of local centres. Provide a framework for phased growth that can respond flexibly to changing needs.

Figure 19: Illustration of the development principles



03. Draft Concept Masterplan

3.1 Concept masterplan

This diagram shows the complete Concept Masterplan.

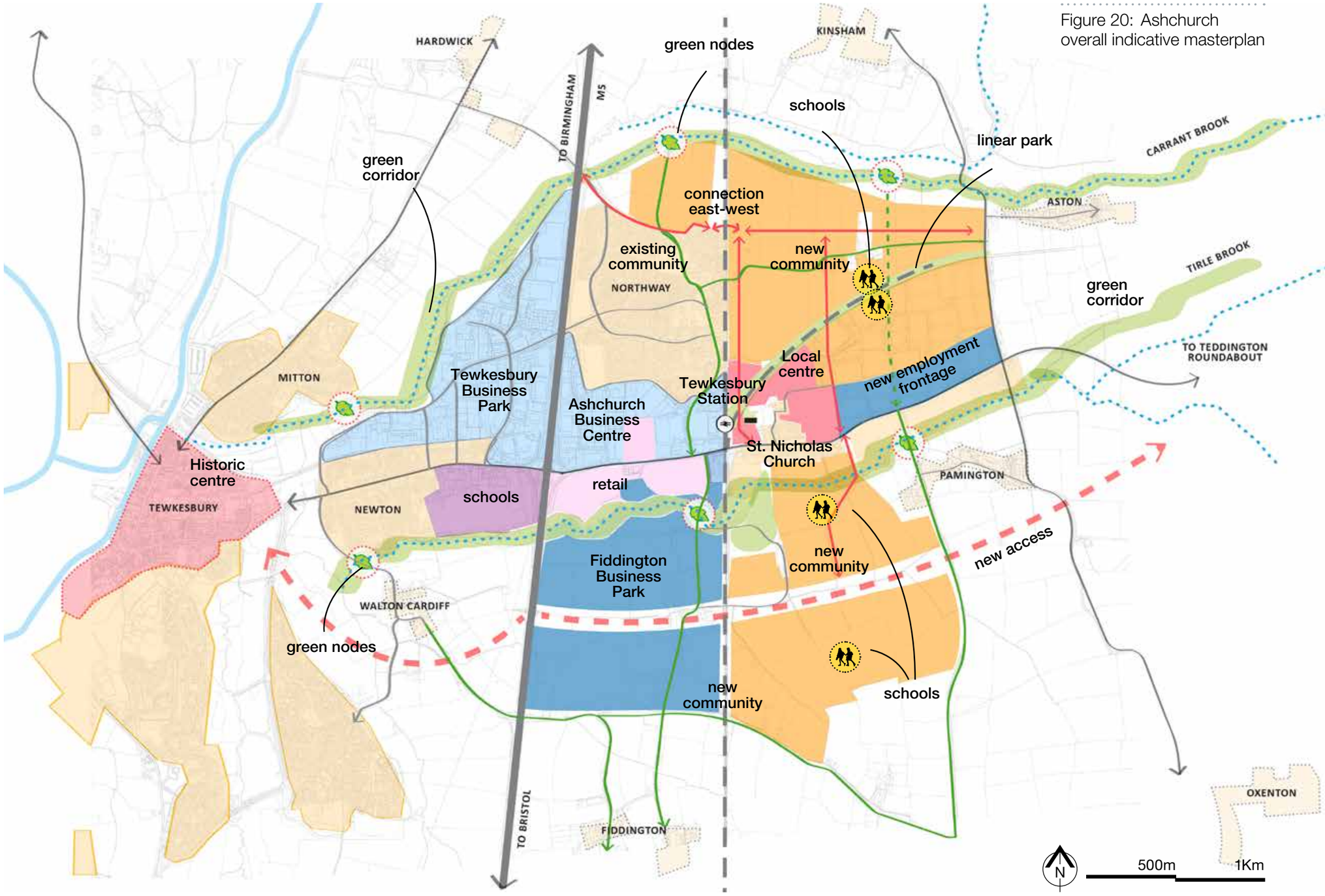


Figure 20: Ashchurch overall indicative masterplan

3.2 Assumptions and approaches

The following assumptions and design approaches have been adopted in the development of the masterplan.

Housing Density

Based on our initial analysis there are three distinct existing urban patterns defining the urban form of the study area:

A. Historic Medieval pattern

B. 20th century cul-de-sac residential pattern

C. Out of town/ industrial pattern

The observed density of the modern residential settlements is in the range of 24-45 units/ Ha.

In particular the Northway residential community (B2) has an observed net density of approximately 30 units/ Ha.

Figure 21: Existing urban patterns

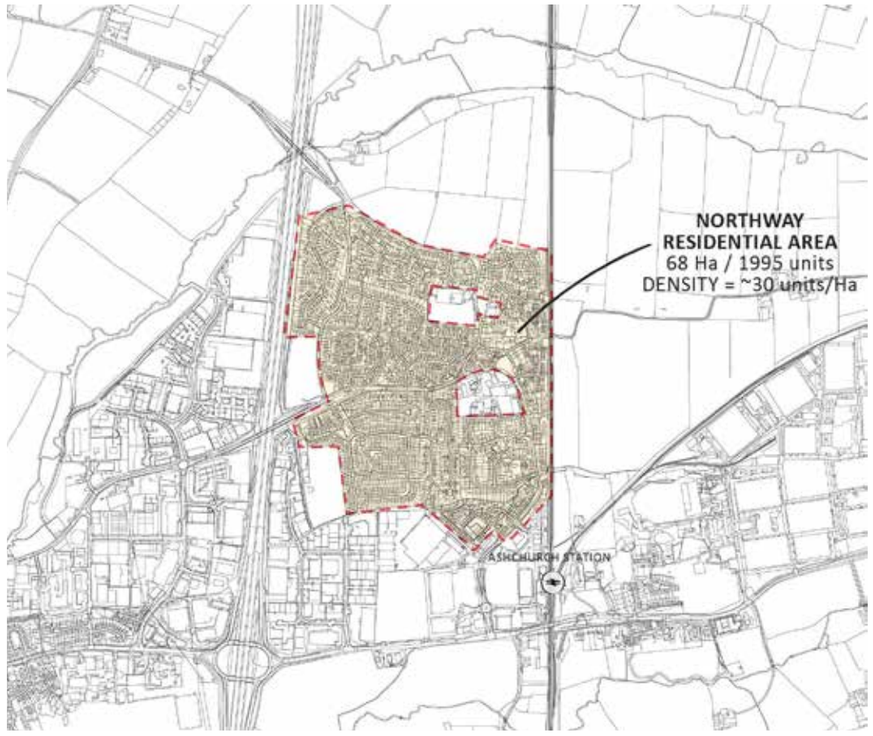


Figure 22: Northway residential development

Figure 23: Density precedents

Comparison with best practice residential examples across the UK shows how different density parameters translate into architecture to shape places with different characteristics.

The examples illustrated on this page show a residential density ranging from 20 to 50 units/Ha:

- Water Colour, Redhill, Surrey (2007): approximately 20 units/Ha
- Poundbury, Dorchester (phase 1 started 1993): approximately 34 units/Ha
- Accordia, Cambridge (started 2003): approximately 40 units/Ha
- Newhall Be, Harlow Essex (completed 2012): approximately 50 units/Ha

Based on this analysis, an average density[1] of 30 units/Ha is considered to best fit the Ashchurch context. This can be blended into a variety of densities to differentiate character areas within the masterplan. For instance, density in the local Ashchurch centre may increase to 50 units/Ha, whereas some of the areas more distant from the centre and in more sensitive landscape settings could decrease to 20 units/Ha.

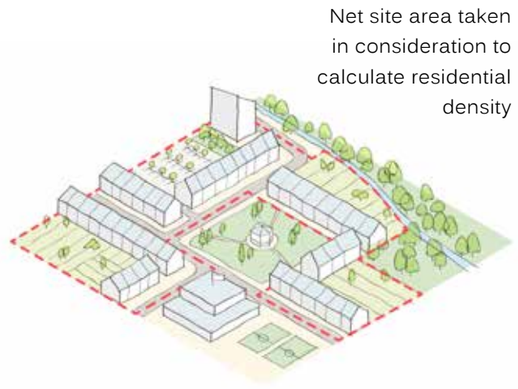
The role of public open space will be key in creating good quality residential developments at the proposed density.

This approach is consistent with best practice examples in similar settlements, but also fits the key masterplan principle of promoting sustainable transport in the area.

[1] The parameters described in this section refer to the definition of net area density (as opposed to gross density).

In calculating density, the net area is defined as the land that is available for residential development or the area of developable land. The measurement of net site area includes access roads within the site; private gardens; car parking areas; and incidental open space and amenity areas. This usually takes into account half the width of adjacent roads. It excludes: flood risk areas as shown on the diagram on this page, buffer zones (e.g. along railway tracks and roads), community uses such as schools and health centres.

Flood risk zones



Net site area taken in consideration to calculate residential density

Employment density

The majority of existing employment and light industrial uses in the Ashcurch area are located within Tewkesbury Business Park and Ashchurch Business Centre.

These two areas extend to 110 Ha and, based on travel to work data, support approximately 10,100 jobs. This results in approximately 92 full time employees (FTE) per hectare.

Figure 24: Existing major businesses in Ashchurch

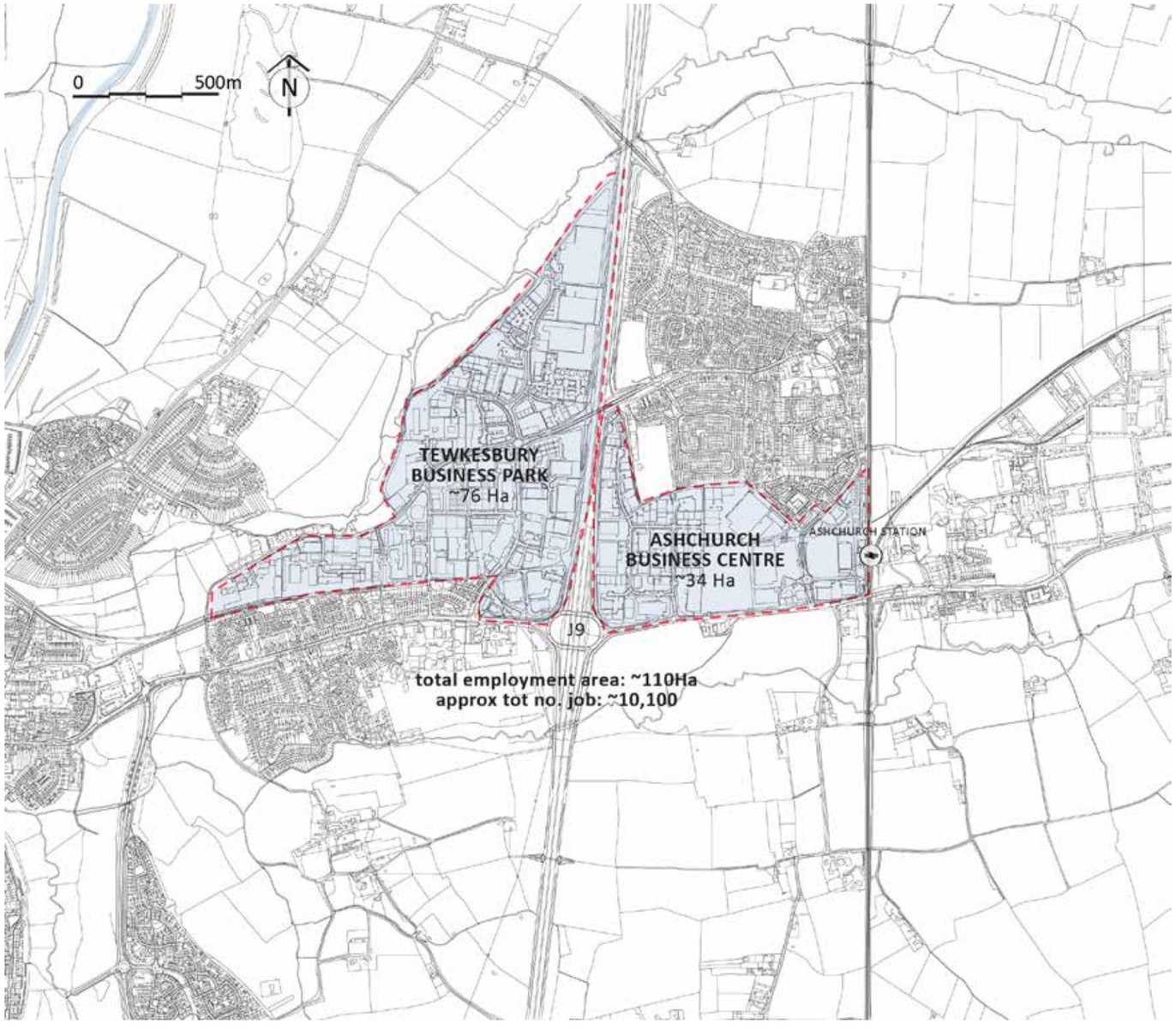


Figure 25: Ashchurch existing employment areas

Based on the assumption that the average plot ratio (building GEA/ site area) is 0.5, a total employment floor area of 550,000m² generates an average employment density of 54 m²/FTE.

According to the HCA employment density matrix (2015) this value corresponds with the job categories ranging from light industrial to distribution centres (Class B1C, B2, B8 uses).

In preparing the draft masterplan we have illustrated two scenarios for jobs yield - one based on the existing employment density (54m²/FTEs), and a second scenario envisaging a denser economic use. This scenario targets an average of 36m²/FTEs, which may encompass several types of B floorspace including more Class B1 office use and compact business types such as workspaces, small business premises and workshops in more prominent locations (such as the local centre).

m²/FTEs

Use Class	Sub-Category	Sub-Sector	Density (sqm)	Notes
B1a Offices	General Office	Corporate	13	NIA
		Professional Services	12	NIA
		Public Sector	12	NIA
		TMT	11	NIA
		Finance & Insurance	10	NIA
	Call Centres		8	NIA
B1b	R&D Space		40-60	NIA lower densities will be achieved in units with higher provision of shared or communal spaces
B1c	Light Industrial		47	NIA
B2	Industrial & Manufacturing		36	GIA
B8	Storage & Distribution	National Distribution Centre	95	GEA
		Regional Distribution Centre	77	GEA
		'Final Mile' Distribution Centre	70	GEA
Mixed B Class	Small Business Workspace	Incubator	30-60	B1a, B1b – the density will relate to balance between spaces, as the share of B1a increases so too will employment densities.
		Maker Spaces	15-40	B1c, B2, B8 - Difference between 'planned space' density and utilisation due to membership model
		Studio	20-40	B1c, B8
		Co-Working	10-15	B1a - Difference between 'planned space' density and utilisation due to membership model
		Managed Workspace	12-47	B1a, b, c

Figure 26: HCA employment density matrix (2015)

The potential new employment scenario would translate into an increase of roughly 50% of employment density, as shown on the table below.

Figure 27: Scenario 1 - as existing (92 FTEs/Ha)

Scenario 1	no FTEs	site area (Ha)	assumed plot ratio	total empl. GEA (site area x plot ratio)	existing employment density (m²/FTEs)	no. FTEs/Ha
	10,100	110	0.5	550000	54	92

Figure 28: Scenario 2 - target density (139 FTEs/Ha)

Scenario 2	target employment density (m²/FTEs)	no FTEs (GEA/ employment desnity)	no. FTEs/Ha
	36	15278	139

Figure 29: different typologies of employment with different densities: from small works spaces to distribution centres

3.3 Urban form and character

Key to the success of the masterplan is that new developments are underpinned by strong and appropriate design principles to achieve the quality that make the Tewkesbury area a place people aspire to live:

- A place that blends into nature
- Make the most of surrounding views
- Permeable and legible pattern, ease of movement and sustainable transport
- Appropriate building scale and massing
- Sensitive roofscape
- High quality landscape of public realm
- Building frontages interacting with streets
- Balance of private/ semi-private/ public spaces
- Variety in architectural character
- A range of building typologies to suit a wider demographic
- Balanced mix of uses complementing the residential offer

Figure 30: Water Colour, Surrey


nature and views

Figure 31: Accordia, Cambridge


private/ semi-private/ public


permeable and legible pattern


variety in scale and massing


sustainable transport


permeable and legible pattern


variety of building typologies


high quality landscape

3.4 Development phasing

An indicative phasing approach has been defined which aims to establish a coherent strategy for new developments to fit with the existing context and the emerging proposals around the Ashchurch area.

This can be broken down into a short term scenarios matching the local plan period, and longer term growth scenarios.

Short term

- Phase 1 extends to 2031, matching the time line proposed by the JCS and aiming to deliver the shortfall of jobs and homes outlined in the document (ie left by the loss of the MoD site). Road transport upgrades would be required to deliver this growth in capacity terms.

Long term

- Phase 2 shows potential developments that could happen after 2031, with the potential unlocking of the MOD site;
- Phase 3 includes all the developments whose access would be unlocked by the new vehicular link to the south; and
- Phase 4 goes further, describing potential further expansion of Ashchurch and outlines the final masterplan.

These phases are illustrated in phasing diagrams on the following pages, with the amount of development provided that can be achieved and an indication of necessary infrastructure.

MASTERPLAN SUMMARY	Total number of residential units	Employment			Total site area to retail	Total site area to education
		Total site area to employment (Ha)	NO. FTEs			
	average density 30 units/Ha		At a job density of 91 FTEs/Ha	At a job density of 145 FTEs/Ha	(Ha)	(Ha)
PHASE 1	3180	46	4232	6394	2	1.5
PHASE 2	1485	28	2576	3892	0	1.5
PHASE 3	1185	0	0	0	0	1.5
PHASE 4	2160	46	4232	6394	0	1.5
FINAL MASTERPLAN	8010	120	11040	16680	2	6

Figure 32: Masterplan phasing

Phasing principles

The following considerations have been made to shape the location and phasing of the concept masterplan:

- Because of the urgent demand for employment land, commercial areas are allocated in Phase 1 on areas directly accessible from existing / easily opened connections, namely the Fiddington area, enabling existing businesses to grow and new businesses to locate here.
- Land around the Railway Station and St. Nicholas Church has been allocated as mixed-use with the aim of becoming the new local centre for Ashchurch and a place of arrival from the station.
- The release of the MOD land is currently uncertain and will be reviewed in 10 years. Smaller releases to the west and east are being evaluated at the time of report preparation. Due to this uncertainty, the MOD land has been introduced in Phase 2. Some MOD land becomes part of the mixed-use quarter, whereas the southern strip along the A46 is more suitable for employment development because of its visibility/proximity from the road.
- The HCA owns a piece of land located between the railway tracks and St. Nicholas Church (highlighted in red on this diagram). This lands is immediately available for delivery and its development is key to allow connections and therefore enable access to the northern areas
- Areas facing onto flood zones along the two brooks are considered as buffer/amenity areas. Here, residential development is envisaged in decreasing density, integrating with nature at the edge.
- The masterplan concentrates on developing land to the eastern side of the railway tracks first, with the aim of creating a compact community with walkable neighbourhoods that eliminate fragmentation.
- In phase 4 the concept masterplan allows for potential future expansion to the south.

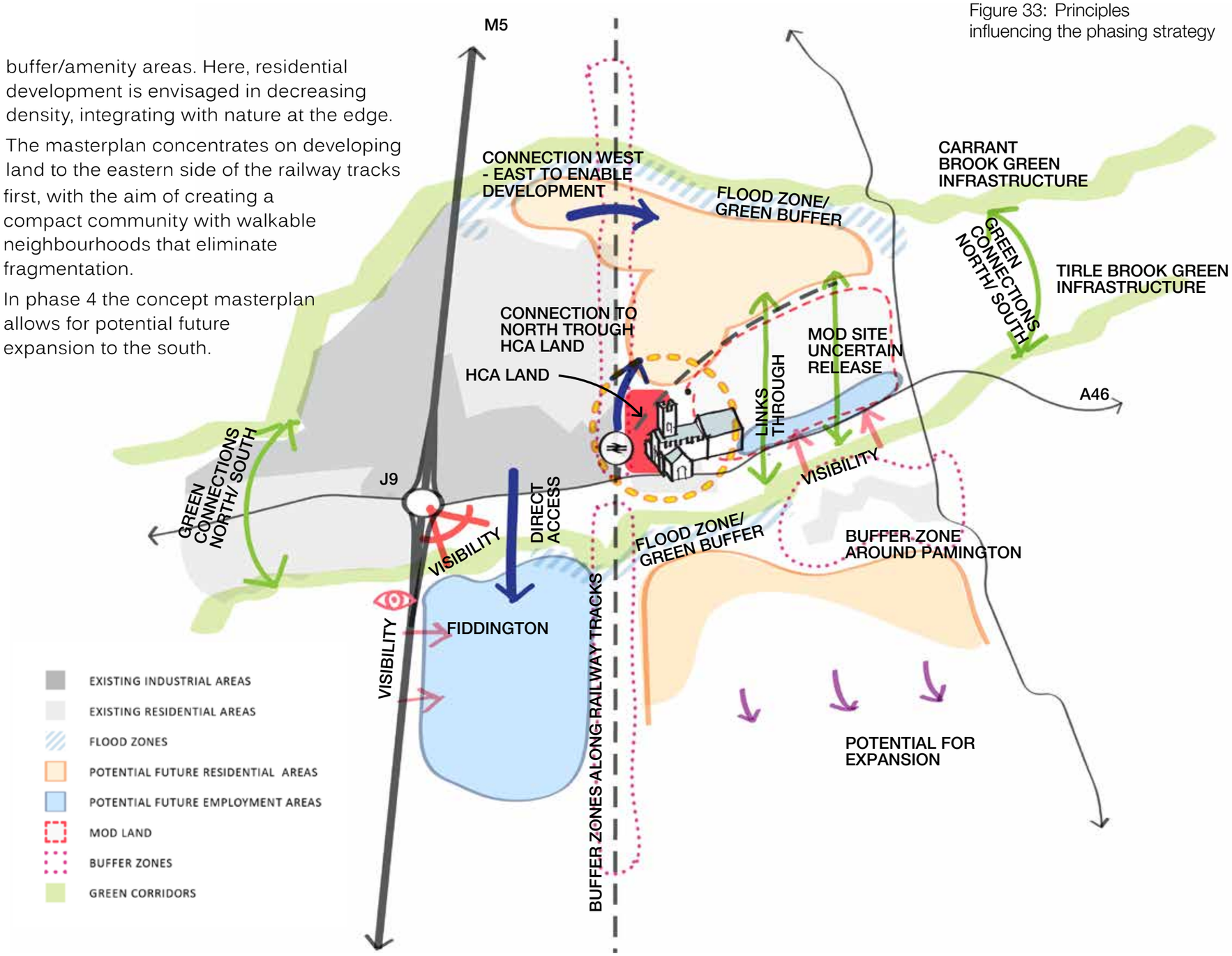


Figure 33: Principles influencing the phasing strategy

Masterplan sites

This plan shows the sites taken into consideration and tested in developing the masterplan.

These sites are categorised as:

- Sites with planning approval
- Residential sites put forward through the SALA process
- Land owned by the HCA and ready to be developed (deliverable)
- Sites subject to planning application
- Land identified by this masterplan that may be developable in future, but whose availability is unconfirmed.

Some of these sites have been excluded from the final masterplan because they have been considered too far from the core of development.

The parcels of land identified by this masterplan but whose availability is unconfirmed have mostly been considered as part of the final phases of the masterplan process, as their release is considered more challenging.

Site numbers correspond to the phasing tables on the following pages.

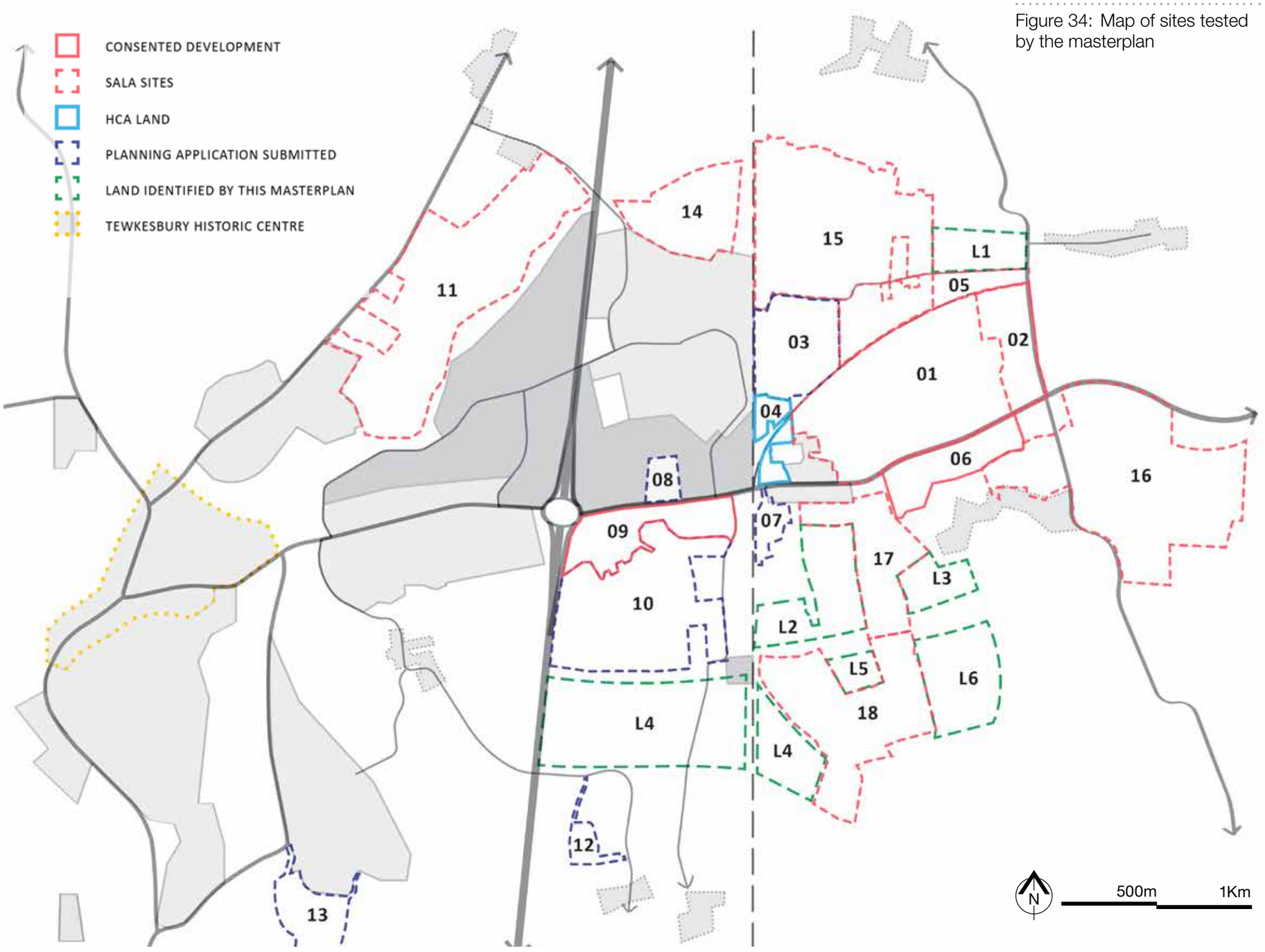


Figure 34: Map of sites tested by the masterplan

Pre-Masterplan

This plan shows the existing Ashchurch context with the permitted development pipleline, which is considered to be the starting pre-masterplan scenario.

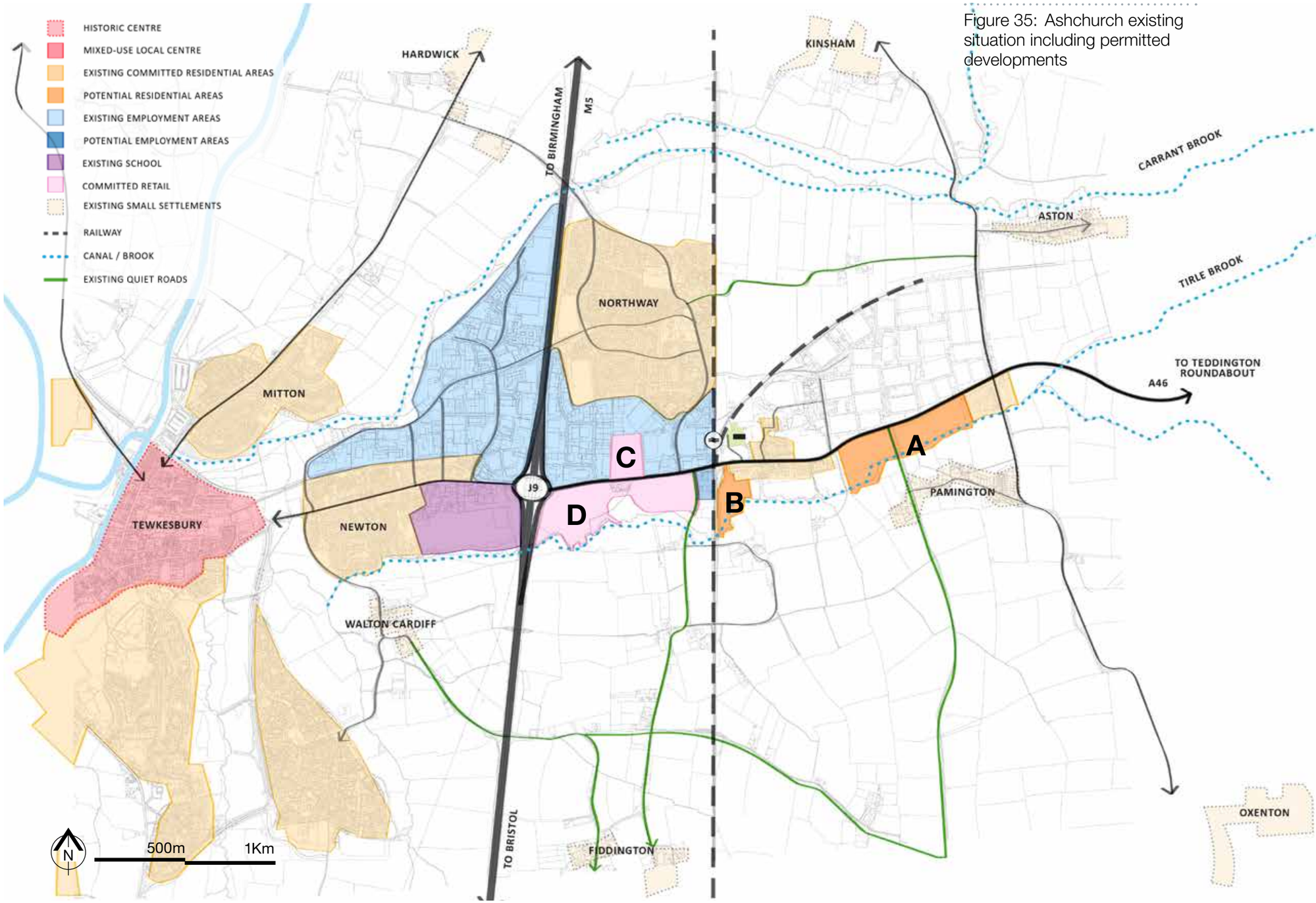


Figure 35: Ashchurch existing situation including permitted developments

PERMITTED DEVELOPMENTS		AREA
		Ha
A	Pamington Lane	13
B	Land east of railway	3.3
C	Trelborg site, Sainsburys foodstore	3.8
D	Retail Centre	21

Phase 1 - to 2031

Phase 1 envisages the development of the areas north of the MOD base, the HCA land and the Fiddington site, delivering:

- 3,180 new homes
- 46 Ha new employment land
- local centre with retail/services
- new primary school
- northern Green Infrastructure corridor

PHASE 1		SITE AREA
		Ha
3	MOD Hitchins (Aston Fields Lane)	21.5
4	MoD HCA Land	6
5	Land east of MoD Hitchins	6.5
10	Fiddington	48
14	Land at Northway	22.5
15	Land north of Ashchurch depot	76
L1	additional land near Aston	10

In terms of transport:

- There is not a transport solution yet for this quantum of development in this phase. This is a gap in the current Concept Masterplan.
- All development loads onto current A46.
- Northern link needed with crossing over mainline rail, joining up existing roads.

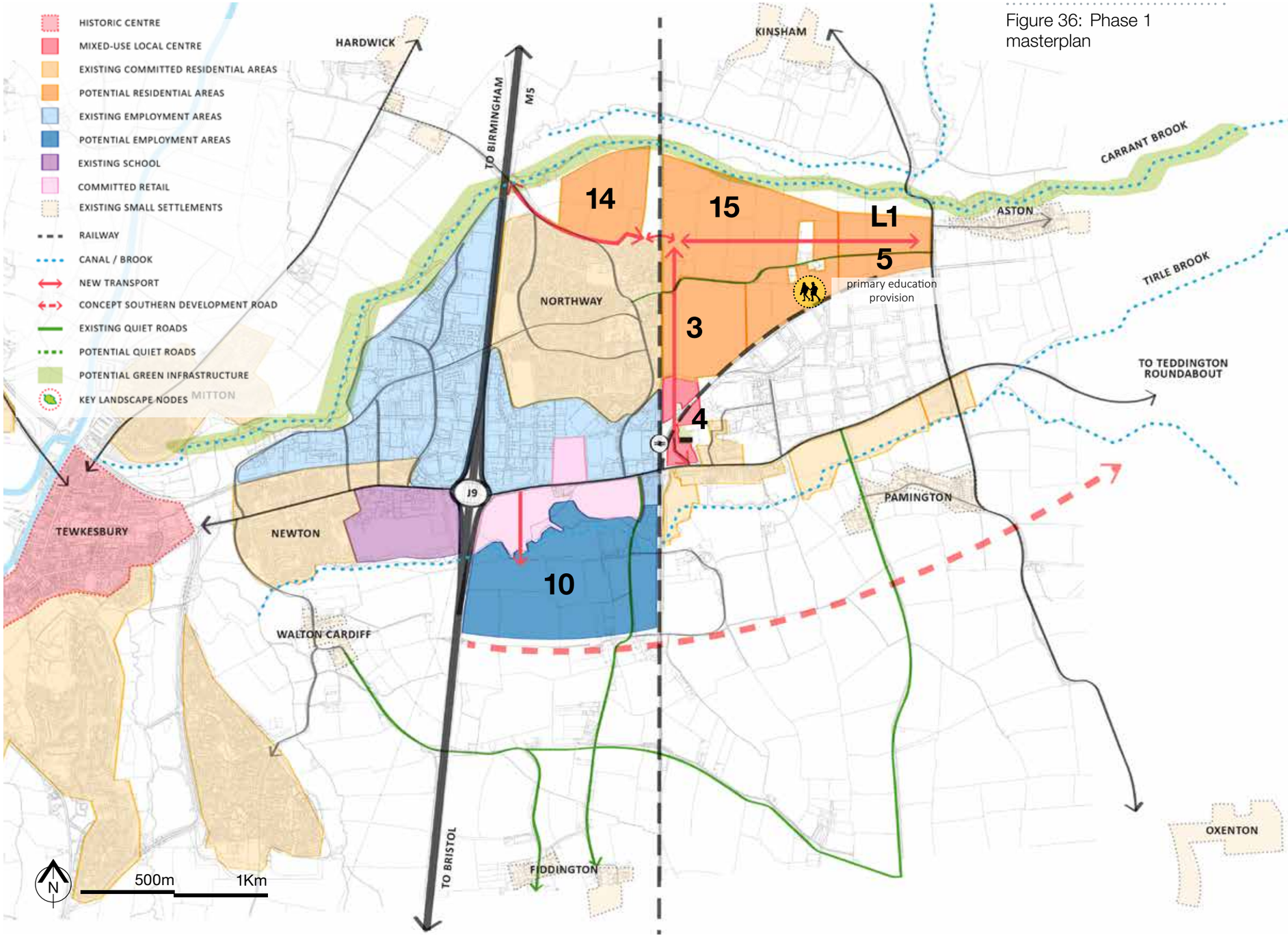
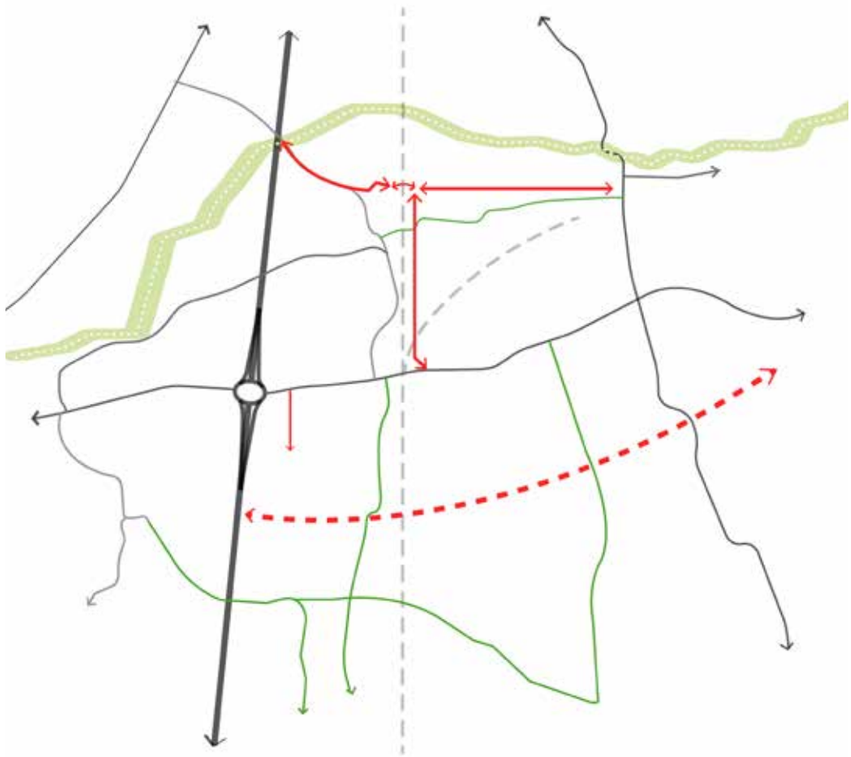


Figure 36: Phase 1 masterplan

Figure 37: Phase 1 area schedule

Additions to the existing road pattern necessary to enable phase 1 development are illustrated on the diagram below.

There is a gap in the Concept Masterplan as to how this quantum of development in this Phase is supported. Further consideration needs to be given to bringing forward the southern development road.



EXISTING ROADS
NEW ROADS
CONCEPT SOUTHERN DEVELOPMENT ROAD
EXISTING QUIET ROADS
NEW QUIET ROADS
GREEN LINKS

ASHCHURCH		RESI				RETAIL	EMPLOYMENT		
	PHASE 1	SITE AREA	SITE AREA TO RESI	PROPOSED DENSITY	INDICATIVE NO. RESI UNITS	SITE AREA TO RETAIL	SITE AREA TO EMPLOYMENT	existing no. FTEs/Ha 92 Scenario 1* NO. FTEs	potential increased no.FTEs/Ha 139 Scenario 2* NO. FTEs
		Ha	Ha	units/Ha		Ha	Ha		
1	MoD Army Camp	64							
2	MoD east	15							
3	MOD Hitchins (Aston Fields Lane)	21.5	18	30	540				
4	MoD HCA Land	6	3	30	90	2	1	92	139
5	Land east of MoD Hitchins	6.5	6.5	30	195				
10	Fiddington	48					45	4140	6255
14	Land at Northway	22.5	14	30	420				
15	Land north of Ashchurch depot	76	54.5	30	1635				
16	Land at Pamington Farm	78.5							
17	Land at Fitzhammon Park	22							
18	Land south of Smow Farm	43.5							
L1	additional land near Aston	10	10	30	300				
	TOTAL	413.5	106	N/A	3180	2	46	4232	6394

The total number of jobs and homes delivered by Phase 1 (highlighted in yellow) is summarized in the area schedule on this page.

*FTEs/Ha for scenario 1 and 2 refer to the parameters explained on p.21 of this report

Phase 2 - MOD release

Phase 2 includes the MOD land, achieving a total of :

- 4,665 new homes (+1,485 homes)
- 74 Ha new employment land (+28 Ha)
- New primary.secondary school
- Extension to local centre and retail/ facilities
- Local walking/cycling routes
- North-south Green Infrastructure routes

PHASE 2		SITE AREA
		Ha
1	MoD Army Camp	64
2	MoD east	15

In terms of transport:

- MOD release pre/post A46 improvements – not deliverable without southern road addressing A46 congestion
- Assumes MOD railway disused therefore north/south access road enabled

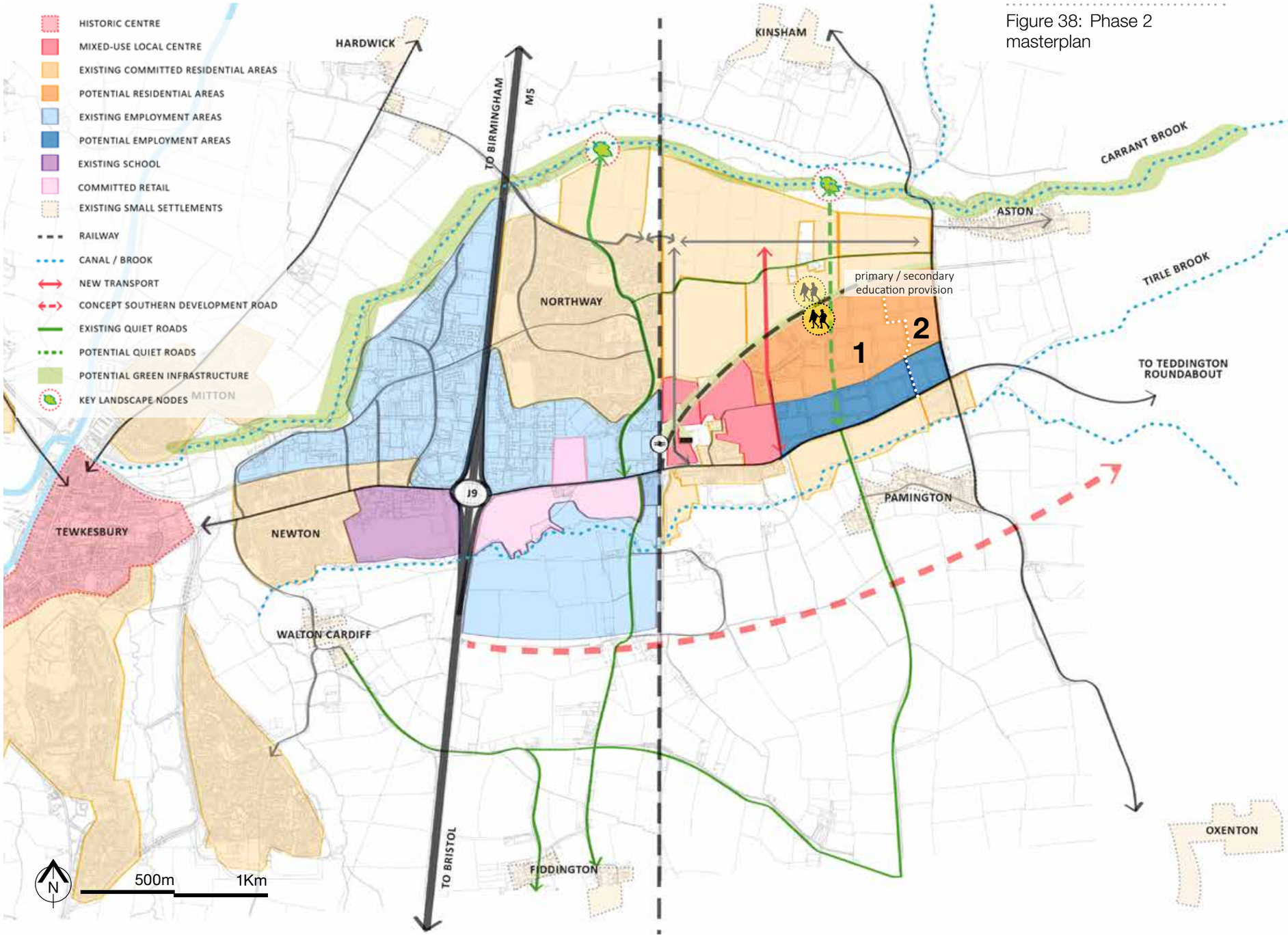
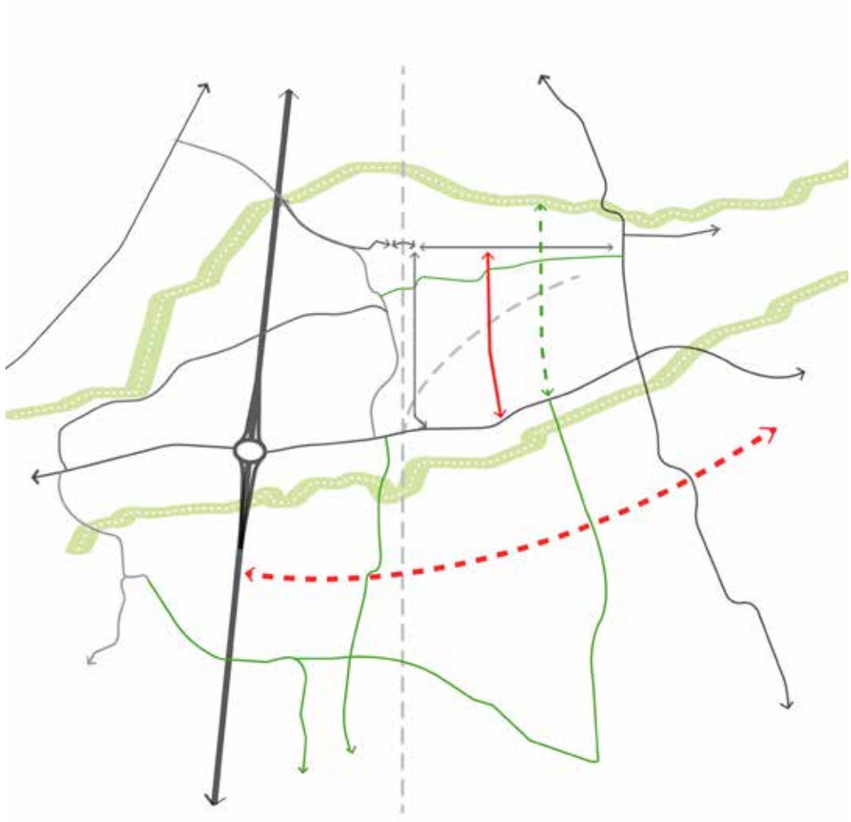


Figure 38: Phase 2 masterplan

Figure 39: Phase 2 area schedule

Additions to the existing road pattern necessary to enable phase 2 development are illustrated on the diagram below.



EXISTING ROADS
NEW ROADS
CONCEPT SOUTHERN DEVELOPMENT ROAD
EXISTING QUIET ROADS
NEW QUIET ROADS
GREEN LINKS

ASHCHURCH		RESI				RETAIL	EMPLOYMENT		
	PHASE 2	SITE AREA	SITE AREA TO RESI	PROPOSED DENSITY	INDICATIVE NO. RESI UNITS	SITE AREA TO RETAIL	SITE AREA TO EMPLOYMENT	existing no. FTEs/Ha 92 Scenario 1* NO. FTEs	potential increased no.FTEs/Ha 139 Scenario 2* NO. FTEs
		Ha	Ha	units/Ha		Ha	Ha		
1	MoD Army Camp	64	38.5	30	1155		24	2208	3336
2	MoD east	15	11	30	330		4	368	556
3	MOD Hitchins (Aston Fields Lane)	21.5	18	30	540				
4	MoD HCA Land	6	3	30	90	2	1	92	139
5	Land east of MoD Hitchins	6.5	6.5	30	195				
10	Fiddington	48					45	4140	6255
14	Land at Northway	22.5	14	30	420				
15	Land north of Ashchurch depot	76	54.5	30	1635				
16	Land at Pamington Farm	78.5							
17	Land at Fitzhammon Park	22							
18	Land south of Smow Farm	43.5							
L1	additional land near Aston	10	10	30	300				
	TOTAL	413.5	155.5	N/A	4665	2	74	6808	10286

The total number of jobs and homes delivered by Phase 2 (highlighted in yellow) is summarized in the area schedule on this page.

*FTEs/Ha for scenario 1 and 2 refer to the parameters explained on p.21 of this report

Phase 3 - Southern expansion

Phase 3 includes the development parcels which would be accessible following the creation of the new southern link road. This phase achieves a total of:

- 5,850 new homes (+1,185 homes)
- 74 Ha new employment land (+0 Ha)
- New primary school
- Southern Green Infrastructure corridor

PHASE 3		SITE AREA
		Ha
10	Fiddington	48
17	Land at Fitzhammon Park	22
L2	additional land east of railway	16
L3	additional land near Pamington	8

In terms of transport:

- A46 could become a local road
- Development site area between current A46 and new road is dependent on alignment
- New southern development road provides direct access to employment area (Fiddington) and residential areas, relieving pressure on A46
- Possible parallel service/ access road

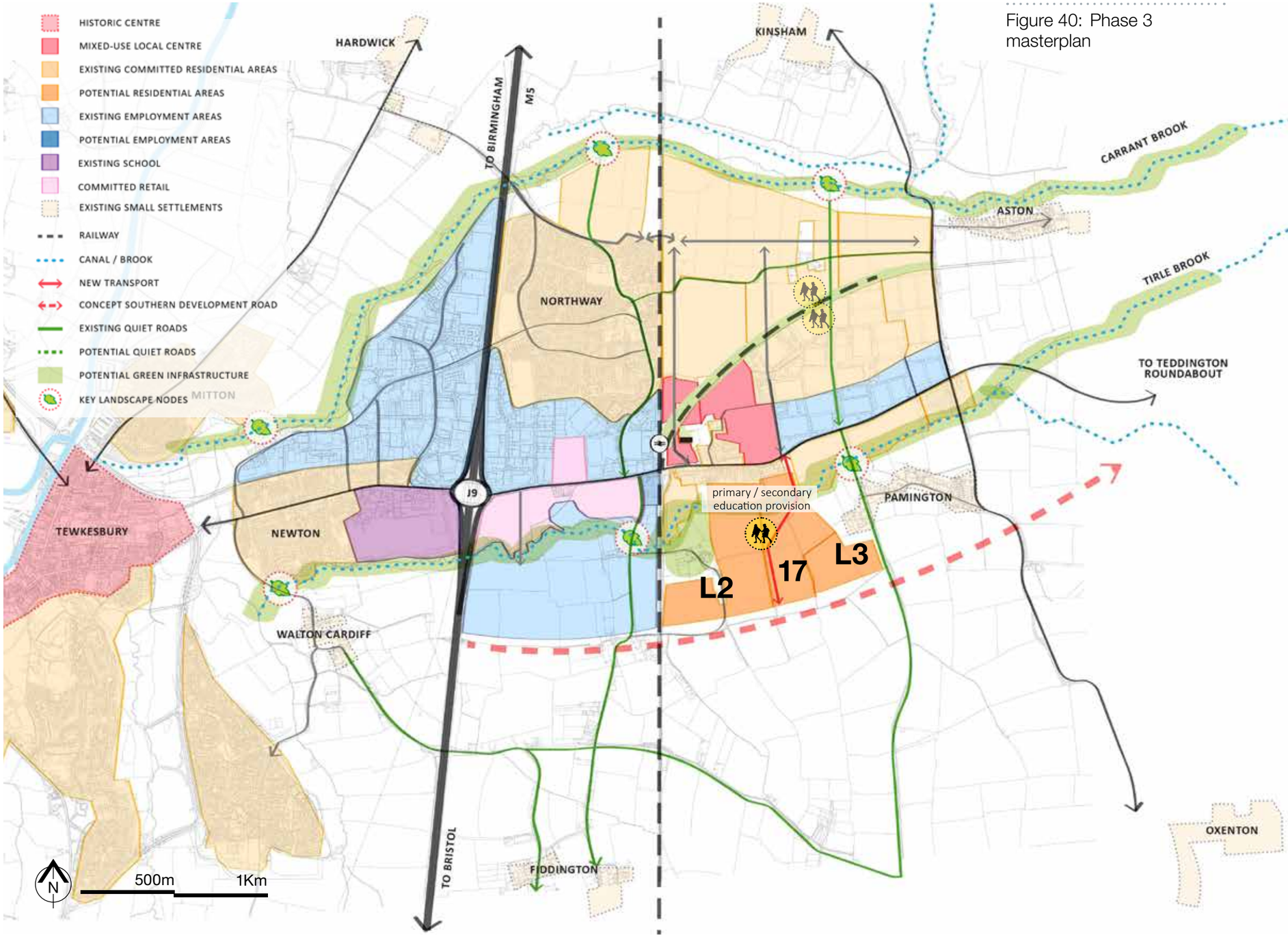
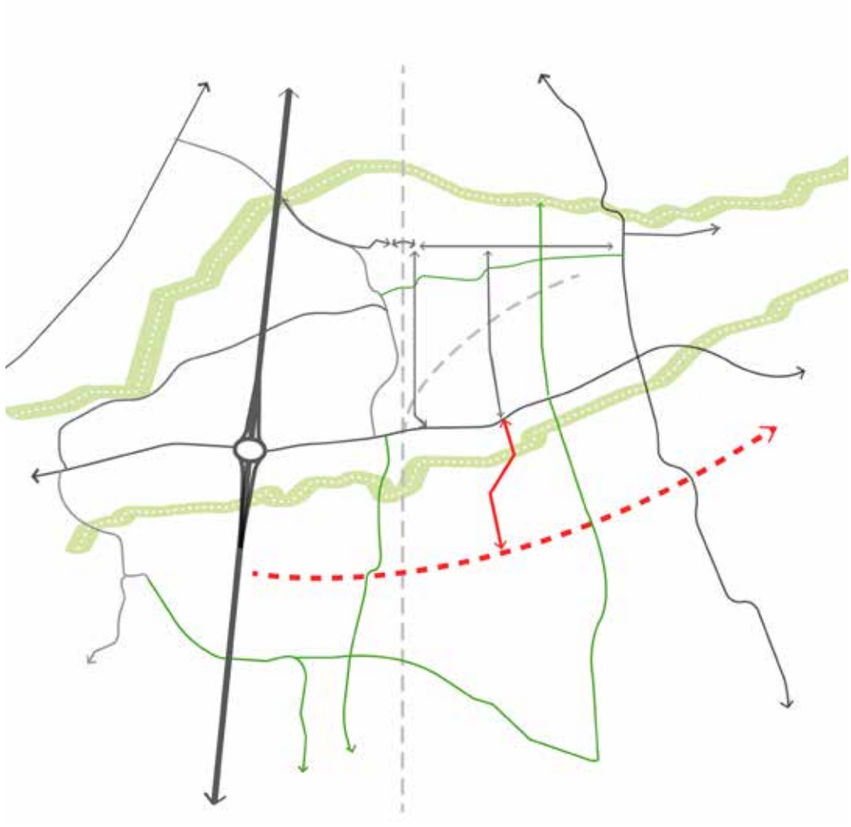


Figure 40: Phase 3 masterplan

Figure 41: Phase 3 area schedule

Additions to the existing road pattern necessary to enable phase 3 development are illustrated on the diagram below.



EXISTING ROADS
NEW ROADS
CONCEPT SOUTHERN DEVELOPMENT ROAD
EXISTING QUIET ROADS
NEW QUIET ROADS
GREEN LINKS

ASHCHURCH		RESI				RETAIL	EMPLOYMENT		
PHASE 3		SITE AREA	SITE AREA TO RESI	PROPOSED DENSITY	INDICATIVE NO. RESI UNITS	SITE AREA TO RETAIL	SITE AREA TO EMPLOYMENT	existing no. FTEs/Ha 92 Scenario 1* NO. FTEs	potential increased no.FTEs/Ha 139 Scenario 2* NO. FTEs
		Ha	Ha	units/Ha		Ha	Ha		
1	MoD Army Camp	64	38.5	30	1155		24	2208	3336
2	MoD east	15	11	30	330		4	368	556
3	MOD Hitchins (Aston Fields Lane)	21.5	18	30	540				
4	MoD HCA Land	6	3	30	90	2	1	92	139
5	Land east of MoD Hitchins	6.5	6.5	30	195				
10	Fiddington	48					45	4140	6255
14	Land at Northway	22.5	14	30	420				
15	Land north of Ashchurch depot	76	54.5	30	1635				
16	Land at Pamington Farm	78.5							
17	Land at Fitzhammon Park	22	15.5	30	465				
18	Land south of Smow Farm	43.5							
L1	additional land near Aston	10	10	30	300				
L2	additional land east of railway	16	16	30	480				
L3	additional land near Pamington	8	8	30	240				
TOTAL		437.5	195	N/A	5850	2	74	6808	10286

The total number of jobs and homes delivered by Phase 3 (highlighted in yellow) is summarized in the area schedule on this page.

*FTEs/Ha for scenario 1 and 2 refer to the parameters explained on p.21 of this report

Phase 4 - Future expansion

Phase 4 shows the future potential of the southern area, completing the masterplan. In total this could deliver up to:

- 8,010 new homes (+2,160 homes)
- 120 Ha employment land (+46 Ha)
- New primary/secondary school
- Continuation of Green Infrastructure network

PHASE 4		SITE AREA
		Ha
18	Land south of Smow Farm	43.5
L4	additional land south of Fiddington	58
L5	additional land south of new road	4
L6	additional land south of Pamington	20

In terms of transport:

- Southern road grants access to southern development
- Potential for southern road to link to Tewkesbury in the future

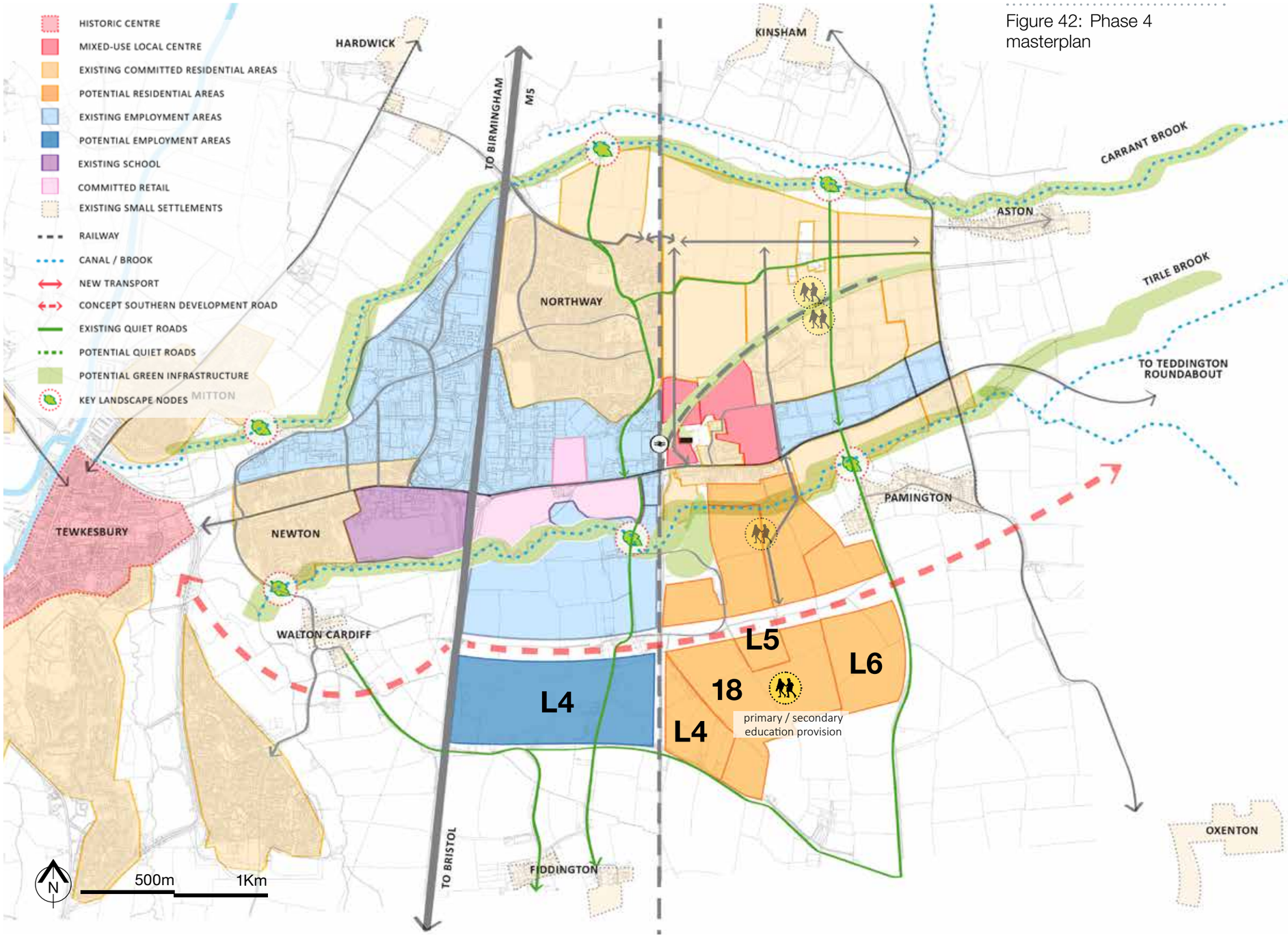
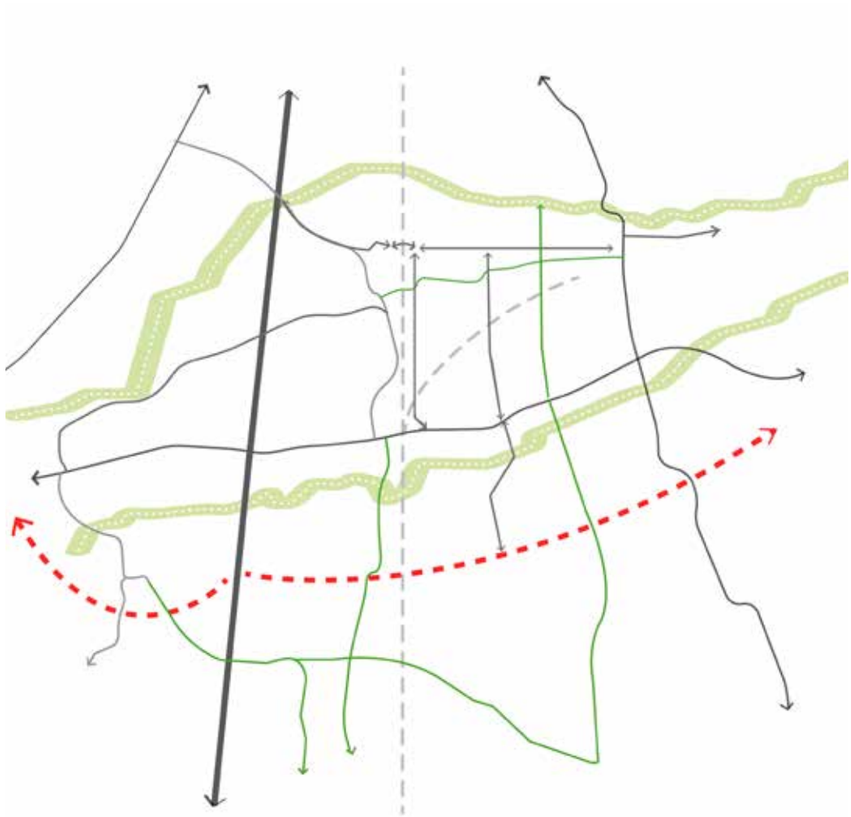


Figure 42: Phase 4 masterplan

Figure 43: Phase 4 area schedule

Additions to the existing road pattern necessary to enable phase 4 development are illustrated on the diagram below.



EXISTING ROADS
NEW ROADS
CONCEPT SOUTHERN DEVELOPMENT ROAD
EXISTING QUIET ROADS
NEW QUIET ROADS
GREEN LINKS

ASHCHURCH		RESI				RETAIL	EMPLOYMENT		
PHASE 4		SITE AREA	SITE AREA TO RESI	PROPOSED DENSITY	INDICATIVE NO. RESI UNITS	SITE AREA TO RETAIL	SITE AREA TO EMPLOYMENT	existing no. FTEs/Ha 92 Scenario 1* NO. FTEs	potential increased no.FTEs/Ha 139 Scenario 2* NO. FTEs
		Ha	Ha	units/Ha		Ha	Ha		
1	MoD Army Camp	64	38.5	30	1155		24	2208	3336
2	MoD east	15	11	30	330		4	368	556
3	MOD Hitchins (Aston Fields Lane)	21.5	18	30	540				
4	MoD HCA Land	6	3	30	90	2	1	92	139
5	Land east of MoD Hitchins	6.5	6.5	30	195				
10	Fiddington	48					45	4140	6255
14	Land at Northway	22.5	14	30	420				
15	Land north of Ashchurch depot	76	54.5	30	1635				
16	Land at Pamington Farm	78.5							
17	Land at Fitzhammon Park	22	15.5	30	465				
18	Land south of Smow Farm	43.5	36	30	1080				
L1	additional land near Aston	10	10	30	300				
L2	additional land east of railway	16	16	30	480				
L3	additional land near Pamington	8	8	30	240				
L4	additional land south of Fiddington	58	12	30	360		46	4232	6394
L5	additional land south of new road	4	4	30	120				
L6	additional land south of Pamington	20	20	30	600				
TOTAL		519.5	267	N/A	8010	2	120	11040	16680

The total number of jobs and homes delivered by Phase 4 (highlighted in yellow) is summarized in the area schedule on this page.

*FTEs/Ha for scenario 1 and 2 refer to the parameters explained on p.21 of this report

04. Masterplan strategies

4.1 Transport strategy

Movement in Ashchurch Today

The road network tends to dominate movement issues in the Ashchurch area with long-standing concerns regarding the M5 and Junction 9 (J9) and the A46 overshadowing other opportunities relating to walking, cycling, bus and rail movement. Before considering how the masterplan development ambitions may be delivered in movement terms, present day movement issues and opportunities are summarised, beginning with that tending to attract the most attention, the road network.

Road Network

The study area is dominated by the key road corridors of the M5, running north-south and the A46, east-west. Although conferring considerable local and strategic connectivity benefits by road, both corridors present several major issues for the area and local people, including community severance, challenging walking and cycling conditions and significant congestion impacts for all road users, including bus services.

Both road corridors have been subject to considerable technical study over many years, with work ongoing by Highways England, Gloucestershire County Council (GCC), Midlands Connect and the A46 Partnership Group. The consensus of these studies is that the provision of a new off-line corridor to supplement the A46 would be of significant benefit although there is no currently promoted alignment or delivery programme for this route. It offers the prospect of: relieving the wider strategic road network; assisting development access via the relieved A46; and reducing traffic flows on the A46 alignment to the benefit of walking, cycling, bus movement and local amenity.

Key road network concerns relate to where road infrastructure is under pressure, incomplete or absent, and is summarised below:

- M5 J9 – northbound off-slip hard shoulder vehicle queuing and blocking-back representing a significant safety concern;
- A46 junctions and accesses through Ashchurch contributing to corridor congestion issues;
- Ashchurch Business Park connection to the A46 congestion during the evening peak period;
- A438 Ashchurch Road – congested during peak periods;
- A438 Ashchurch Road / Shannon Way congestion – development related improvements are planned which may include J9 improvements too [see note below on the Short Term Access Strategy];
- The A46 railway overbridge limits road width to a single lane in either direction; and
- Aston Cross junction – highway capacity constraint by development on all arms with congestion during peak hours.

The Road Network and Development Impact

Short Term Access Strategy

In parallel with the work undertaken in support of this masterplan, a road network traffic modelling study has been progressed separately to develop a short-term access strategy for development sites within the study area. The work, commissioned by Gloucestershire County Council on behalf of Tewkesbury Borough Council, developed and applied a Paramics microsimulation model to assess the highways impact of a number of scenarios around the A46 corridor to facilitate site access.

The traffic model tests indicated that the assumed scale of development could have a significant impact on the highway network as there is insufficient capacity to absorb additional demand. Without additional measures being employed, there was a significant increase in delays and journey times along all key routes, including the A46.

The most significant intervention tested in the study was a new Northern Access Road proposal to cross the railway, connecting between Aston Fields Lane and Hardwick Bank Road and effecting closure of the level crossing. This provides an alternative east-west route and distributes traffic movements more widely across the road network. However, the modelling results indicated that this intervention would not be able to support additional growth taking place on the western MOD site (900 homes), leading to significant congestion and delays.

Other scenarios, varying by physical intervention (link and junction improvements) and development demand, were also tested, though not a scenario with maximum development demand and the full range of physical interventions in place. The reason given was that the resultant delays were deemed to be at an unacceptable level, thus emphasising the limitations of these relatively localised and modest junction and road link improvements.

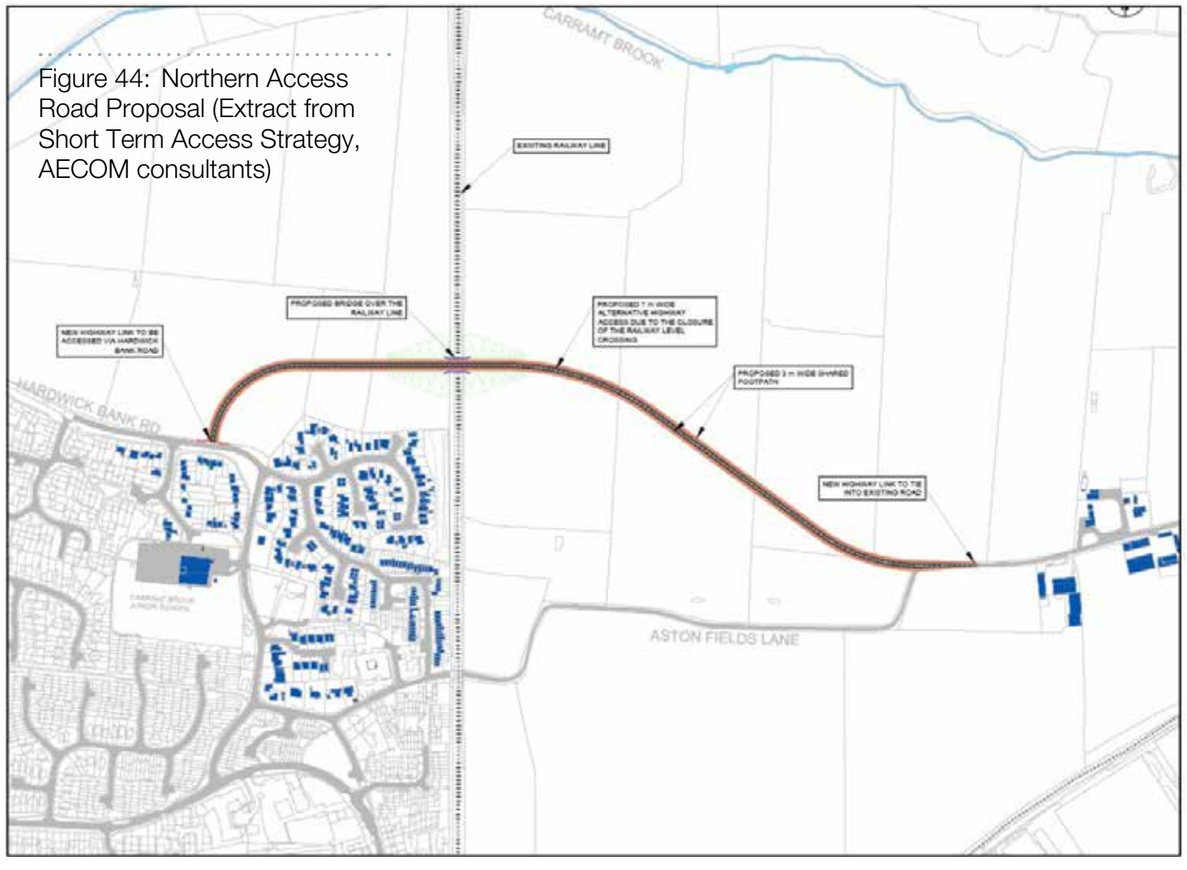


Figure 44: Northern Access Road Proposal (Extract from Short Term Access Strategy, AECOM consultants)

In summary, this study's findings indicate that although there is some evident benefit in enabling development access to specific land parcels in the short term through localised link and junction improvements, such measures will be of limited benefit, either in the near term or beyond in considering more ambitious development proposals. The prevailing issues of traffic demand, related vehicle delays and the limited road network connections available mean that more substantial and comprehensive road infrastructure improvement is required to support anticipated development. To minimise the related negative impacts of such infrastructure, severance, noise, visual impact etc, and to provide a more positive and active movement and living environment, then a related and comprehensive approach is required, predicated on sustainable transport.

Masterplan High Level Development Impact Assessment

To inform this report, a separate and high-level assessment of the highway impacts of the masterplan has been undertaken by estimating the scale of trip generation that the masterplan would generate at the local (masterplan area) level.

The analysis estimated the number of trips for each development site using trip rates derived from technical work underpinning the Joint Core Strategy and also from the national TRICS trip rate database. Trip distributions and modal splits were taken from Census 2011 data.

The key findings of this analysis are:

- the scale of the development and estimated impact for all development phases would require significant increases in capacity on the A46 and at the M5 Junction 9, with later phases requiring provision of a dedicated new east-west road link to the south of the development area to provide specific development area access;
- the daily movement profile for the employment land use is especially onerous in terms of vehicle trips on the M5 northbound off-slip - a particular issue due to the congestion pressures and associated safety concerns experienced currently; and
- the volume of trips through the residential Northway area is such that managing that flow should be very carefully considered to minimise traffic impact on residents.

We also note that the information supplied by GCC's transport consultants indicates that the modelled JCS growth was distributed over a wide area including Ashchurch, Pamington, Fiddington and Bishops Cleeve. Concentrating this demand into a tighter area around Ashchurch places greater pressure on the local highway network, particularly the A46, serving to emphasise the road network's shortcomings in responding to development demand.

At the highest level, the principal conclusion confirms the common understanding that the existing road network offers little in the way of further capacity for additional development. Therefore, this report recommends that to accomodate very substantial growth in the Ashchurch area, major development delivery road infrastructure and comprehensive sustainable living interventions will need to be brought forward with the minimum of delay. Clearly, the delivery of new road infrastructure involves substantial lead times, but sustainable modal shift initiatives can be planned and provided for at the outset, and further developed over time.

Rail

Ashchurch for Tewkesbury station is clearly of significant benefit to the area, being well positioned on the rail network and serving many stations / destinations including northbound to Birmingham New Street and southbound to Cheltenham Spa, Gloucester and Bristol. This advantage is though compromised by present day significant shortcomings in service frequency. During the morning and evening peak hours there are direct services to Birmingham which travel between Cardiff and Nottingham, with one service a day travelling to Stanstead via Leicester. Strengthening these existing connections with more frequent services would make Ashchurch for Tewkesbury station considerably more appealing to potential rail users and a very considerable contributor to sustainable transport mode shift in support of masterplan delivery.

Bus

Services are limited with coverage focussed on Tewkesbury town centre to the west with limited coverage to the east. The Northway residential and employment area is served by only two routes, serving Tewkesbury town centre, the rail station and Cheltenham. Ashchurch itself is only served by school bus routes, with the nearest bus stops for services to Tewkesbury town centre and Cheltenham located at the railway station and on Northway Lane.

More widely, buses provide connections between Cheltenham, Gloucester, Bishop's Cleave and Evesham. Given this patchy coverage, and the variable quality of bus passenger facilities, the travel mode share for Tewkesbury is, unsurprisingly, below the average for Gloucestershire, while bus travel to work within Tewkesbury is lower still. Notably, congestion on the A46 is cited by operators as a significant barrier to bus routes operation and coverage.

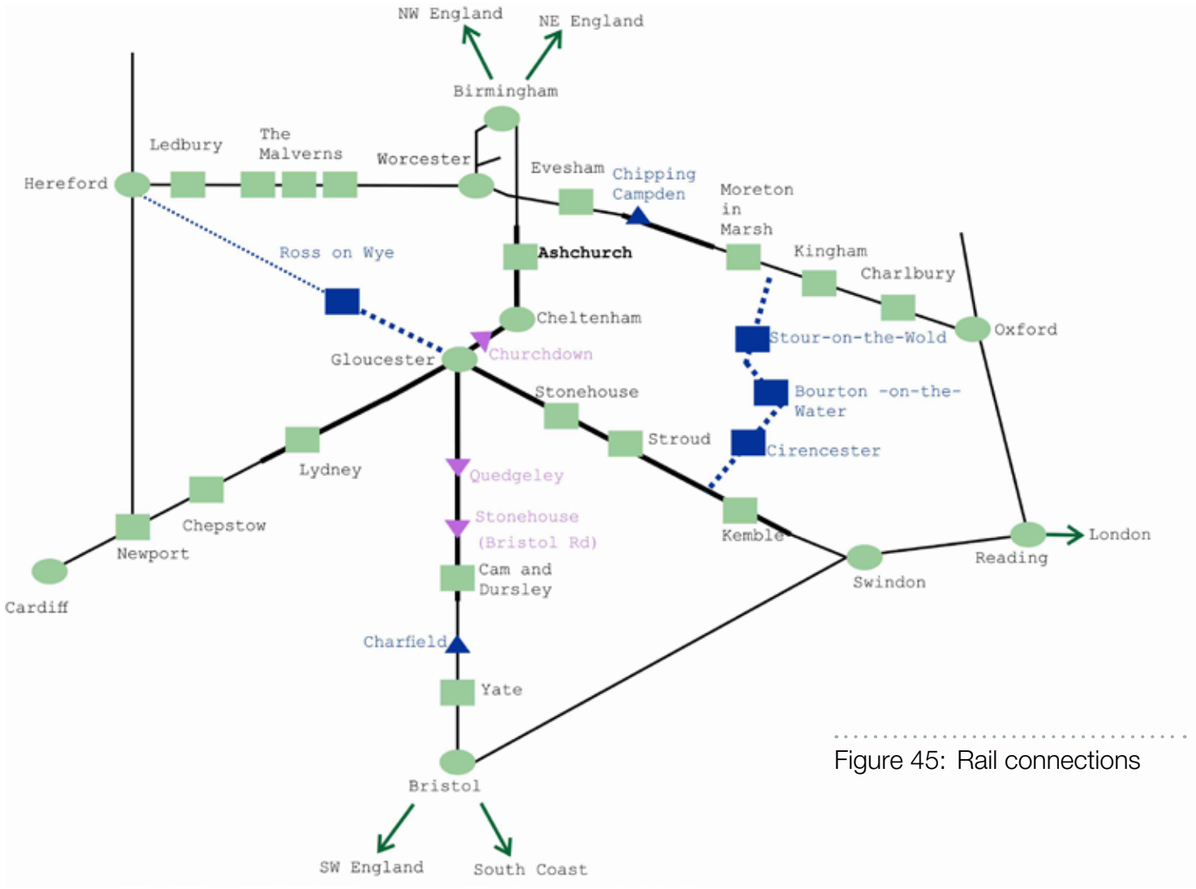


Figure 45: Rail connections

Walking and Cycling

Despite the issues of congestion and severance associated with the A46 and M5, the latter worsened on the east-west axis by the railway line, cycling is a popular travel mode throughout the area. As a counter to the road network difficulties, cyclists benefit from the area's linear form, it's generally favourable topography, and quiet links, where motorised vehicle flows are generally low. There has been considerable investment in promoting cycling in recent years as a meaningful local access mode which has seen a very encouraging level of take-up across the area as evidenced by its untypically high travel mode share.

For walkers and cyclists, addressing the key severance axes of the M5, A46 and railway line through the provision of dedicated and high-quality crossings would contribute greatly to walking and cycling movement across the area. A key focus of the masterplan will be to actively promote and encourage walking and cycling, building on the laudable momentum already evident in relation to cycling in the area.

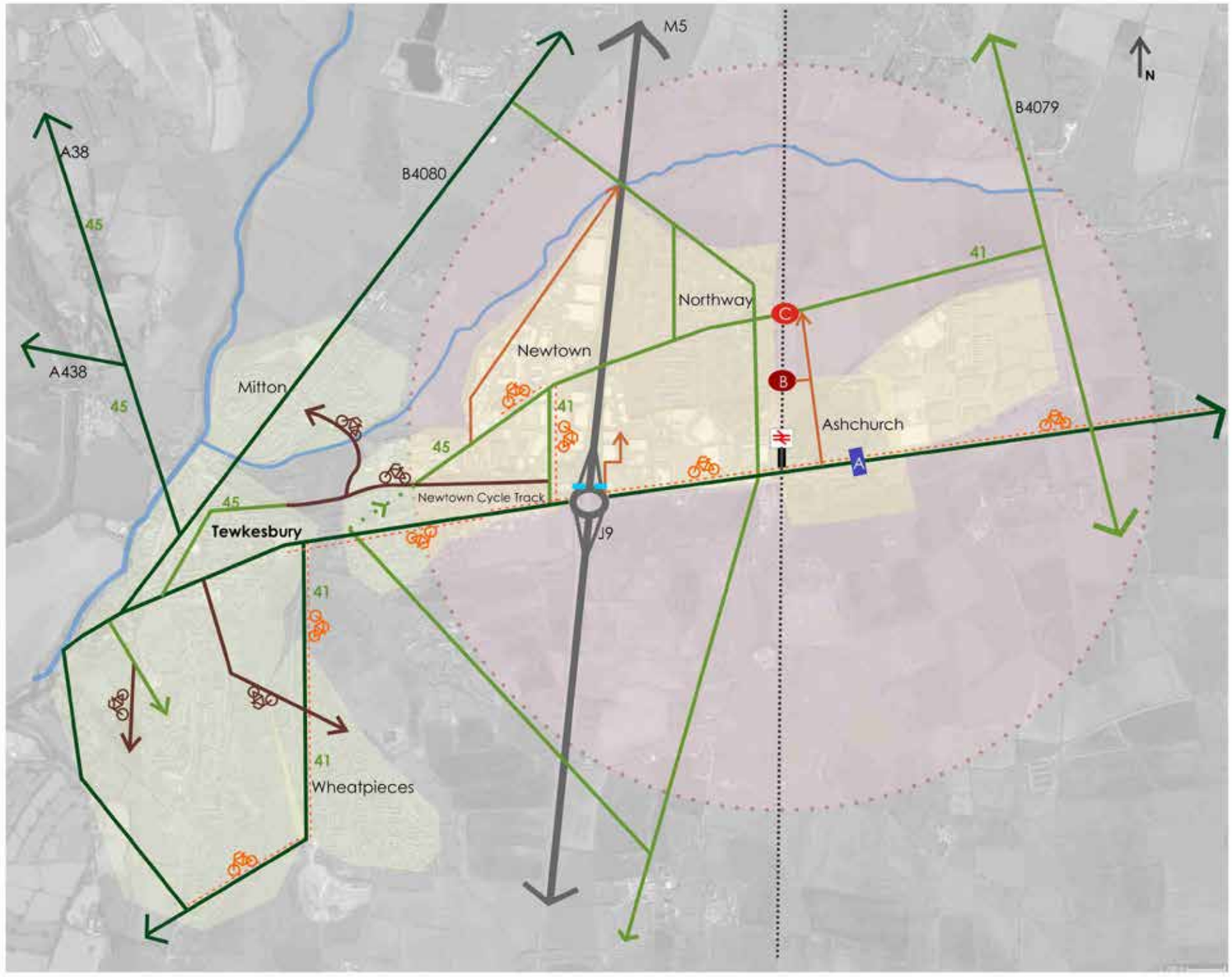


Figure 46: Existing Walking and Cycling Routes and Facilities

Delivering the Masterplan

The key to successfully delivering the long-term vision is in planning development in such a way that it maximises sustainable travel mode use whether through the ready availability of high quality and appealing sustainable modes, area-wide connectivity improvements, or the arrangement and scale of land use types to encourage walking and cycling (co-location of homes and jobs). Relying on the traditional major highways infrastructure-based approach involves a high degree of uncertainty regarding delivery, very substantial infrastructure costs and a long lag period between construction and use. However, as stated, such infrastructure will be required to realise the scale of the Masterplan's longer-term ambitions.

Very beneficial progress can though be made through the delivery of complementary physical infrastructure in the short-term allied to sustainable movement initiatives to provide for additional road network capacity gains and the impetus for achieving a truly sustainable travel mode culture in the long-term. Continuing to plan for development in the traditional way, i.e. awaiting uncertain major physical infrastructure delivery, may well compromise achievement of the desired development scale.

Accordingly, in developing short term and medium-term movement intervention scenarios, we should work-back from the desired end-state, that is the achievement of a high performing sustainable living / movement environment. Actions in the short-term must look towards achievement of the long-term vision and be fully complementary to it. The future major road-based infrastructure should not be seen as evidence of a roads-led approach to new development delivery, but rather as representing a managed increase in road-based travel capacity proportionate to the scale of development, in the context of achieving a sustainable living / movement-based approach to providing the needed movement capacity.

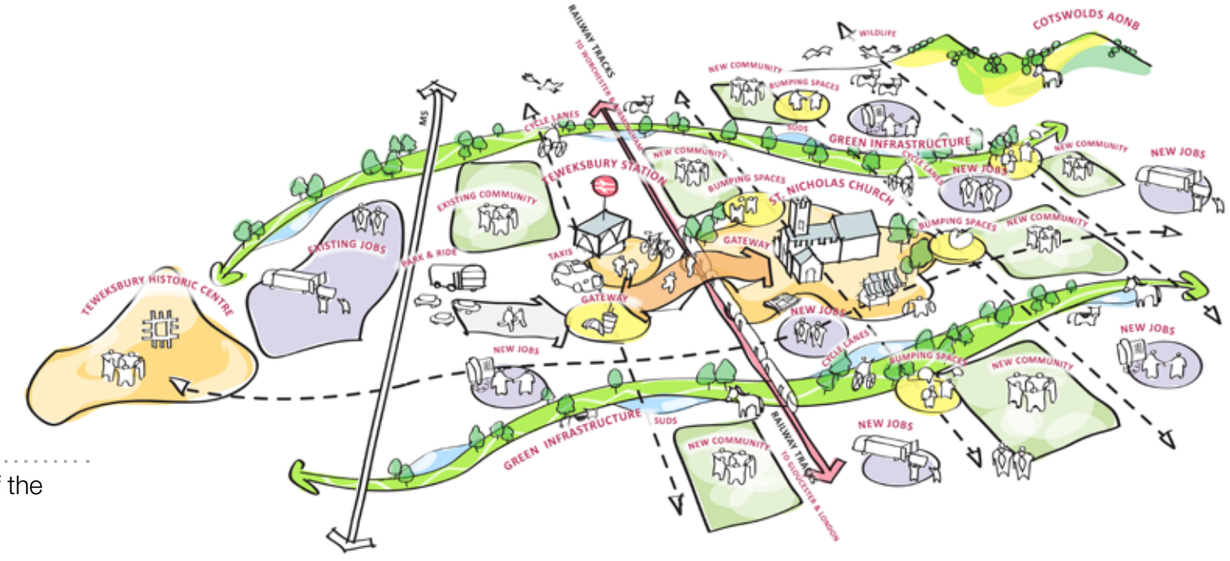


Figure 47: Illustration of the masterplan principles

Transforming the Sustainable Movement Environment

The masterplan vision represents the transformation to a comprehensive sustainable transport environment, initiated in the short-term and progressed, developed and strengthened over time. The sustainable community principle will minimise reliance on personal motorised vehicles and embed a step-change towards active and sustainable transport through an attractive, accessible and highly legible movement network with optimally located housing, employment and leisure facilities. Some initiatives and interventions illustrative of this approach are shown below:

- Land use planning – development planned and arranged to be fully complementary to the achievement of maximising sustainable movement and greatly reducing the need to travel beyond the Ashchurch and Tewkesbury area through:
  - Encouraging a live-work culture
  - Providing locally based amenities, schools, medical facilities, leisure opportunities
  - Co-locating land uses where trips may be linked / shared
- Behavioural changes:
  - Promoting the area to people pre-disposed to active travel and sustainable living – identifying and emphasising the opportunities for a healthy and enjoyable lifestyle

- Active Travel – further increasing travel by cycle and on foot with new walk and cycle links connecting key sites, amenities, facilities and developments
- Rail improvements - significantly reducing service intervals to key destinations, providing a high quality station building for passengers and cycle / bus interchange facilities to further encourage people to rail use from private cars for medium-long distance travel
- Bus service improvements - providing high quality, reliable and convenient services as meaningful and attractive alternatives to personal car use for short-medium journeys
- Park & Ride
  - Provision for a substantial Park & Ride facility accessed from the new road with buses and in the future, likely autonomous vehicle shuttles to transfer people from their cars at the earliest opportunity from the strategic road network thereby minimising vehicles in Ashchurch & Tewkesbury
- Technological Change and Application:
  - Maximising the application of developing relevant technologies to optimise the sustainable movement environment, considering:
    - Autonomous personal and mass-transit
    - Mobility as a Service / Demand Responsive transport
    - Application of traffic modelling technology to manage road network operation and performance according to new transport means.

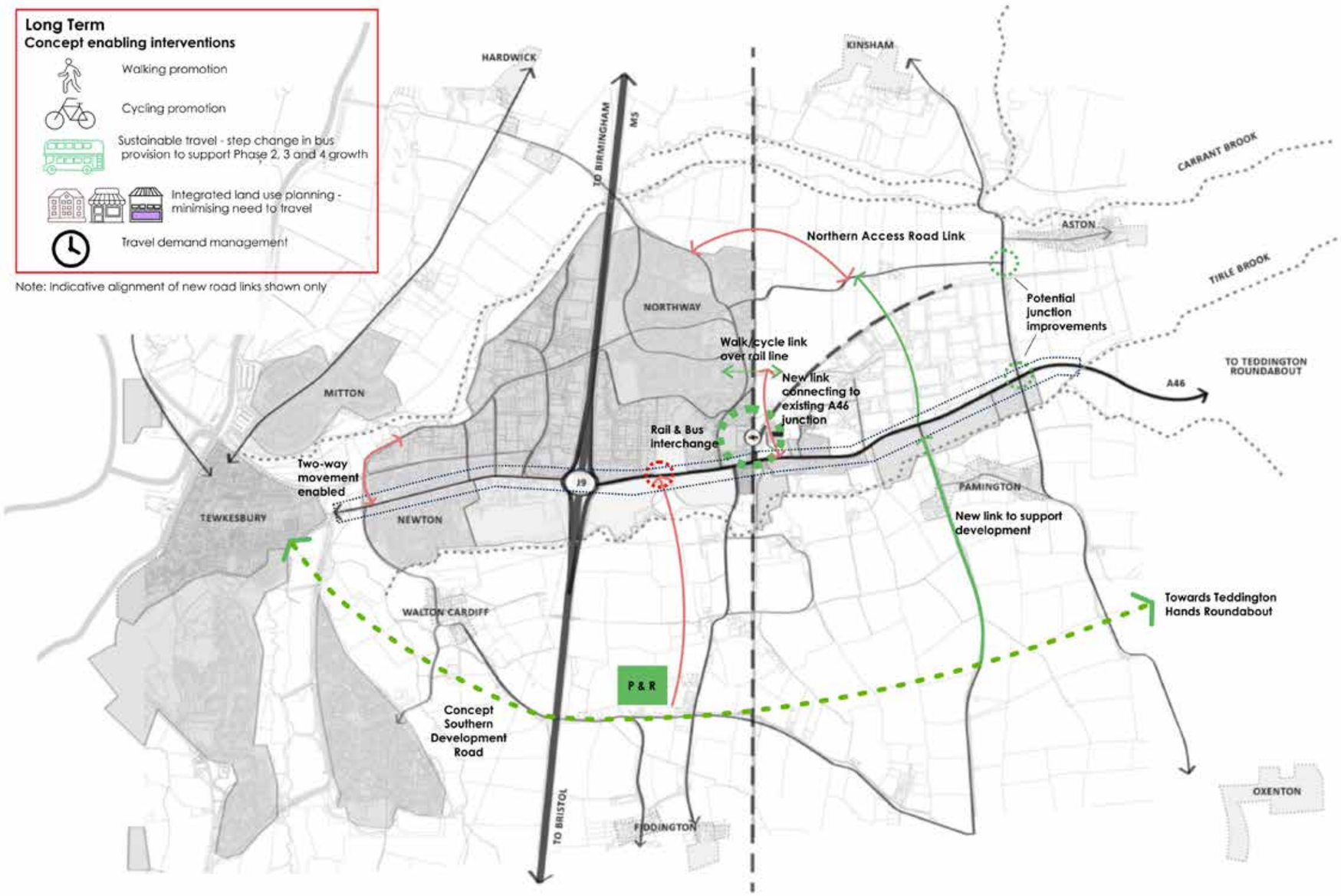


Figure 48: Long-term transport vision and interventions

A46/J9 Concept Connectivity Improvements

A key major intervention would be the delivery of a new connectivity road to the south of the development area, running east-west. This very significant infrastructure intervention would facilitate the step-change in road-based movement conditions required to deliver the Masterplan's long-term vision for growth.

Amongst the benefits are:

- This road could provide dedicated development access junctions and alternative routeing options for local access and development traffic, along with the ability to carry strategic traffic that currently passes through Ashchurch.

Ashchurch – Tewkesbury Sustainable Corridor

With the Development Delivery Road in place, the present A46 alignment could be reimagined as a high quality, convenient and safe pedestrian, cycle and bus corridor connecting Ashchurch with Tewkesbury. Provision along this corridor should be made for mass transit solutions, in the shorter term buses and in the longer term driverless, demand-responsive services. Accordingly, the route should be designed adaptably to accommodate anticipated future movement patterns and needs. Presented as green and pleasant, it will be in keeping with the wider sustainable living environment.

Building on the progress made in the short and medium-term, the implementation of the initiatives and interventions above would be of the appropriate type and form to achieve the long-term vision of circa 8,000 new homes, and between 11,000 to 16,000 new jobs.

Figure 49: Ashchurch rail station

Figure 50: Visualisation of a sustainable movement corridor (image souce: internet, not attributed)

Short-term Enabling Interventions

Local connectivity

Currently, all activity areas feed into the A46, pressurising this principal traffic corridor. Improving local connectivity by providing new links and joining existing incomplete links will assist in relieving that pressure. These include:

- Two-way for entirety of Northway Lane;
- Northern link between Hardwick Bank Road and Aston Fields Lane (over the railway line);
- New link from the A46 (across the MOD rail line); and
- Specific, localised junction improvements at – M5 Junction 9 and Aston crossroads.

The delivery of the northern development plots rely on the provision of a northern link over the main rail line, overcoming severance and completing the link between existing local roads.

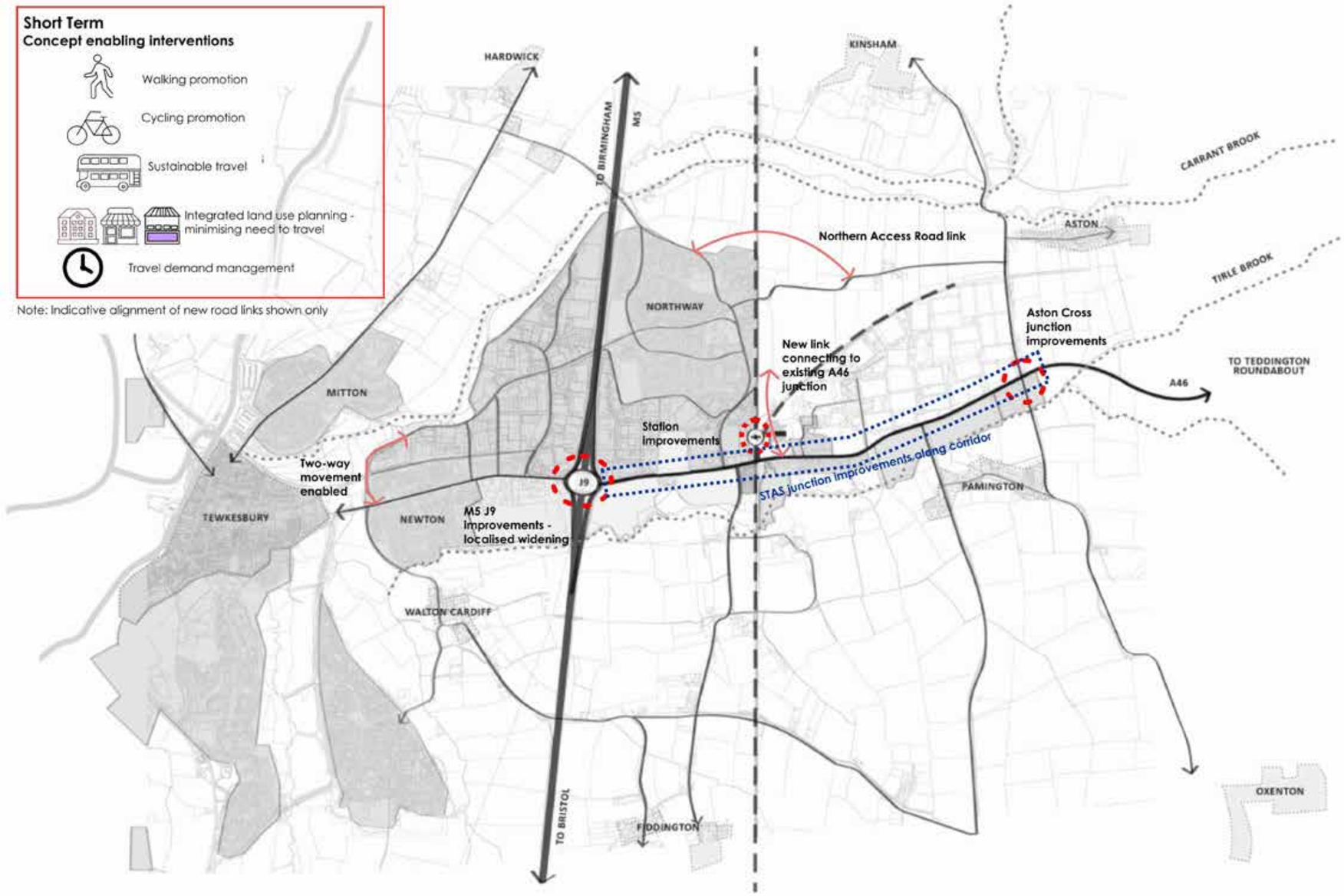


Figure 51: Short-term concept initiatives and interventions

Medium-term Enabling Interventions

Between the short-term connectivity improvements and the long-term major infrastructure interventions, the medium term would see the deepening of the connectivity improvements and the commencement of infrastructural improvements:

- First stage of the link southwards from the A46 providing access for development, particularly around Fiddington;
- The related provision of the Park & Ride facility; and
- Further service improvements at Ashchurch station, with further services & facilities.

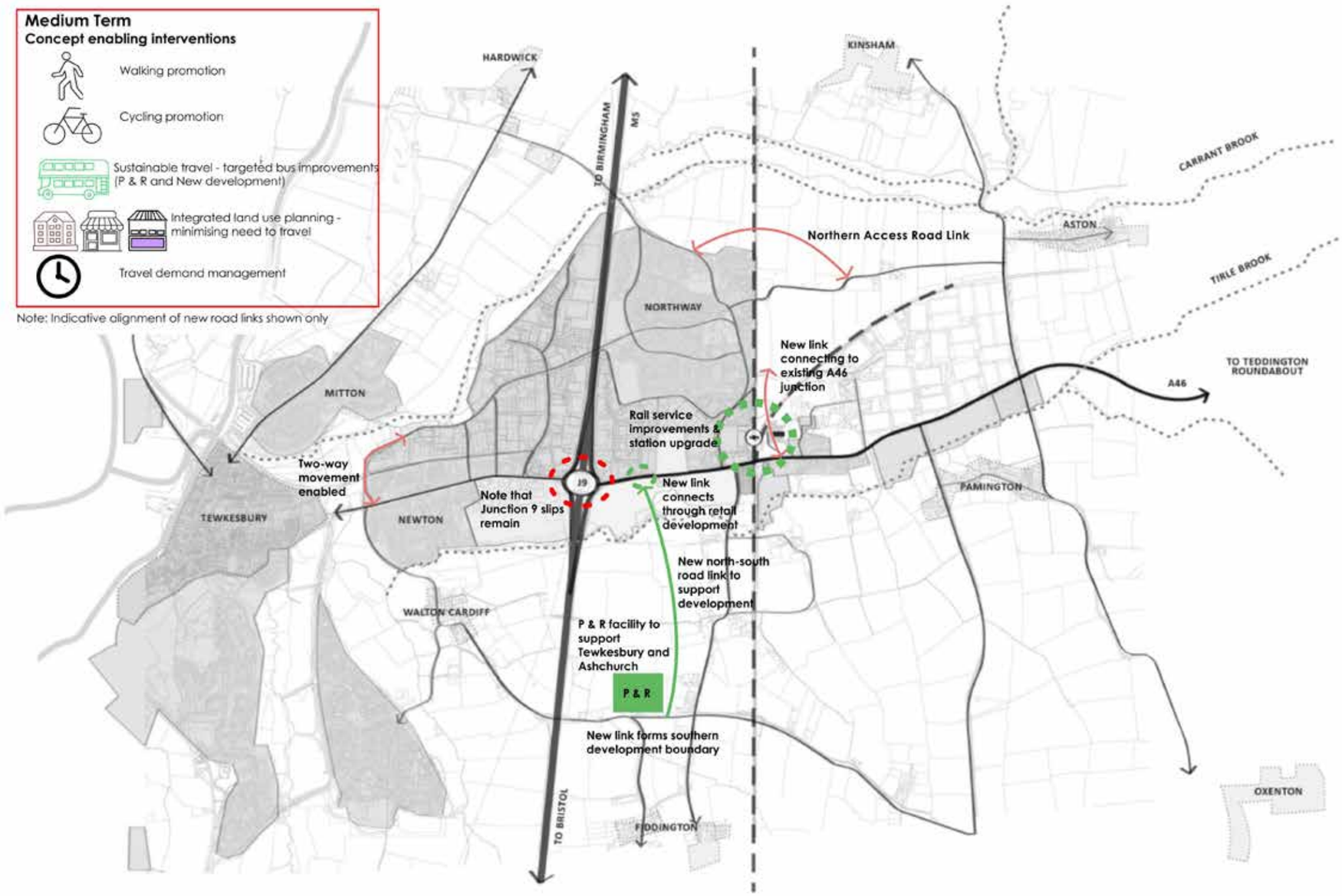


Figure 52: Medium-term masterplan concept initiatives and interventions

Intervention schedule

The range of proposed Masterplan interventions and initiatives is summarised in the schedule opposite, indicating their short / medium / long term phasing.

Indicative transport intervention schedule	
Short-term 0 - 10 years	Travel Demand Management: • Extensive walk, cycle, bus and rail promotion, new supportive facilities and public realm improvements • Smarter Travel Initiatives – area-wide travel planning, peak spreading, sustainable travel mode shift encouragement etc • Integrated land use / transport planning, provision of local services and facilities
	Road links: • Localised M5 Junction 9 improvements • 'Northern Access Road' link between Hardwick Bank Road & Aston Fields Lane with closure of level crossing to south • New two-way road link on Northway Lane (j/w A438) • New road link over MOD rail line connecting to A46 • Aston Cross A46 junction improvements
	Rail improvements commence, rail services, station buildings and facilities
	Bus service improvements – frequency and coverage
Medium-term 10 – 15 years	Start of new Development Delivery Road (forming southern boundary to the masterplan)
	New north-south link connecting Development Delivery Road with current A46 through retail site
	Development links – providing improved local connectivity through the area, particularly for non-car modes
	Continued and strengthened integration of Travel Demand Management measures
	New Park and Ride facility to south
Long-term 15 years +	Development Delivery Road completion providing capacity for long-term development aspirations and congestion relief to the current A46
	Continued and strengthened integration of Travel Demand Management measures

Figure 53: Intervention schedule

4.2 Landscape strategy

The onsite and surrounding landscape offer a large number of social and environmental opportunities. Many of these tie into National Character Area 106, Natural England's suggestions for enhancing and managing the relationship between acess to the natural environment, the conservation/enhancement of valuable ecological processes and increased health and landscape value for residents. Through development there are also opportunities to address systemic environmental issues with design. These include soil stabilisation and creation, pollutant mitigation, water purification, intensive agriculture mitigation and carbon offsetting.

Key themes and features

- Create high value Green Infrastructure with both natural capital value and human scale education/play/recreation value. This aligns with the guidance of the "Building with Nature" programme, developing through a Knowledge Transfer Partnership between Gloucestershire Wildlife Trust and the University of the West of England. This brings together evidence and good practice guidance, creating a set of principles that planners and developers can follow to deliver high-quality green infrastructure. The LEP are considering making this a requirement in any future Growth Deal funding provided.

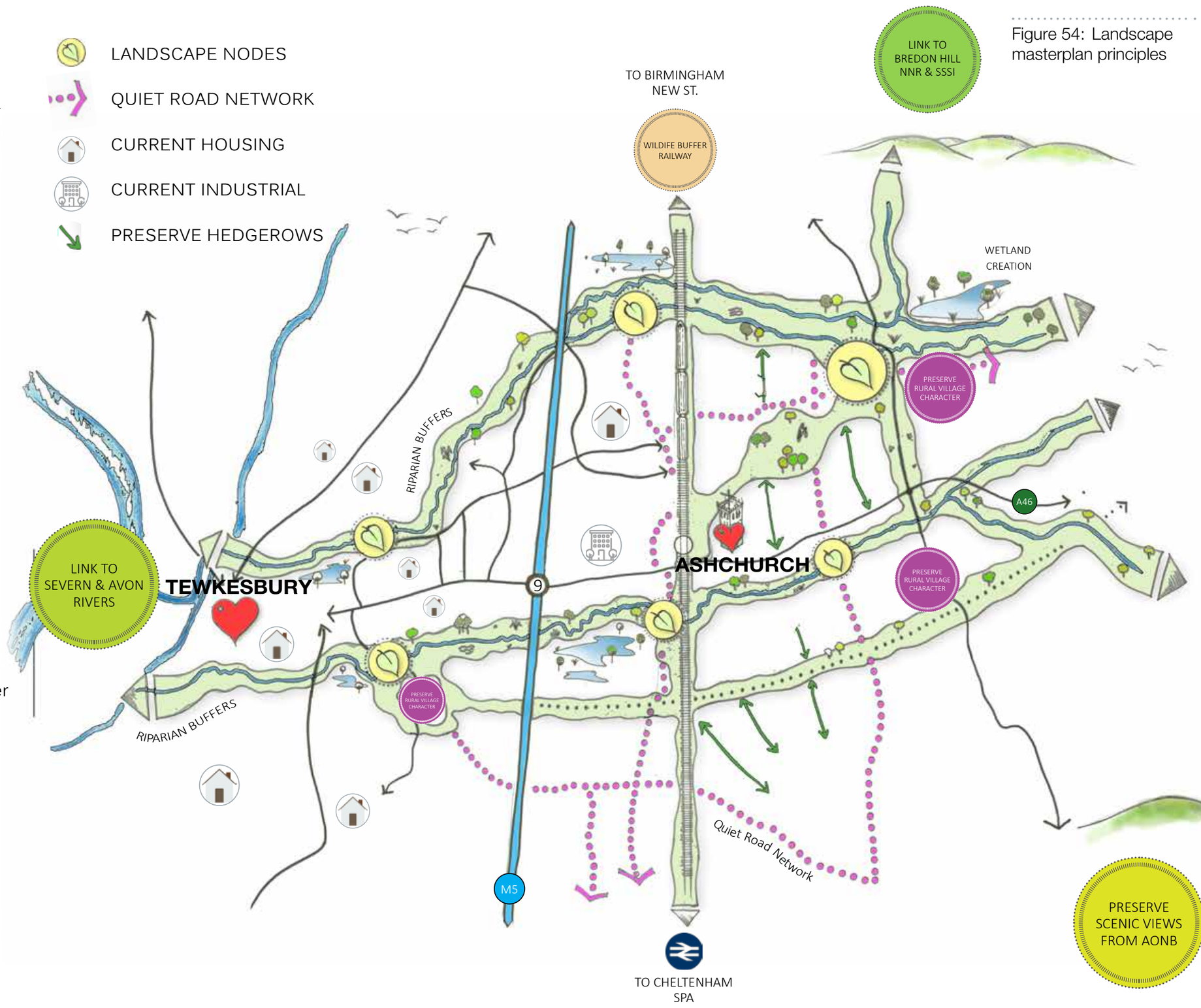
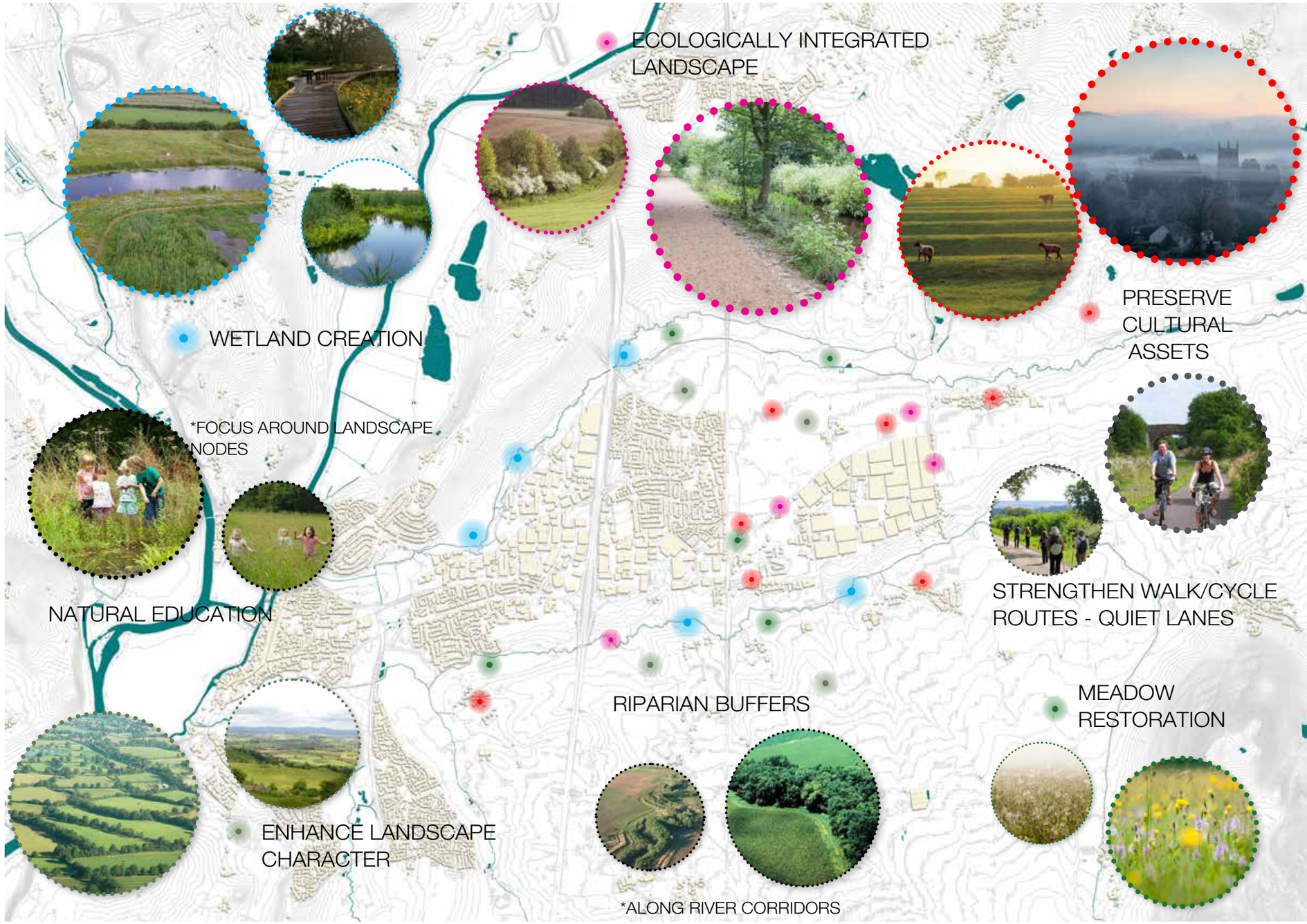


Figure 54: Landscape masterplan principles

Figure 55: Key principles

- Enhance and utilise the main riparian corridors along the river corridors to the north and south of the masterplan area with wider buffers, wetland creation and meadows.
- Add a network of footways and quiet lanes to preserve rural character and access to green spaces.
- Maintain the patchwork field structure character with hedgerows and woodland belts and landscape/wildlife nodes.
- Splay and visually fragment blocks of development with endemic copse and orchard character.
- Preserve archeological character of ridge and furrow.
- Create strong green links to Tewkesbury town centre.
- Enhance landscape views from surrounding AONB designations.
- Reserve natural floodplains to limit flooding and increase biodiversity of area/increase water quality. Increase storage capacity.
- Preserve the setting of the rural settlements (Pamington, Aston and Walton Cardiff)



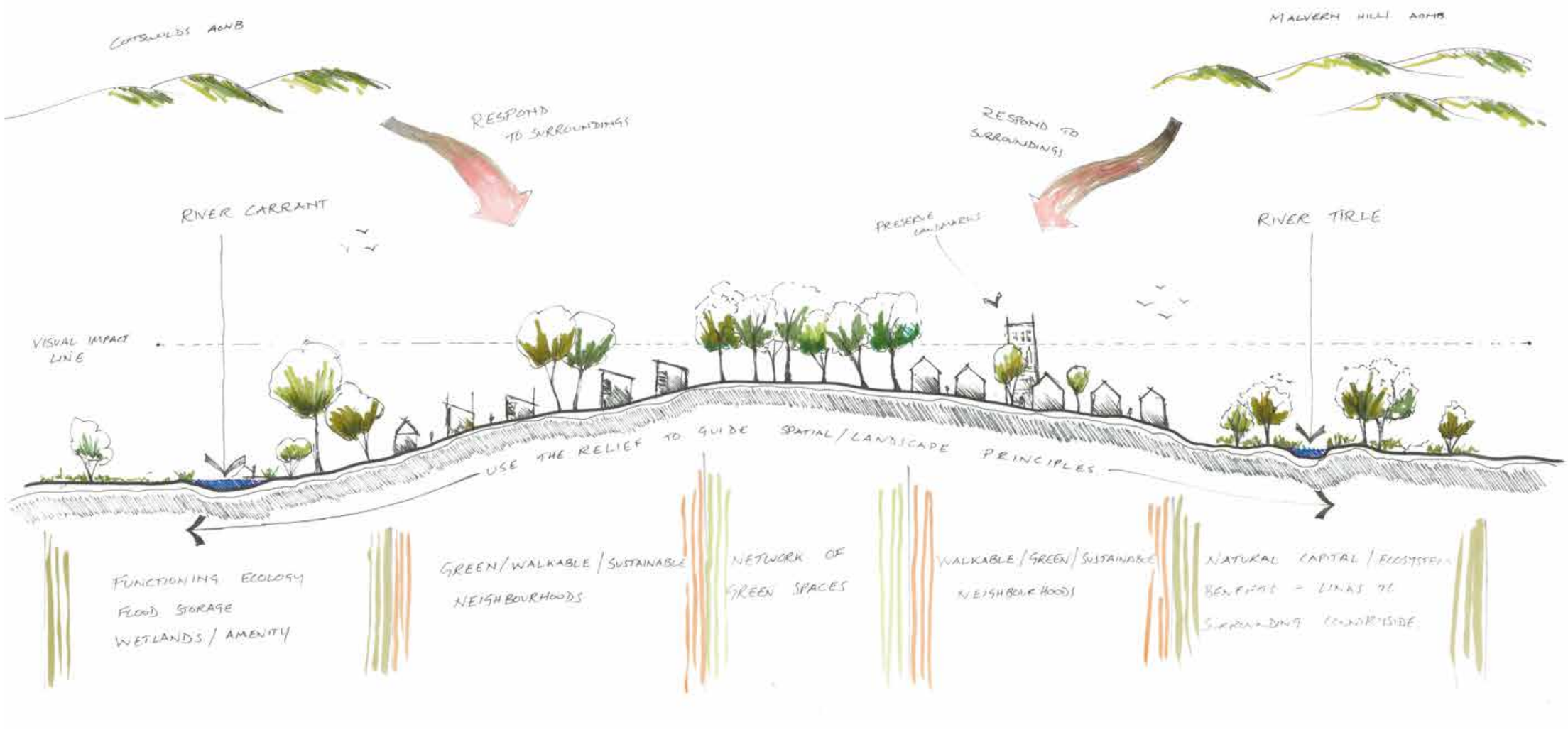
Landscape visual principles

The surrounding rural hinterland looks down on the site from several historic and geologically characterful landscapes.In order to respond to these in a novel way, one must look to the landscape in order to preserve or enhance the scenic beauty of looking across the Severn and Avon vales.

Below are some conceptual principles which can drive the form and massing of development in order to maintain/enhance the rural character:

- use topography to drive density/ massing/locations for both domestic and commercial development.
- continue using hedgerow character to reduce block pattern of post-war urban grain.
- create green walkable streets which focus on pedestrian transport.
- create a network of internal green spaces within development to divert visual impact from surrounding hills, AONBS and SSSIS
- maximise the opportunity offered by the brooks to develop multi-faceted benefits from ecosystem services (such as flood storage) to amenity value & access.

Figure 56: Conceptual principles to respect surrounding views



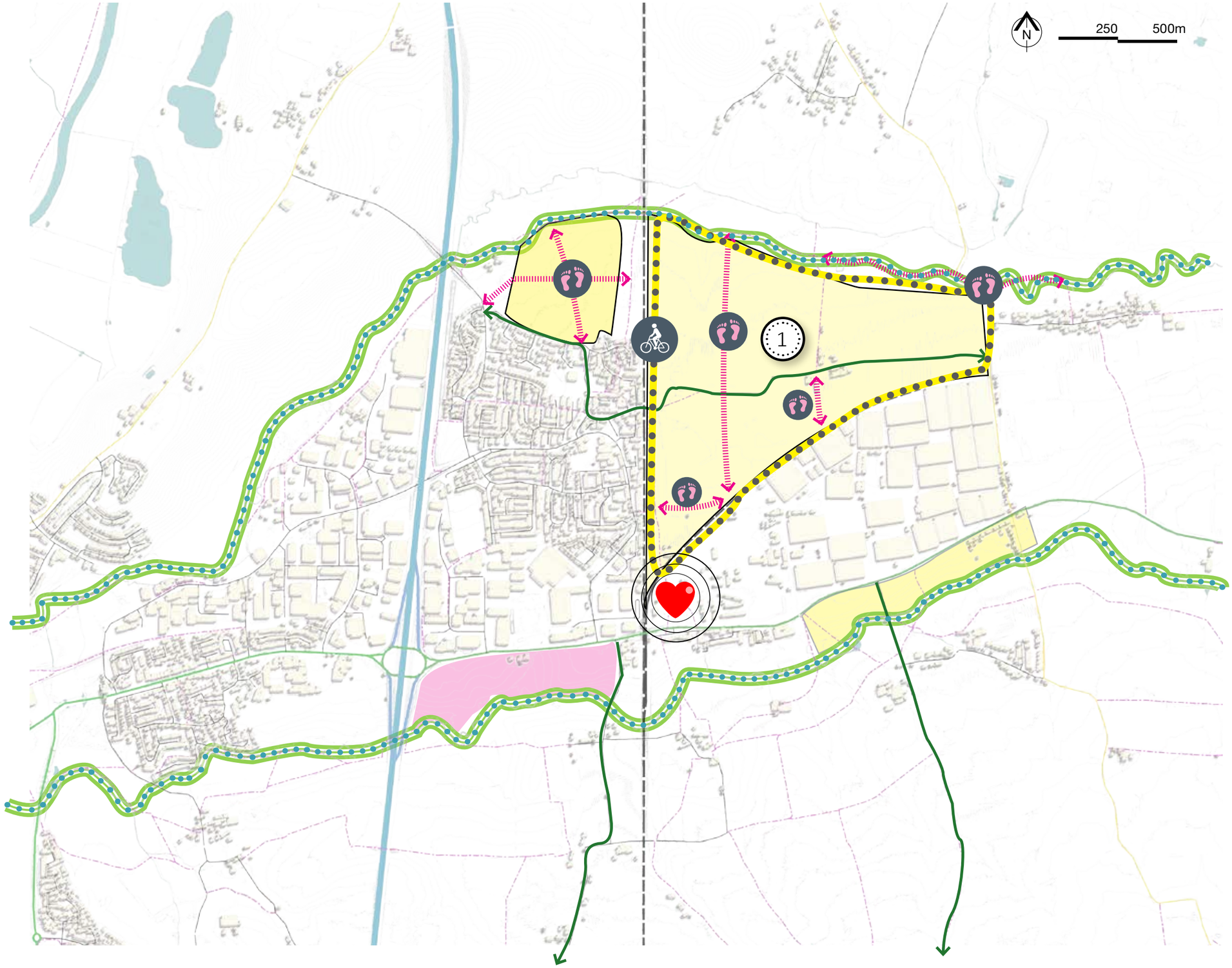
Quiet lanes, cycle & footpaths - Phase 1

Throughout the delivery of the masterplan phases, build a movement network of footpaths, cycle ways and quiet lanes which progresses in a hierarchy as follows:

FOOTPATHS

CYCLE PATHS

QUIET LANES



pedestrian links

cycle links

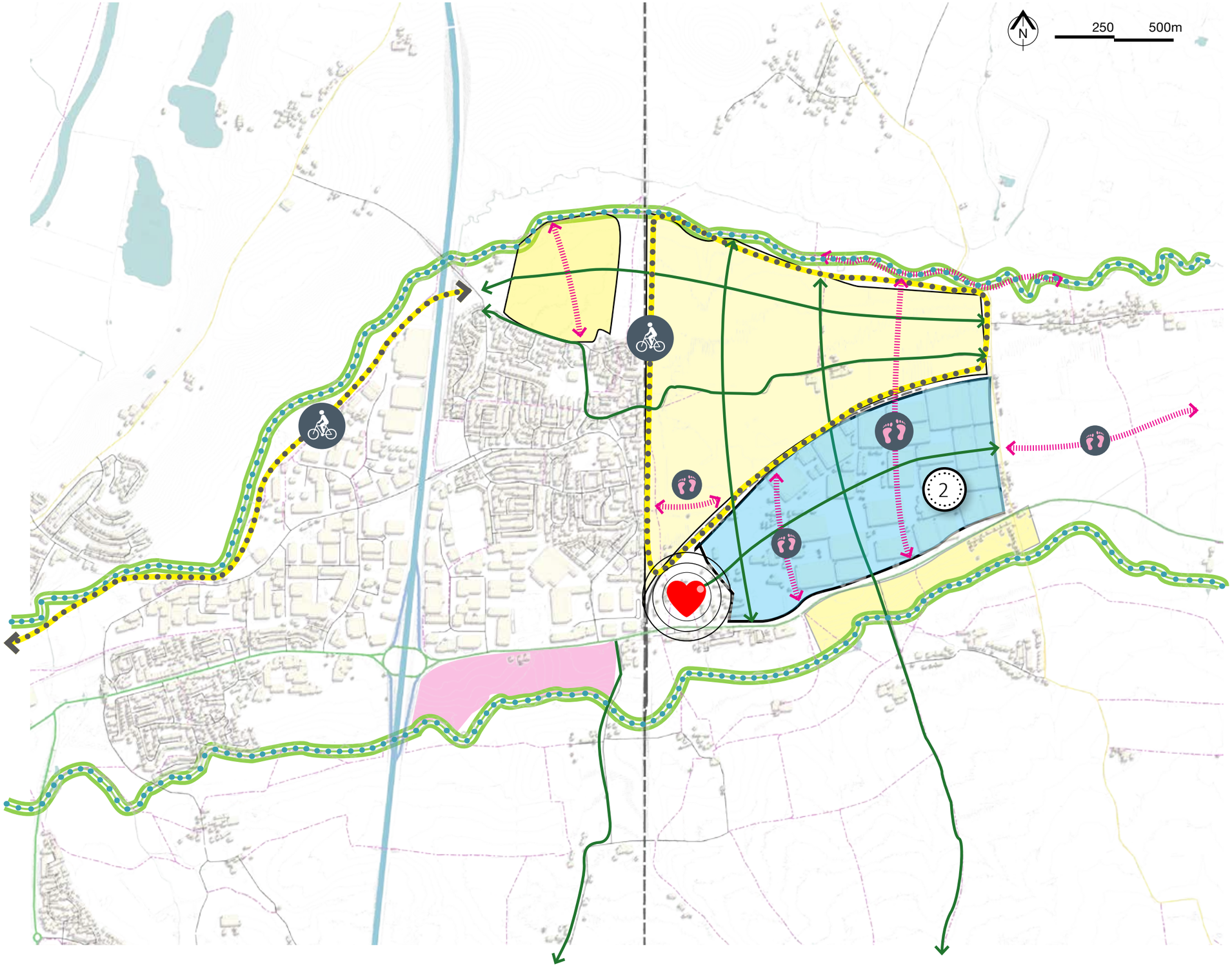
quiet lanes

1 current phase

Ashchurch Local Centre

Quiet lanes, cycle & footpaths - Phase 2

- Link to the town centre
- Tackle severance across the rail line
- Add longer cycle links



pedestrian links

cycle links

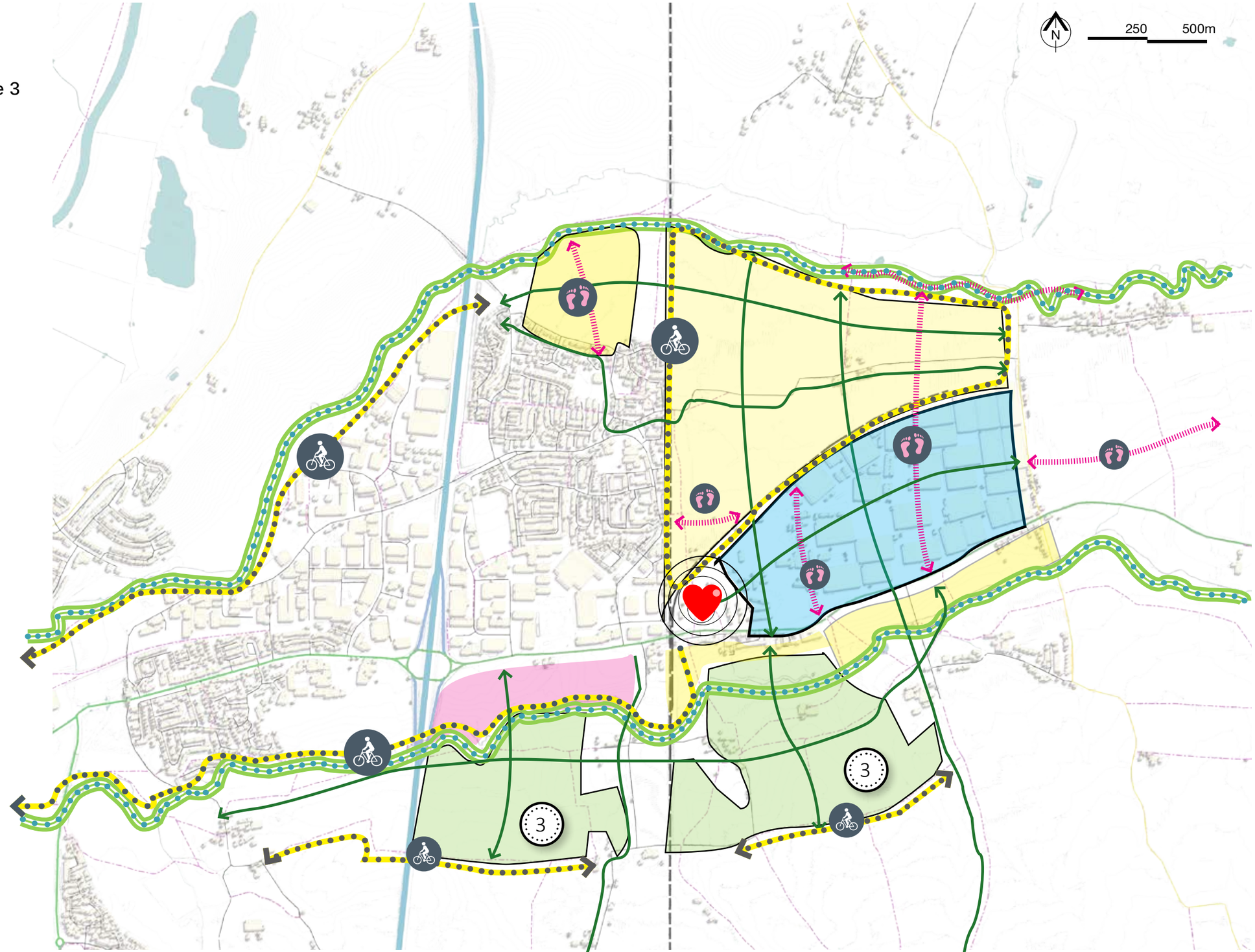
quiet lanes

1 current phase

Ashchurch Local Centre

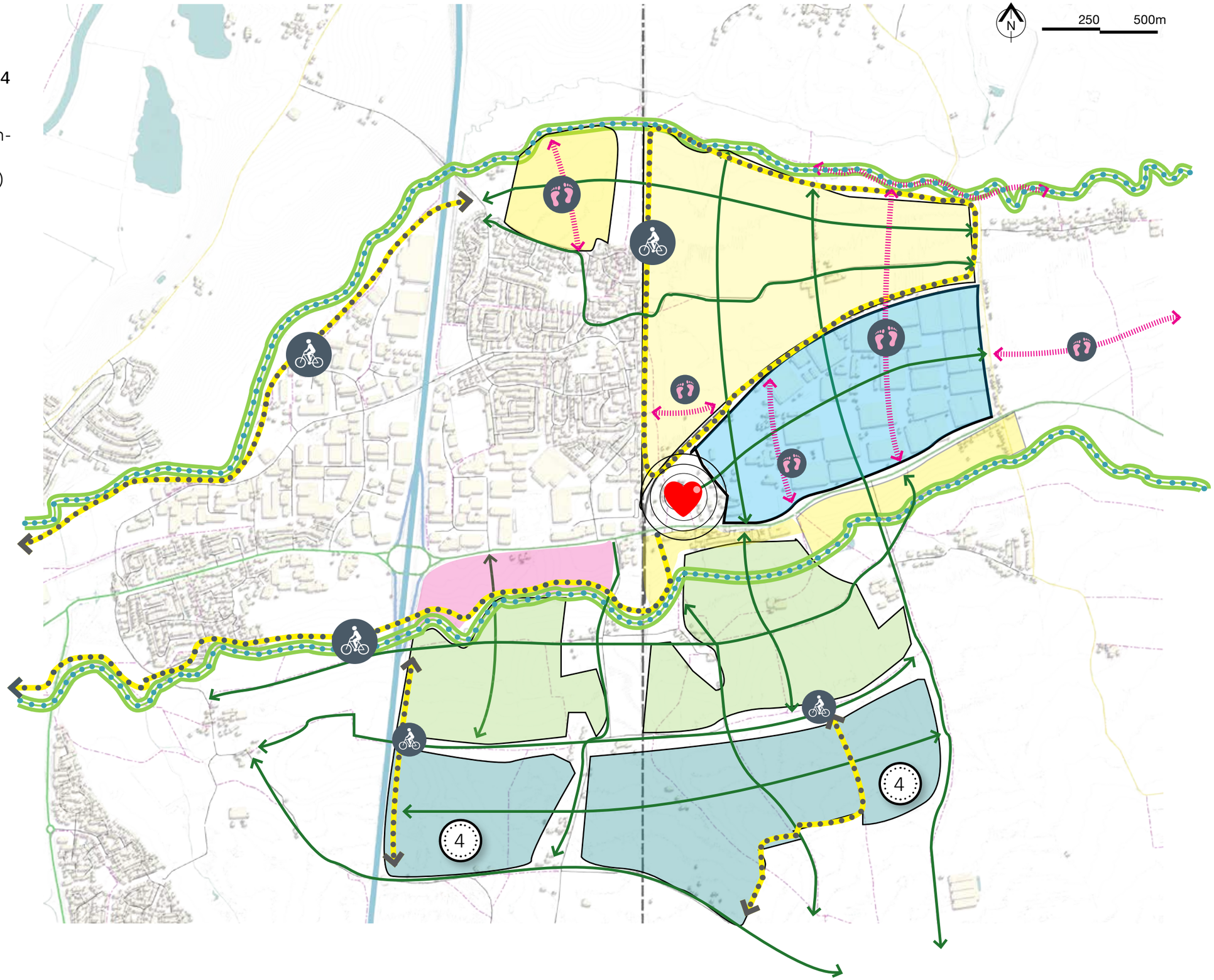
Quiet lanes, cycle & footpaths - Phase 3

- Develop grid of new n-s and e-w connections
- Connect river corridors to north and south with masterplan
- Introduce longer cycle routes to Tewkesbury town centre



Quiet lanes, cycle & footpaths - Phase 4

- Introduce and connect the Ashchurch-Tewkesbury Sustainable Corridor (replacing the existing A46 alignment)



pedestrian links
cycle links
quiet lanes
1 current phase
Ashchurch Local Centre

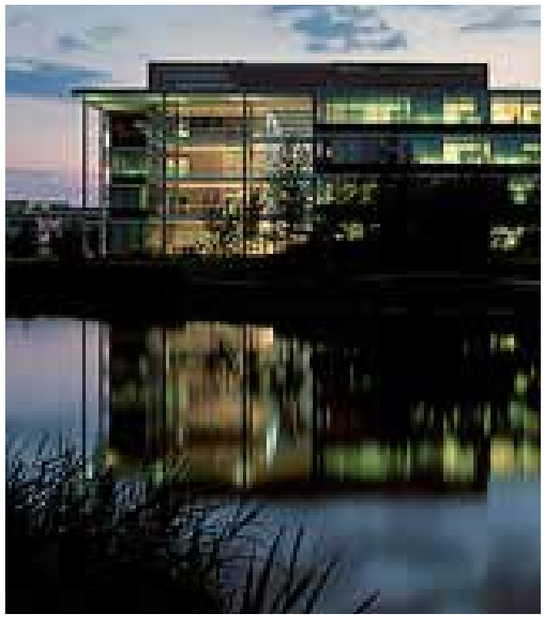
4.3 Economic strategy

Existing context

Ashchurch has experienced strong population and jobs growth over the last 15-20 years. Between the Censuses of 2001 and 2011 the population grew by 17% and employment by 20%. These growth trends have continued since 2011. As a result of Ashchurch's growth running ahead of the JCS average, the area plays an increasingly significant role as an economic hub, centred around junction 9 of the M5. Latest data (BRES 2015) indicates around 10,000 jobs at Ashchurch. The current economic focus is on manufacturing and related activities, accounting for more than a third of employment, being home to a mix of business uses including a number of high tech and knowledge intensive users. However, there are employment opportunities across a diverse range of sectors. Strong market demand from employment occupiers is long standing and local agents Alder King report that the current shortage of readily available employment land is limiting the opportunity for both new occupiers to locate at Ashchurch and existing occupiers to expand in the area. This is consistent with an array of policy and strategy documentation published over recent years.

Vision for growth

Both the Strategic Economic Plan (SEP) and Joint Core Strategy (JCS) place strong focus on the role of the M5 corridor, and its junctions, as the primary location for employment development in the coming years, encouraging development of the types of sectors and activities that are located at and attracted to Ashchurch. This positions Ashchurch at the core of current policy and strategy efforts to deliver and accommodate increased levels of employment to support a growing population. Tewkesbury Borough is targeting 8,900 additional jobs over the period 2011-31, equivalent to 20% growth. These figures are consistent with a JCS wide ambition of 39,500 additional jobs. Some 4,500 of the planned Tewkesbury Borough jobs are anticipated within the B-Class. The growth in service sector jobs is expected to predominate (6,400 additional jobs). No specific quantification of anticipated employment growth at Ashchurch is set out within existing policy and strategy documentation but the area forms a primary employment location in the Borough. Earlier iterations of the JCS set out proposals for 34 hectares of B-Class development at Ashchurch but the proposed allocations are unlikely to be delivered at the current time and there is a resulting shortfall in employment land provision which needs to be addressed and is a primary concern of this masterplanning exercise.



The SEP and JCS identify a number of potential employment locations along the M5 corridor at the respective junctions. This strategy is designed to enable employment growth to take place in proximity to each of the main towns. It is therefore important that the scale of employment growth is aligned to workforce growth at Ashchurch and Tewkesbury. Existing strategy documentation lacks clarity on whether each of the motorway junctions will serve a specific role and function, in terms of its target employment market, or whether they will each provide similar products. Understanding the potential role and function of Ashchurch within this M5 corridor strategy, also recognising the role of junctions to the north within Worcestershire, needs to be a priority to not only inform the masterplanning of Ashchurch but also other key development opportunities within the JCS area.

Whilst there is a need for greater clarity at a strategic level around the role, function and scale of employment and economic growth at Ashchurch to ensure masterplanning fits with the broader context, what is clear is that from both a commercial market and strategic perspective it is vital that the masterplan is able to deliver well located and readily available employment land to enable Tewkesbury and Ashchurch to continue in its role as a significant engine of the Gloucestershire economy. This will complement employment opportunity created through service activities (retail, education, health, leisure etc) across the wider Tewkesbury and Ashchurch area.

Concept for Ashchurch

The economic focus should capitalise on the prominent location and excellent access to enable existing businesses to expand, accommodate new inward investors and allow new businesses to grow. Through provision of flexible and readily available employment land this will continue to support a broad based economy which aids resilience whilst supporting key opportunity knowledge intensive sectors. The JCS and SEP note key economic growth sectors including: Aviation; Cyber Technology; Energy; Engineering; Financial; Information Technology; Leisure; and Marketing and Public Relations.

Based on current activities and strengths the new business park at Ashchurch should target Energy, Engineering, Cyber Security and Information Technology related sectors, building around existing anchor tenants with knowledge intensive and high value operations. This creates an opportunity to develop a prominent high quality business park with a special focus on technology and innovation to complement existing mixed industrial and business areas.

A new high quality employment park must deliver the range of supporting facilities and amenities that modern occupiers and workforce are looking for. Appropriate incubation or innovation centre type facilities should also be located on the park to support both new and existing enterprises with a technology and innovation focus.

Figure 58: Grey Matter offices in Ashburton. They are located on the edge of Dartmoor National Park, employing highly skilled graduates and professional and offering the benefits of an outstanding natural location

4.4 Community infrastructure strategy

In terms of provision for existing and emerging community infrastructure the aims is:

- Make the most of existing privision
- Improve signposting/legibility/ accessibility of existing facilities
- Explore opportunities to introduce uses that are currently absent
- Explore opportunities to enhance facilities that are currently under-represented
- Consider role of new facilities, public realm, and meanwhile/interim uses

Education & Health

Population

An indicative development mix was calculated on the following basis:

Dwelling size	Development share
1 bedroom	10%
2 bedrooms	30%
3 bedrooms	30%
4 bedrooms	25%
5+ bedrooms	5%
Total	**100%**

Source: HJA

Data from the 2011 Census of Population has been analysed to assess the average number of residents in households by number of bedrooms in the dwelling. Data was analysed for the Tewksbury Borough and Gloucestershire County areas. Figure 1.2 outlines the population at full occupancy when applying the results to the final indicative development mix. The average household size for the Proposed Development is estimated between 2.3–2.4 persons.

	Dwellings	Gloucestershire basis	Tewksbury basis
Phase 1	2,640	6,057	6,233
Phase 2	4,395	10,084	10,377
Phase 3	5,160	11,839	12,183
Phase 4	7,785	17,862	18,381

Source: HJA analysis based on 2011 Census data

Phase 4		2011 Census Analysis (persons per household)		Estimated Population Impact (based on 2011 persons per household)	
Dwelling Size	**Indicative number of dwellings**	**Gloucestershire basis**	**Tewksbury basis**	**Gloucestershire basis**	**Tewksbury basis**
1 bed	779	1.3	1.3	1,013	1,002
2 beds	2,336	1.8	1.8	4,306	4,299
3 beds	2336	2.5	2.5	5,738	5,827
4 beds	1946	2.9	3.1	5,552	5,972
5+ beds	389	3.2	3.3	1,254	1,282
Total	**7785**			**17,862**	**18,381**

Source: HJA analysis based on 2011 Census data

No adjustment has been made for vacant or second homes. Whilst it is possible that there will be a level of frictional vacancy at any point in time, it was deemed prudent to ensure the full potential population was estimated for purposes of assessing socio economic effects.

A proportion of the population may be non-additional at both the Tewksbury and Gloucestershire levels. Average household size across the areas has been falling and is projected to fall in the coming years. This is in part a result of existing households splitting to form new households. As a result, a proportion of all new housing requirements is to meet the needs of the changing household patterns of the existing population. That is, additional housing is required to accommodate the existing population. Analysis of the latest UK Government Household Projections for England (2014-based) indicates that approximately 12% of the growth in households over the period 2014–2029 is required to accommodate the 2014 population size, with the remaining 88% as a result of population growth. The cumulative approximate net additional population at each phase are outlined below:

	Low forecast	High forecast
Phase 1	5,345	5,501
Phase 2	8,899	9,158
Phase 3	10,448	10,751
Phase 4	15,763	16,221

Source: HJA analysis based on UK Government Household Projections (2014-based)

Education and childcare

Additional dwellings and associated population growth will increase demand for educational/early years provision in the local area. Based on the National Population Projections (ONS, 2014-based) for Gloucestershire, at 2029 approximately 1.2% of the population will be within each year of age 0-19 years. Based on the estimates of total population accommodated within the Proposed Development, this equates to the following maximum impact across each phase:

	Low forecast	High forecast	Forms of Entry
Phase 1	73	75	2.5
Phase 2	121	125	4.2
Phase 3	142	146	4.9
Phase 4	214	221	7.4

Source: HJA analysis based on UK Government Household Projections (2014-based)

Considering increased educational demand in the context of net additional population, the net impact is forecasted to be slightly less:

	Low forecast	High forecast	Forms of Entry
Phase 1	64	66	2.2
Phase 2	107	110	3.7
Phase 3	125	129	4.3
Phase 4	189	195	6.5

Source: HJA analysis based on UK Government Household Projections (2014-based)

On this basis the total population associated with new housing at Ashchurch has the potential to create demand for more than seven forms of entry throughout the educational system. This is equivalent to four, two-form entry primary schools and a new secondary school within the Ashchurch area. The need for school places increases in line with the phases of development, with broadly a requirement for one two-form entry primary school at each phase.

Health

The additional population as described above will create additional demand for primary healthcare services. A range of services are available in Tewksbury at present. The Gloucestershire County Council Local Developer Guide 2016 refers decisions on provision of health infrastructure to the NPPG:

"Local planning authorities should ensure that health and wellbeing, and health infrastructure are considered in local and neighbourhood plans and in planning decision making. Public health organisations, health service organisations, commissioners and providers, and local communities should refer to the NPPG to help them work effectively with local g authorities in order to promote healthy communities and support appropriate health infrastructure"

They expect appropriate infrastructure to be secured through s.106 planning obligations.

The demographic modelling undertaken indicates likely demand of the following health workforce:

	GPs		Nurses		Admin/ non-clinical		Dentists	
	Low	High	Low	High	Low	High	Low	High
Phase 1	3.9	4.0	2.5	2.6	9.0	9.2	2.7	2.8
Phase 2	6.4	6.6	4.2	4.4	15.0	15.4	4.6	4.7
Phase 3	7.6	7.8	5.0	5.1	17.6	18.1	5.3	5.5
Phase 4	11.4	11.8	7.5	7.7	26.5	27.3	8.1	8.3

Source: HJA Analysis based on NHS Digital Detailed Tables September 2016, and NHS Dental Statistics 2016-17

An indicative review of education and health requirements is then suggesting four two-form entry primary schools, a new secondary school and a large GP practice might come forward when the full scheme is implemented.

Whereas the phasing of primary schools is roughly one per phase, for secondary schools this is subject to further investigation and information from Gloucester County Council.

In addition, in a future long-term potential scenario pictured by the masterplan, the current location of Tewkesbury Secondary School and Alderman Knight Special School - by the side of the motorway Junction 9 - would be more suited to become employment land and these could be re-provided elsewhere.

The preferred location for education facilities would be the neighbourhood centres emerging with each phase of the concept masterplan and for the health centre the new Ashchurch Local Centre.

The neighbourhood centres would be the cores of the new walkable neighbourhoods and the “bumping spaces” of the new community. Their provision would include education, local retail, recreation/play spaces, local food and beverage offer and potentially spaces dedicated for community use.

They are connected to each other and to the green infrastructures running along the brooks by a network of quiet roads and pedestrian/cycle links and all of them are located at ten minutes walking distance from Ashchurch Local Centre.

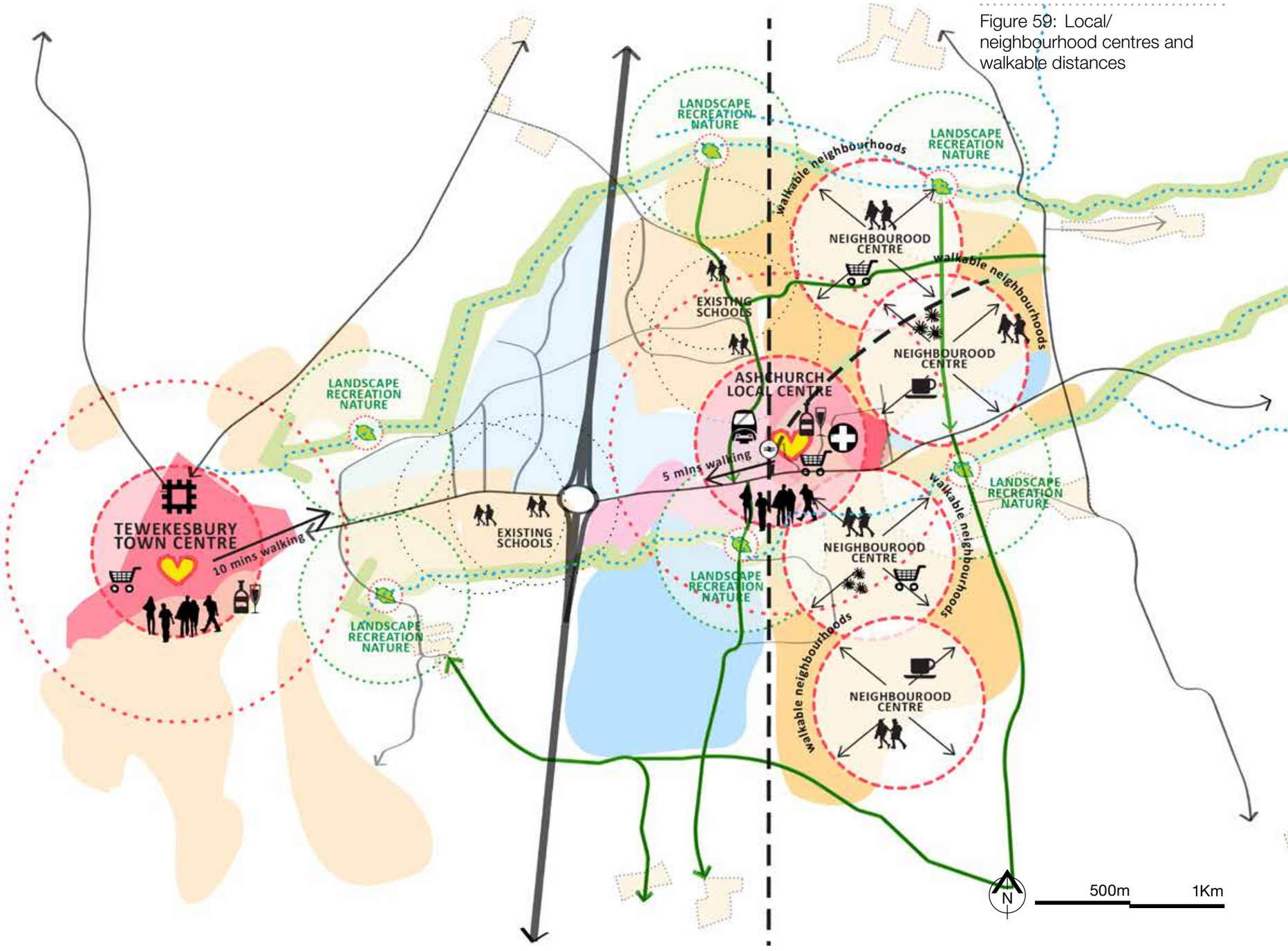


Figure 59: Local/ neighbourhood centres and walkable distances

4.5 Ashchurch Local Centre strategy

Whereas Tewkesbury Town Centre will maintain its role as the main historic centre, Ashchurch Local Centre will provide a proper gateway to Tewkesbury, while keeping its own distinct identity as the new contemporary core of the emerging community. This identity will be strongly related to the new businesses and opportunities coming forward in the area.

The existing railway station environs will become the new 'heart' of the Ashchurch community, with the provision of pedestrian/ cycle friendly east-west link and an enhanced setting for St. Nicholas Church. This building provides an identifiable source of community identity and a traditional anchor for what could become a re-imagined 'village green'.

Surrounding this new heart for Ashchurch would be a mixed-use proposal that could meet local employment need and contribute towards the requirement for other community facilities such as local shops and retail outlets.

On the west and east of the enhanced station would be two gateway areas, each with different character.

The western gateway could provide local facilities for the near business park including park & ride space.

The eastern gateway would be the village green, using the existing vernacular buildings to accommodate new uses but at the same time create a distinctive and recognisable identity for Ashchurch (e.g. church, church farm buildings, barn).

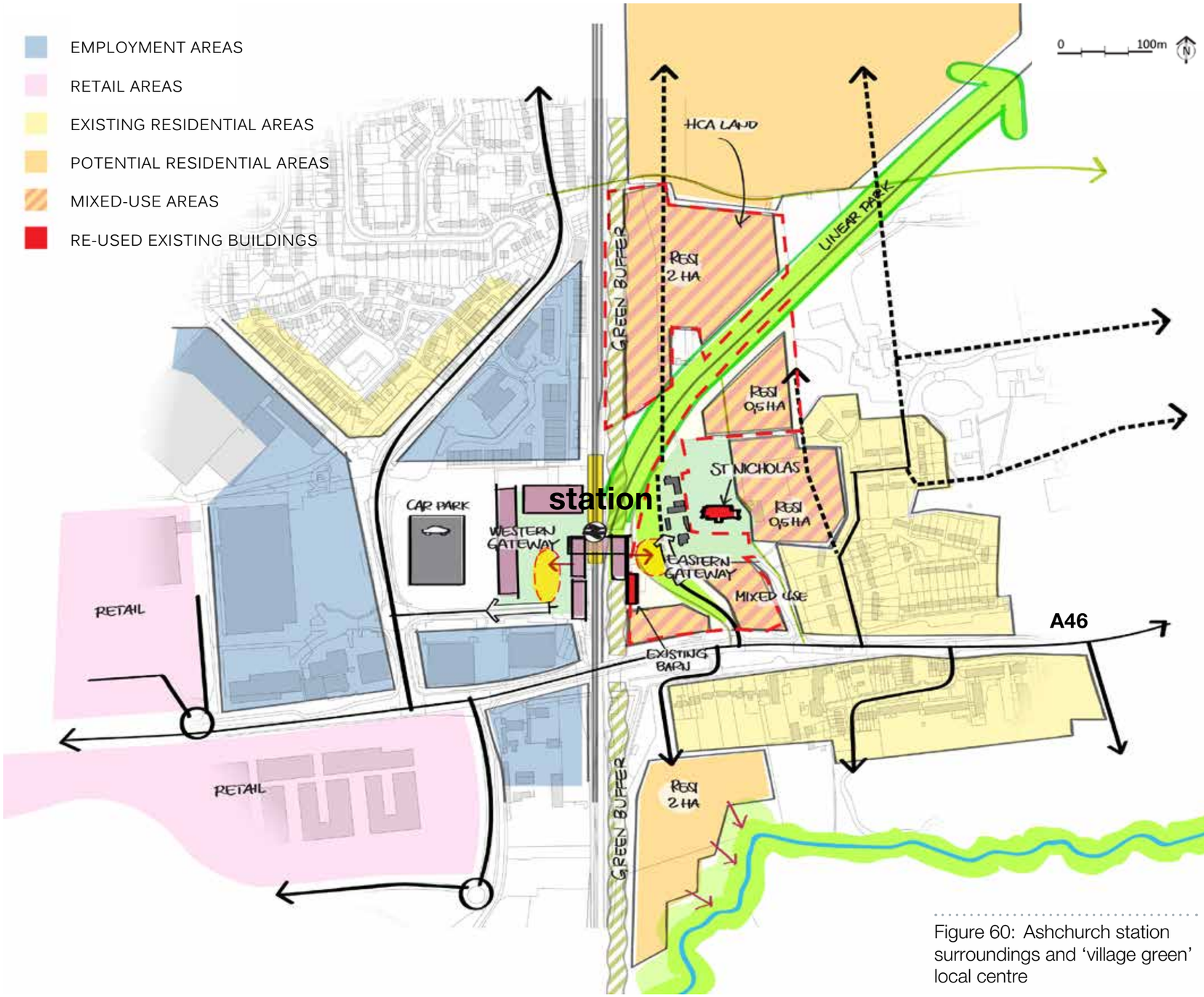


Figure 60: Ashchurch station surroundings and 'village green' local centre

The new centre, built mostly on the land owned by HCA, would offer a mix of uses (local retail, food and beverage, health facilities) serving the emerging community and new jobs.

Once decommissioned, a new linear park would be built along the MOD rail spur, starting at the eastern gateway and potentially extending to Carrant Brook.

The vision for Ashchurch local centre is based on the assumptions that the HCA land would facilitate access to north, and the existing MOD rail tracks will come into disuse.

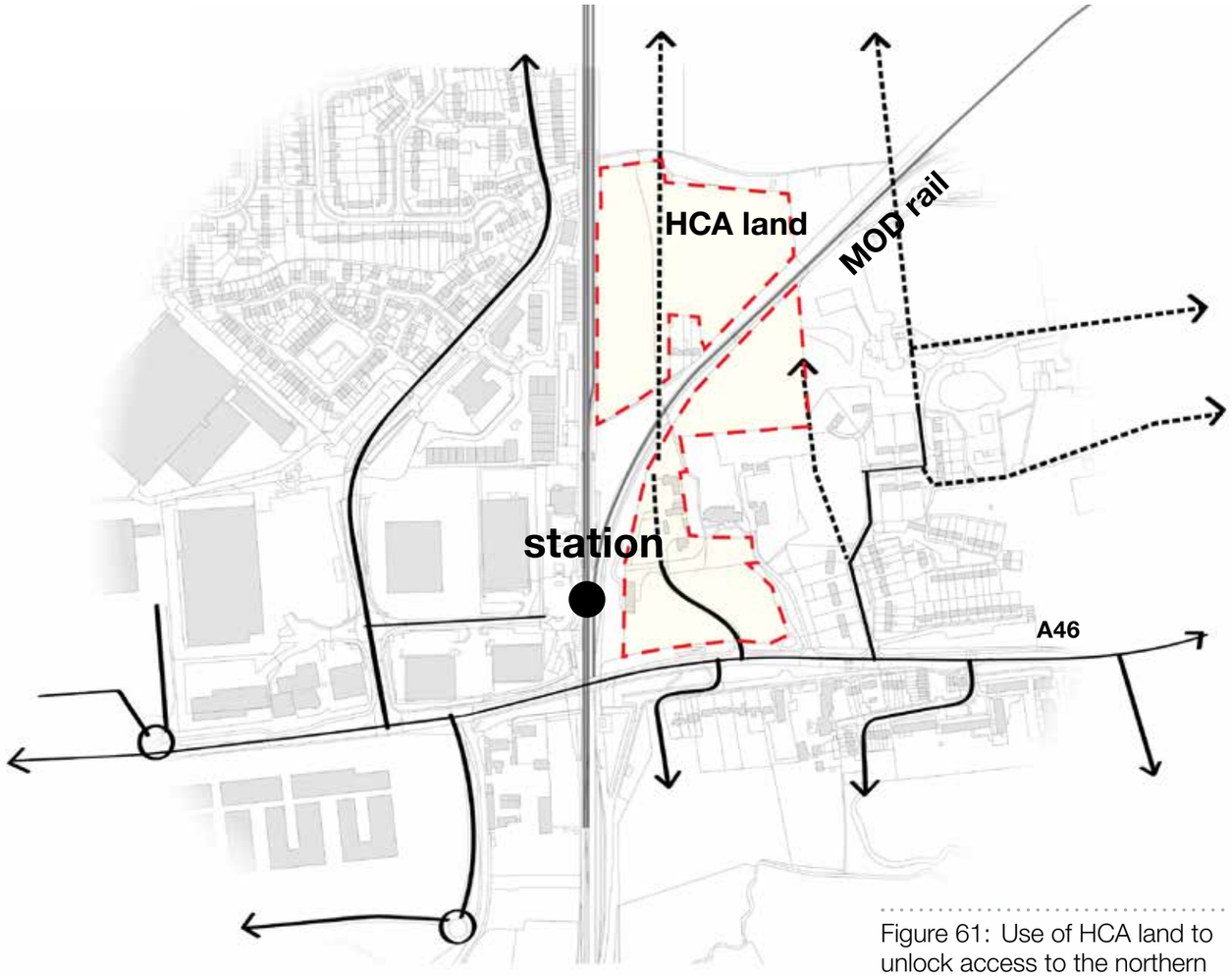


Figure 61: Use of HCA land to unlock access to the northern areas

Figure 62: Reuse of traditional buildings at Kingsway, Gloucester South

Figure 64: St. Nicholas Curch

Figure 63: Linear parks along disused railway tracks

Retail provision

The Ashchurch Local Centre could be servicing 3,000-3,500 dwellings, and based on commercial advice, could therefore be support the following:

- A larger format convenience retail store of circa 500 – 900 m²;
- Additional retail space of 2,000 m² in units sizes from 100 m² to 200 m² capable of combination;
- Typical local A1-5 uses as well as specific provision for a pharmacy, clinic or other health related use;
- Provision for a public house or restaurant of circa 1,000 m²;
- The potential to include some form of community use building of circa 1,000 m²;
- Potentially an element of D2 leisure of say 200 - 400 m²;
- Potentially there could be demand for a childrens day nursery of circa 500 m²;

The neighbourhood centres could potentially be supporting 500-1,000 new dwellings. At this level, local facilities could include:

- A small format convenience store of circa 400 m²;
- Additional retail space of 600 m² in unit sizes from 100 m² capable of combination;
- If the location is sufficiently prominent, there may be demand for a public house restaurant.

Benchmark: Kingsway Local Centre, Quedgeley, Gloucester

The Kingsway scheme provides around 3,300 new homes, 12 Ha of employment, a 3,700 m² food store (separate to the local centre food retail provision), two schools, a doctors surgery (currently under construction) and a family pub / restaurant of 1,200 m² (also currently under construction and separate to the pub / restaurant). The commercial uses are some 0.75 miles from the local centre.

The local centre itself consists of approximately 2,500 m² of retail and pub restaurant space. This includes a 500 m² convenience store, café, estate agents and pharmacy. The local centre public house has been converted from former farm buildings much as we discussing for Ashchurch. The local centre land take is 3.6 acres but this include the low density element being the former farm buildings.

Alongside the local centre there is a new build community centre which sits on 0.2 Ha.




Figure 65: The Kingsway: community and cycling, retail, traditional architecture, nature, education

05. Conclusions and next steps

5.0 Conclusions and next steps

Conclusion

This report outlines a Draft Concept Masterplan that tests the capacity of housing and business development that can be delivered sustainably in the Tewkesbury area, in the short and longer term. The tested scenarios indicate a potential development pipeline of up to 8,010 homes and 120Ha of employment land, of which:

- 3,180 homes and 46 Ha of employment are considered deliverable by 2031;
- 2,670 homes and 28 Ha are considered developable in the longer term,
- 2,160 homes and 46 Ha are identified broad locations for growth.

The Draft Concept Masterplan finds that the Tewkesbury area has potential to deliver strategic growth. It is a prime location to capitalise on business opportunities, and an attractive area to deliver new communities where people will want to live and work.

The presence of significant transport infrastructure constraints requires an approach that places infrastructure upgrades and modal shift at the heart of the development strategy. The key conclusions are that conventional highways infrastructure alone will be unable to facilitate this level of development.

Rather, there is a clear opportunity when planning for growth at this scale to embed sustainable choices at the heart of future communities, through urban form, movement strategies and integration of land uses, which together can encourage a fundamental shift in the way occupants will live and travel.

All of the development phases outlined in the Draft Concept Masterplan are reliant on the upgrading and delivery of infrastructure - sustainable transport, alongside new schools and local services, as well as enhancement of the role of Ashchurch for Tewkesbury station.

From the outset, the development of the Tewkesbury area needs to plan for transformational long-term growth. The strategy can be flexible and incremental, but it must avoid being piecemeal.

By taking a long-term approach, real benefits can be secured for both existing and new residents. Strategic growth offers a critical mass to fund key infrastructure improvements and deliver comprehensive, high quality design. Together, these components can deliver a vision of successful place-making.

Strategic growth on this scale requires ambition, as well as a positive approach that is honest and robust about finding solutions to infrastructure needs and constraints. The growth of the Tewkesbury area will require local support and buy-in from key regional and local stakeholders, as well as Highways England. The need for collaboration with multiple stakeholders and agencies demands a robust vision and project objectives, and an ability to articulate clearly the benefits of growth. This concept masterplan is the first step in setting a vision for the long-term potential of the area, and the necessary strategies to achieve this positively.

Garden villages

The level of growth envisaged by the Draft Concept Masterplan corresponds to the government's promotion of new, locally-led garden villages (1,500 to 10,000 homes), recognising their vital contribution to the UK's growth.

To date, 14 garden village proposals have been awarded funding to investigate infrastructure requirements and will receive support in determine routes to unlock funding and delivery. Projects include Long Marston in Stratford-upon-Avon and Oxfordshire Cotswold in West Oxfordshire.

The government does not prescribe a set of fixed attributes for garden villages, but conceptualises them as distinct new places with their own community facilities, rather than urban extensions. They should be locally led in response to local housing need, and incorporate sustainability and good design. Larger proposals should consider their economic benefits and gain LEP support, and infrastructure needs should be clearly assessed. The government may also assist in brokering solutions to unblock delivery issues, advise on the setting up delivery vehicles, and help local authorities to resist speculative planning applications, in reward for planning for housing delivery.

Should another funding round for garden villages be opened up, it is considered that the Tewkesbury area would be well placed to seek garden village status and government support.

Masterplanning - **next steps**

In order to progress from the Draft Concept Masterplan stage we have set out the next steps below:

- Refine Draft Concept Masterplan depending on steer and comments from Client Steering Group and Key Stakeholders
- Amend phasing to reflect the transport strategy and clarify infrastructure triggers
- Explore garden villages opportunity
- Make reps to the early JCS plan review
- Further modelling of the local and wider strategic impacts of the masterplan on transport infrastructure
- Engage with key stakeholders on key infrastructure provision (HE, GCC for transport and schools, Network Rail, NHS, bus companies)
- Engage with LEP on economic growth strategy to define a clear vision for the business park areas and integrate with their Growth Zone priorities
- Develop a Community Engagement Strategy to introduce growth concepts
- Continue alignment with Tewkesbury place story and place based proposals
- Assess emerging planning applications against Draft Concept Masterplan
- Work with holders of existing consents to eliminate conflicts with the Draft Concept Masterplan, for example A46 access improvements for Sainsbury's site
- Commission market testing of local absorption rates to develop the phasing trajectory.

Transport - next steps

The technical analysis undertaken in support of this masterplan report has concluded that the focussing of wider JCS area growth in the Tewkesbury area serves to accentuate the commonly accepted shortcomings in the transport network. Added to this, our analysis of travel impacts at the local level (as with the yet to be released Short term Access Strategy), further accentuate these shortcomings.

The principal issue therefore is to resolve the substantial gap between the masterplan's growth ambitions and the ability to deliver the very substantial infrastructure that is likely to be required. In order to address this gap, we propose two parallel streams of investigation:

1. How to optimise / minimise travel demand (especially road-based) in terms of development:

- Scale
- Land use type
- Phasing

2. Transport infrastructure delivery schedule – identifying needs in relation to the above and with reference to those infrastructure proposals:

- Already tabled – notably the Short Term Access Strategy
- New proposals – i.e. those identified within this report and others yet to be identified.

Having considered 1 and 2 above, further modelling of the local and wider strategic impacts would then be needed to understand the potential benefits of these network capacity improvements and demand changes.

The short-term scenario is naturally more straightforward to assess given the studies already undertaken (though yet to report), with the long-term scenario considerably more complex to consider and plan for given the range of uncertainties involved. Though the latter clearly would benefit from further investigation, particularly the issue of the Development Delivery Road, it is suggested that the medium-term scenario demands a similar degree of focus to that accorded the short-term to date given the apparent infrastructure capacity shortfall.

This report has concluded that sustainable living / movement is not only desirable in a wider sense, but will play a critical role in helping to deliver the growth ambitions. However, achieving the scale of mode shift needed will be challenging, and will require a close assessment of its likely ability to support the level of major growth sought.

Urban design - next steps

This first stage of the Draft Concept Masterplan has defined a set of high-level design principles and a strategic framework for development, outlining:

- A spatial strategy to combine different parcels of land;
- A transport strategy capable of delivering the masterplan;
- Timeline and phasing programme;
- High level parameters for development (e.g. residential and employment density);
- An overarching landscape strategy; and
- The role and integration of the area within the wider context and surrounding settlements.

Based on the work undertaken at Stage 1, the second stage of the masterplan will define in more detail:

- Land uses, densities, heights and massing;
- Open space, townscape, green infrastructure and public realm strategies;
- How trees, planting and sustainable drainage system (SuDs) could help the successful integration of developments into the existing landscape fabric;
- Utilities, servicing and waste;
- Hierarchy of streets and streetscape design;
- Local character and definition of character areas, including a more detailed definition of the new local centre;
- Housing typologies, typical development layout options and their integration into the local context;
- Employment typologies, typical development layout options and their integration in the context; and
- Public transport, access, car and cycle parking needs.

Given the sensitivity of the area, Stage 2 could also include a set of design codes providing criteria for development in the different character areas, providing guidance and evaluation of their relative merits or drawbacks.

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