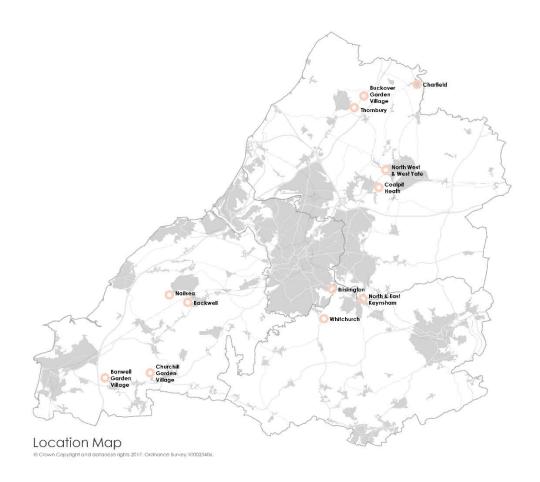
West of England Joint Spatial Plan: Publication Draft

Strategic Development Location Templates

Date of issue: Papers for West of England Joint Committee - 30 October 2017



Strategic Development Location Templates

Introduction

This report documents the work carried out as part of the Joint Spatial Plan (JSP) to further refine the assessment of potential for development at the Strategic Development Locations (SDLs) identified in the previous draft of the JSP – *Towards an Emerging Spatial Strategy (TESS)* published in November 2016. The purpose of this phase of the work has been to more clearly establish the capacity and strategic development requirements at each strategic development location which has been used to inform JSP Policy 7.

The contents of this technical report are therefore intended to illustrate the possible extent of where development might take place (and where it might not). The diagrams presented are illustrative at this stage as further work is being undertaken by each UA through their respective Local Plans'.

Accessing prospects for delivery The previous iteration of the Joint Spatial Plan – *Towards an Emerging Spatial Strategy (TESS)* (Nov. 2016) included a range of potential Strategic Development Locations across the West of England and assigned a broad dwelling capacity to each. This work was supported by evidence published in the 'Assessment of Strategic Development Locations – Beyond Settlement Boundaries – Locational Dashboards'. The templates presented in this document are a continuation of this earlier work.

For each of the proposed SDLs (listed in the table below), a template is provided which focusses on the delivery challenges and opportunities faced at each SDL and the approximate scale of development potential achievable.

SDL	Local Authority	Page
North Keynsham	Bath & North East Somerset	3-10
Whitchurch	Bath & North East Somerset	11-16
Brislington	Bristol City Council	17-22
Backwell	North Somerset	23-30
Nailsea	North Somerset	31-40
Churchill Garden Village	North Somerset	41-50
Banwell Garden Village	North Somerset	51-59
Buckover Garden Village	South Gloucestershire	60-65
Charfield	South Gloucestershire	66-71
Coalpit Heath	South Gloucestershire	72-77
North West & West Yate	South Gloucestershire	78-84
Thornbury	South Gloucestershire	85-90

For each SDL the following information is provided:

- **Location characteristics:** Site location, approximate size, relevant planning history and designations, current land use.
- **Suitability (constraints and opportunities):** Strategic opportunity, site characteristics, physical & environmental constraints, existing development schemes, opportunities.
- Landuses, capacity, availability & viability: Mix of uses, employment, housing typology / density, housing capacity, availability, viability.
- **Draft policy expectations for the location:** *Vision, housing capacity (types, typology & affordable housing)* and other land-uses, access, Green infrastructure, infrastructure requirements. Draft policy expectations identified in this section are further articulated through relevant policies in the JSP (particularly policies 4 and 7).
- Barriers to delivery / critical interventions: Identified risks to suitability availability & achievability, actions needed to reduce risks.
- An indicative housing trajectory: Outlining indicative lead in times, start dates, build-out rates, and the number of developers (outlets) anticipated.

• A concept diagram: Which provides the broad location or area of search for growth in each SLD. It is important to note that the options for development of the SDLs, including the areas identified in the diagrams, are indicative and of the more precise allocations to be made in Local Plans will depend on further work to be undertaken.

Due to the scale of these strategic developments and the inherent long term nature of their planning and development, at this stage only key infrastructure requirements are identified as the exact requirements for each development and how these might correspond to a land use requirement are not yet known. Further evidence gathering and testing will be required to support their implementation and will be informed by further detailed land allocation, master planning and policy formulation, undertaken through local authorities' respective Local Plan processes.

Further technical information relating to the templates is provided within the supporting methodology paper.

Strategic Development Location – North Keynsham Bath and North East Somerset

Date of Issue: October 2017











1.0 Location characteristics

1.1 Site Location

The area lies to the north-east of Keynsham, between the town and the River Avon. The majority of the area lies between the river and the Great Western Main Line with a smaller section between the railway and the A4. It also includes the land south of the A4 which is safeguarded for development through B&NES Core Strategy.

1.2 **Size**

Approx: 150ha(Gross) and 70ha developable area.

Safeguarded land: 12 ha

1.3 Relevant planning status and designations

The area sits within the Green Belt.

North of the Wessex Water site is a former landfill site which has been allocated in the West of England Joint Waste Core Strategy for a residual waste facility.

Land around World's End Lane is allocated in the B&NES Local Plan as a Strategic Site for employment (30,000sgm of B1 and B2).

Land south of the A4 has been allocated for residential development and granted outline planning consent for 250 dwellings. Further land adjacent the allocated sites has been safeguarded for additional development of approximately 250 dwellings.

1.4 Current land use

Mixed including agricultural, industrial, utility, leisure, private riverside park with some residential moorings.

2.0 Suitability (Constraints & Opportunities)

2.1 Strategic Opportunity

The Emerging Strategy consultation identified North Keynsham as accommodating up to a further 1100 dwellings in the plan period (to 2036). However, further work indicates around 1,250 dwellings can be accommodated. Together with the safeguarded land capacity of 250 dwellings, a total of 1,500 dwellings can be accommodated in this location.

2.2 Site characteristics.

The area is largely characterised by open, flat arable and pasture fields of varied sizes around a mix of industrial, agricultural and residential buildings accessed by narrow lanes. Field boundaries and lanes are marked by strong hedge and treelines with stronger boundaries along the riverside and railway. Broadmead Brook runs south-north close to Broadmead Lane before heading east and discharging into the river

2.3 Physical & Environmental constraints.

Access: Access to the area is significantly constrained by the railway, the River Avon and by associated capacity constraints on the A4 and connecting roads. Existing lanes through the site are narrow and have constrained crossings at the railway. At present there are three vehicle access points: at the far western end via Keynsham Road or Avon Mill Lane, providing access to the town centre and railway station; in west via the Broadmead Lane underbridge; and in the east via the Pixash Lane overbridge (Heritage Listed, constraining opportunity to improve capacity). There are additional minor links at Unity Road (connecting the DS Smith site, under the A4, towards Bath Road) and east of World's End Lane.

A series of Public Rights of Way run through the eastern end of the site and provide access towards the long distance routes provided by the River Avon Trail, Monarch's Way and the Bristol and Bath Railway Path (NCN4), which provides opportunity to connect towards Bath. There is currently no direct pedestrian/ cycle route from the area across the river.

At present there is no public transport connectivity to the area with the nearest services running along the A4 and Keynsham Road. While the site is close to Keynsham Station, pedestrian and cycle access is poor and indirect.

Ecology: Stidham Farm Site of Special Scientific Interest (SSSI) is located to the east of the area and currently managed as an arable field. There are three Sites of Nature Conservation Interest on site: Stidham Farm SNCI, Broad Mead Field SNCI in the centre (designated for its marshy grassland and botanical interest), and the River Chew SNCI (designated for its running water and associated marginal habitats, including protected fauna, which use the site in part as a wildlife corridor). The River Avon SNCI runs adjacent to the northern site boundary and is designated for its running water and associated marginal habitats, including protected fauna, botanical and invertebrate interest.

Landscape: The area contains a number of character areas with woodland at the western end, around the DS Smith site and open fields in the centre and east. The main (northern) area of the area has a relatively open and tranquil character due to its physical and visual separation from the built settlement of Keynsham and the mid to long distance views of the Cotswolds. At the eastern end, the railway lies in a cutting and provides less visual severance. South of the railway, the land is urban fringe in nature, merging into open countryside. Landscape is sensitive and has limited capacity to accommodate new development, particularly at the eastern end. Buffer planting and/or setbacks will be required along these edges.

<u>Green Belt:</u> The area is located within the Bristol-Bath gap, an area in which Green Belt land generally contributes to some extent to the prevention of merger between Bristol, Keynsham and Bath.

Archaeolgy and Heritage: The site includes a small number of listed buildings around Avon Mill Lane, two Listed bridges (Pixash Lane and pedestrian bridge to the east) and a number of heritage sites with HER records, notably some Roman finds at Avon Valley Park. There are a small number of buildings with notable character at Broadmead Lane Industrial Estate and Avon Valley Farm.

<u>Flood Risk:</u> Primarily within Flood Zone 1. However the northern area of the peninsula including Broadmead Lane Industrial Estate, a corridor along the River Avon and the access from Avon Mill Lane / Keynsham Road are located Flood Zone 2 and 3 and may be affected by climate change.

<u>Utilities:</u> The site is highly constrained by the presence of the Wessex Water sewage treatment works at Broadmead Lane. Anecdotal evidence suggests that the site has odour nuisance issues which could limit it's attractiveness for more sensitive development such as residential. Wessex Water odour risk assessment would be triggered within a 400m consultation zone around the works site. The site is crossed by a number of utilities, most notable is the gas pipeline (Feeder 14) which passes south-west to north-east at the eastern end of the type. The pipeline was not constructed to allow new roads above so would require upgrading or diverting if it were crossed. A National Grid easement of 10m exists either side with further HSE consultation zones around the alignment (inner zone: 40m, middle zone: 125m, outer

zone: 155m).

A sludge pumping main crosses east-west through the centre of the site towards the Wessex Water site with a second route running north from the works.

The western end of the site is crossed by a number of high- and low-voltage Western Power lines. Many of these routes would require easement or diversion to facilitate development.

Proximity to active industrial sites: potential environmental health concerns, strong impact on views from and to the site and likely poor frontage along proposed North Keynsham Link Road route.

<u>Ground Conditions:</u> The site gently slopes down towards the River Avon with a more prominent slope at the eastern end close to the railway path.

The site includes some areas of artificial ground and historic landfill. This and the existing industrial uses could pose contamination issues for development.

The ground conditions are generally not expected to pose constraints for foundations however further investigation would be required.

2.4 Existing development schemes

Land south of the A4 has been allocated for residential development and granted outline planning consent for 250 dwellings.

2.5 Opportunities

- Upgrade the riverside area and link into the marina proposals, to provide an enhanced public experience alongside ecological improvements.
- Frontage and outlook onto the River Avon, providing a high-quality living and recreation environment. Strong opportunity around a new marina for high-density residential development.
- Provide a strong neighbourhood centre to act as a focus to the site, serving residents and employees. Opportunity to cluster retail, service and education uses around key open space and marina frontage.
- Opportunity to create strategic pedestrian and cycle connections to Keynsham town centre and railway station and the local schools. Connections across the river towards the long distance walks should be explored.
- Consider realignment of the proposed North Keynsham Link Road. Appropriate street environment to be used to provide traffic calming.
- Create green corridors between the riverside area and the railway corridor, providing a range of ecological, connection and recreation opportunities and accommodating surface water attenuation.
- Opportunity to provide a new, enhanced facilities at the Avon Valley Park to cater for an increased number of visitors with a wider range of attractions.
- Development provides the opportunity to improve the functionality of the floodplain and ease flows in connecting watercourses.

3.0 Landuses, capacity, availability & viability

3.1 Mix of uses

Housing, marina with residential moorings, employment (industrial), waste facilities, local centre with shops, primary care and community facilities, leisure facilities and open space.

3.2 Employment (type/ha)

Employment development around main access road: 14ha (55,000sqm floorspace)

3.3 Housing typology / density.

The development should support a high-quality mix of housing typologies and tenures to develop a sustainable community which compliments the existing settlement. High-density apartments to give a strong frontage around the marina, mix of middensity houses and apartments over the centre of the site and lower density family housing at the eastern edges where the visual impact will be greatest. An assumption has been made that higher density units would be provided over 3-4 storeys giving strong frontages and higher densities around public open spaces and the main road. Development over the rest of the site is more appropriate at 2-3 storeys. Around the edges, development should respond to the potential for attractive views towards the riverside and provide appropriate surveillance of public areas whilst minimising visual impact.

The site has potential as a location for custom-build or self-build housing with plots set aside for these alternative delivery mechanisms. This could help establish a strong and unique identity for the site.

3.4 Capacity

About 1500 units comprised 30 - 35% AH (34ha + 12ha), a full range of types and sizes.

3.5 Availability

Call for Sites: 2 representations Pegasus (Edward Ware) and JLL(Avon Valley Adventure & Wildlife Park, John Douglas Estates, The Bendall Family and 3C Commercial).

Multiple ownership

3.6 Viability

Viability likely to be dependent upon alternative sources of funding. See viability evidence for further information.

4.0 Concept Diagram

Refer to Appedix 1 Concept Diagram

5.0 Draft policy expectations for location

5.1 Vision

To create a new sustainable urban neighbourhood with increased access to the River Avon and connecting Keynsham to strategic walking and cycle routes.

This will be a lively, safe, sustainable and healthy place which reinforces the distinctive character of Keynsham, improves connectivity, enhances our understanding and respect of nature and creates spaces around which a new community can start to form.

The community will thrive and develop within a well-integrated and multifunctional green infrastructure network of new wetland features, restored floodplain meadows and new woodland.

New transport infrastructure will be put in place in a timely way to ensure that it is properly integrated and connected with its surrounding communities, and designed so that sustainable and active travel becomes the preferred option for most. The existing network of walking and cycle routes will be extended, public transport will be

significantly improved, and a new multi modal link road connecting Avon Mill Lane to the A4 will be constructed at an early stage in the development.

5.2 Housing capacity (types, typology & affordable housing) and other land uses.

About 1550 units comprised 30 - 35% AH (34ha + 12ha), a full range of types and sizes including marina providing residential and leisure moorings

Employment development around main access road: 14ha (55,000sqm floorspace) New waste and recycling site (4ha)

New local centre (0.5ha) potentially including shops, primary care, community/recreational facilities

Primary School (1.2ha)

5.3 Appearance

New marina providing residential and leisure moroings. High density housing fronting marina and riverside, maximising development along valuable views and provide strong surveillance.

5.4 Access

North Keynsham Link Road alignment through centre of site from Avon Mill Lane to A4 with new roundabout.

Pedestrian and cycle connections across the River Avon. Improved pedestrian and cycle connections to Keynsham railway station.

Existing vehicle routes downgraded to pedestrian and cycle only links.

5.5 Green Infrastructure (flood risk/mitigation, ecology, heritage, POS)

Green spines through residential areas providing surface water attenuation though SUDS. Public access to riverside area with ecological landscape and public realm improvements and increased leisure amenity. Links to the East Keynsham Strategic Allocation and community woodland. Extensive buffer planting around edges of site to mitigate the visual impact of development.

5.6 Infrastructure requirements (health, education, utilities) etc

A new primary school, new primary care facility, recreation facilities potentially including sports pitches, open space, new marina, neighbourhood centre

6.0 Barriers to delivery / critical interventions (Achievability Risks)

6.1 Identified risks to suitability, availability and achievability.

The critical risks are:

- Delivery of strategic transportation improvements including the North Keynsham Link Road and the link road between A4 and A37.
- Poor access to the site using existing routes and congestion on connections to the A4. Improvements would require new bridge access and new road provision at a cost to the project.
- Un-coordinated piecemeal development that fails to secure necessary improvements to the range of services, facilities and accessibility improvements.
- Proximity to active industrial sites; potential environmental health concerns.
- Existing infrastructure considerably constrains the layout of the site unless relocated which will have an associated cost to the project.

6.2 Actions needed to reduce risks (e.g. investment in new infrastructure, dealing with fragmented land ownership, environmental improvement, or a need to review development plan policy)

- Consideration / review of developer contributions strategy.
- Keynsham wide access and movement strategy required.

- Early engagement with local school academy / options assessment required.
- Land ownership and legal check (see trajectory below).

7.0 Indicative trajectory

7.1 Trajectory assumed lead in time of 11 yrs, to allow for strategic transportation measures to be funded and programmed. Indicative build out rates: 50-200pa. Slow build out to allow new community to form.

	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27
N Keynsham	0	0	0	0	0	0	0	0	0	0	0
	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	2035/36	Capacity within	Plan period
	50	100	150	200	200	200	150	200	150	1,400)

•	Post 2036	Total Capacity
	100	1,500

8.0 Appendix 1 Concept Diagram



Strategic Development Location – Whitchurch Bath and North East Somerset

Date of Issue: October 2017











1.0 Location characteristics

1.1 Site Location (address)

Land South East of Bristol, Whitchurch

1.2 **Size**

Approx. 120ha (Gross), 68 Ha Developable Area (approx.)

1.3 Relevant planning status and designations

- The area is within the Green Belt.
- The area is part of the setting of Maes Knoll and the setting of the Queen Charlton Conservation Area
- Land east of Whitchurch is allocated for 200 dwellings in the B&NES Local Plan as a Strategic Site. Of which 100 dwellings has been granted. (16/02055/FUL)

1.4 Current land use

Primarily agricultural land.

2.0 Suitability (Constraints & Opportunities)

2.1 Strategic Opportunity

Assessments indicate capacity for around 2,500 dwellings in total, with 1,600 dwellings developed within the plan period.

2.2 Site characteristics.

This area lies to the south east of the village of Whitchurch. The land is mainly untended grassland with pasture and grazing land and areas of recreational land. To the south and east lie areas of open countryside with small clusters of dwellings along the lanes. Maes Knoll, an ancient hilltop fort, forms a significant landmark to the south west and its setting is very important.

2.3 Physical & Environmental constraints.

<u>Access:</u> The A37 provides a direct link to Bristol city centre. There are a number of narrow lanes with radiate out through the surrounding countryside. In terms of wider connections, Whitchurch Lane gives a link to the A4174 which provides access to the western parts of the city centre, on to the A4 and M5. Keynsham is accessed via Woolard Lane and Charlton Road.

Ecology: Adjacent to Sturminster Road and Stockwood Open SNCI.

<u>Landscape</u>: The site relates to parts of two landscape character areas: Stockwood Vale to the north east, and Dundry Plateau broadly to the west. Stockwood Vale is a particularly sensitive landscape character area, as is the setting of Maes Knoll. The landscape buffer between the southern Bristol suburbs and the village of Whitchurch ensures the physical and visual separation of the village from the Bristol urban area.

<u>Heritage:</u> Listed Buildings (including Lyons Court Farmhouse and St Nicholas Church). The site forms part of the setting of Queen Charlton Conservation Area and Maes Knoll Scheduled Ancient Monument and Wansdyke Scheduled Ancient Monument.

<u>Flood Risk</u>: The area around the village lies almost entirely within FZ1. A small area of fluvial FZ2 flows a tributary of Brislington Brook that flows between Whitchurch Park

and Stockwood. There are already significant existing surface water flooding issues in the adjoining urban areas of Dundry and Whitchurch. Any development upstream of these areas should ideally take the opportunity to reduce flood risk and as a minimum must not increase flood risk or create any new flood risk areas.

<u>Utilities:</u> The site contains a strategic gas pipe that needs to be taken into account when masterplanning the development site. New water mains and other infrastructure requirements will be met as part of the site development costs.

<u>Ground Conditions:</u> The ground conditions are generally not expected to pose constraints for foundations however further investigation would be required.

2.4 Existing development schemes

No existing development schemes apart from the land east of Whitchurch allocated for 200 dwellings in the B&NES Local Plan as a Strategic Site.

2.5 Opportunities

To encourage active travel and to reduce car dependency, there are important opportunities to enhance existing and to provide new sustainable transport routes, particularly into central Bristol and to Keynsham.

Green infrastructure opportunities should seek to optimise the setting of both Maes Knoll and Queen Charlton Conservation Area, enhance the potential of Stockwood Vale as an important green infrastructure asset for the wider community, and seek to safeguard the open green fields that separate Whitchurch village from Bristol.

3.0 Landuses, capacity, availability & viability

3.1 Mix of uses – housing led mixed use development

New community Including residential (2,500 dwellings), employment, new local centre, two new primary schools, a secondary school, Park and Ride and new green infrastructure

3.2 Employment (type/ha)

To be determined though the local plan process.

3.3 Housing typology / density.

Urban extension. Rage of densities to create variety and character responding to the local environment. Significant green infrastructure, and designed to encourage active travel. (68 ha, 2,500 dwellings max, at average 40dph)

3.4 Capacity

Predominately at 40 dph, with some lower density development in more sensitive locations, the area (would provide approximately 2,500 dwellings).

3.5 Availability

Multiple ownership, with some larger landowners and developer partnerships emerging.

3.6 Viability

Viability likely to be dependent upon alternative sources of funding. See viability evidence for further information.

4.0 Concept Diagram

Refer to Appendix 1 – Concept Diagram

5.0 Draft policy expectations for location

5.1 Vision

The new development to the south east of Bristol will be an exemplary and inspirational place; a high quality, people centred environment that feels safe, sociable and attractive for all. The design of the new development will respond positively to its sensitive and important environmental, landscape and historic context, and will be at least zero carbon.

It will be a residential led community, and will include local centres, two new primary schools and a secondary school, new health and community facilities, a variety of employment workspaces, all integrated with new parks, open space and green infrastructure.

New transport infrastructure will be put in place in a timely way to ensure that it is properly integrated and connected with its surrounding communities, and designed so that sustainable and active travel becomes the preferred option for most trips. The existing network of walking and cycle routes will be extended, public transport will be significantly improved.

5.2 Housing capacity (types, typology & affordable housing) and other land uses. 2,500 dwellings Affordable Housing 35%

5.3 Appearance

The development of a contemporary, inspirational and recognisable place, that helps to create positive relationships with the built and natural environments and with neighbouring communities.

5.4 Access

Contribution to strategic transport package including: the link between the A4 and A37, from the A37 to South Bristol Link Road, and the construction of a new Park and Ride. Developer investment is required in highway, foot and cycle connections.

Enhancements are required to be made to existing cycle routes into Bristol and to the south, and the implementation of new cycles routes to improve connectivity with Keynsham, particularly the town centre and railway station.

Strong encouragement to walking, cycling and public transport use.

5.5 Green Infrastructure (flood risk/mitigation, ecology, heritage, POS)

Contributing to and reinforcing a comprehensive green infrastructure network and implementing opportunities for enhancing biodiversity.

5.6 Infrastructure requirements (health, education, utilities) etc

The new development will provide 2 new primary schools, a secondary school, Park and Ride, health and community facilities.

5.7 Energy/heat

New development will aim to maximise the range of sustainability measures, e.g. including micro renewables, passivhaus standard homes, homeworking measures and electric car charging facilities etc. District heating networks will also be investigated.

6.0 Barriers to delivery / critical interventions (Achievability Risks)

6.1 Identified risks to suitability, availability and achievability.

The critical risks are:

- Critical risk is the delivery of strategic transportation link between the A4 and A37. The location has the potential to be well linked to Bristol city centre by bus, and to Keynsham town centre by cycling.
- Un-coordinated piecemeal development that fails to secure necessary improvements to the range of services, facilities and accessibility improvements.
- 6.2 Actions needed to reduce risks (e.g. investment in new infrastructure, dealing with fragmented land ownership, environmental improvement, or a need to review development plan policy)
 - Early prioritisation, identification of funding and infrastructure delivery is required.
 - Early engagement around viability modelling.
 - Early consideration of utility strategy.

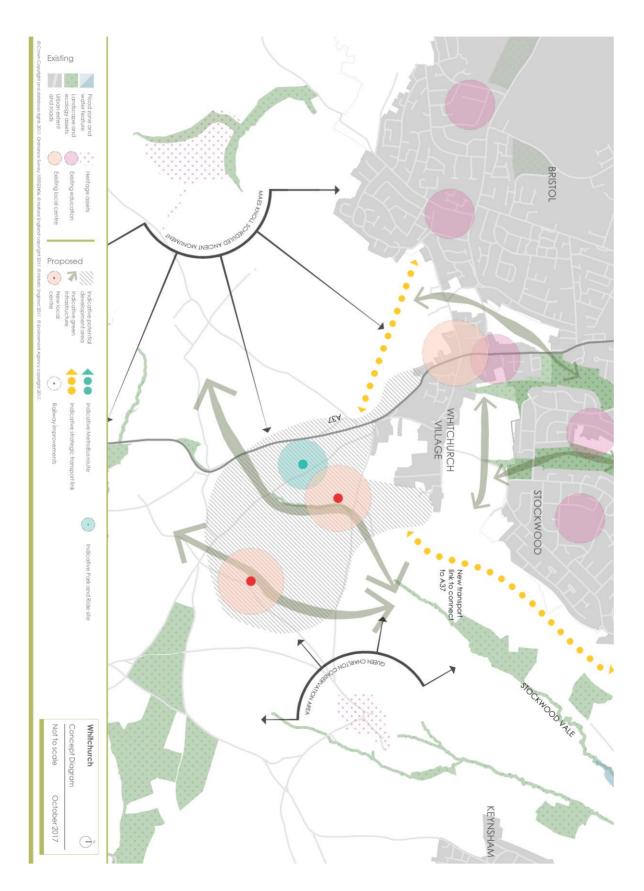
7.0 Indicative trajectory

7.1 Trajectory assumed lead in time of 13 yrs, to allow for strategic transportation measures to be funded and programmed. Indicative build out rates: 50-300pa. Slow build out to allow new community to form.

	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27
Whitchurch	0	0	0	0	0	0	0	0	0	0	0
	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	2035/36	Capacity	within Plan period
	0	0	50	150	250	250	300	300	300	1,60	00

Post 2036	Total Capacity
900	2,500

Appendix 1 Concept Diagram



Strategic Delivery Location – Brislington, Bristol

Date of Issue: October 2017











1.0 Location characteristics

1.1 Site Location (address)

Brislington Park and Ride and land at Bath Road, Brislington, Bristol

1.2 Size

Approx. 27ha.

1.3 Relevant planning status and designations

Policy BCS5 of the adopted Local Plan identified the use of some Green Belt land in southeast Bristol as a long-term contingency for an urban extension. The broad location of this land was indicated on the Key Diagram and the capacity was not expected to exceed 800 homes. Green Belt, two Minerals Safeguarding Areas, Coal Resource Area, Brislington Park and Ride Expansion - Safeguarded Park and Ride Sites.

1.4 Current land use

Agricultural, Park and Ride, Garden Centre

2.0 Suitability (Constraints & Opportunities)

2.1 Strategic Opportunity

Brislington Strategic Development Location has been identified as capable of accommodating at least 750 dwellings in the plan period (to 2036).

Land at Brislington provides an opportunity for the creation of a new neighbourhood in Bristol with good links to the city centre and the countryside beyond Bristol's boundaries. It is dependent on, and would support the delivery of key transport infrastructure: Callington Road Link / A4 Rapid Transit Scheme; and the relocation of the Brislington Park and Ride to a more optimal location close to the Hicks Gate Roundabout.

2.2 Site characteristics

The site comprises Brislington Park and Ride, agricultural fields and Keynsham Garden Centre on the eastern edge of Bristol, south of the Bath Road (A4). The land slopes gently downwards from northwest to southeast continuing into Bath and North East Somerset, where it then slopes up more steeply to the ridge at Stockwood Lane.

2.3 Physical & Environmental constraints

Access: From the A4, ideally utilising existing Park and Ride Access.

<u>Landscape & Heritage:</u> Loss of Green Belt has the potential to impact on valued countryside and the historic landscape, including the network of hedgerows and woodland pockets on the edge of the city and the rural character of Stockwood Lane.

Pylons: Pylons run southeast-northwest across the site.

Ecology: Much of the site is a Wildlife Corridor. Hedgerows traverse the site. There are records of legally protected species in the vicinity.

<u>Coal Resources:</u> There is a potential requirement for extraction of surface coal resources in the area.

<u>Land contamination:</u> Potential for contamination from infilled quarry and landfill site to the south on Stockwood Lane.

<u>Flood Risk:</u> There is a low risk of flooding from Scotland Bottom Watercourse. Surface water drainage: Mitigating / managing surface water runoff may present significant constraint as Scotland Bottom watercourse has existing flood risk issues upstream and downstream of the site.

2.4 Existing development schemes

No existing development schemes exist for the site.

2.5 Opportunities

The land is constrained by Green Belt designation and existing Park and Ride on the site. Otherwise the site is relatively unconstrained land which has been promoted by the landowners. Development provides an opportunity to create a high quality new neighbourhood to the southeast of Bristol benefiting from close proximity to existing services, facilities and communities within Bristol, with good connections to the city centre.

3.0 Landuses, capacity, availability & viability

3.1 Mix of uses – housing led

Housing (at least 750 dwellings) and open space with further mix of uses to be provided following a detailed master-planning process. The provision of a local centre should be considered.

3.2 Housing typology / density

Broad range of housing types from 2-5 storeys to create variety and character within the new neighbourhood.

3.3 Capacity

At least 750 dwellings.

3.4 Availability

The land is owned by several landowners and the development of the site has been actively promoted in the Call for Sites. Relocation of Brislington Park and Ride to a site within Bath and North East Somerset is required to enable development.

3.5 Viability

Initial modelling shows the site to be viable, although alternative funding sources will be required to deliver transport infrastructure and the relocation of the Park and Ride site.

4.0 Concept Diagram

See Appendix 1 – Concept Diagram

5.0 Draft policy expectations for location

5.1 Vision

A new neighbourhood that will provide an attractive, high quality, well-functioning place with good connections to central Bristol, the wider city and the countryside beyond Bristol's boundaries. The development will be designed to promote safety, accessibility and permeability.

5.2 Housing capacity (types, typology & affordable housing) and other landuses. It will provide at least 750 dwellings, comprised 35% affordable housing with a full range of types, sizes and tenures.

5.3 Appearance

Deliver high quality urban design, creating a strong sense of place, responding to the landscape features of the area.

5.4 Access

Contribution to strategic transport packages including: Callington Road Link / A4 Rapid Transit Scheme; A4 – A37 link; widening of the A4 strategic road network corridor to provide public transport infrastructure inbound and outbound, and an adjacent strategic greenway providing walking and cycling paths with links across Bath Road. Developer contributions required for the removal of traffic from Scotland Lane to create a pedestrian and cyclist only greenway and to extend and improve cycle routes to Bristol, Keynsham, and to the countryside to the south.

5.5 Green Infrastructure (flood risk/mitigation, ecology, heritage, POS)

The development must retain and incorporate the network of hedgerows into development, including the hedgerows along Scotland Lane. It should provide a linear recreational park incorporating Scotland Bottom watercourse to allow for maintenance of the watercourse, the protection and enhancement of nature conservation and the provision walking and cycling routes. It should also provide a Sustainable Drainage Systems (SuDS) strategy to include surface water runoff management measures to address existing issues on the Scotland Bottom Water Course and Scotland Lane.

5.6 Infrastructure requirements (health, education, utilities), etc.

The development will be subject to financial contributions to the provision of primary school places off-site. Other infrastructure requirements will be determined by the masterplan. No infrastructure constraints have been currently identified.

5.7 Energy/heat

The new neighbourhood will aim to be zero carbon standard or produce more renewable energy than it uses.

6.0 Barriers to delivery / critical interventions (Achievability Risks)

6.1 Identified risks to suitability, availability and achievability

Development of the site is dependent on the:

- Delivery of strategic transportation improvements in advance of development, including:
 - Relocation of Brislington Park & Ride to land near Hicks Gate Roundabout within Bath and North East Somerset;
 - Callington Road Link / A4 Rapid Transit Scheme;
 - Widening of the A4 strategic road network corridor to provide public transport infrastructure inbound and outbound, and an adjacent strategic greenway providing walking and cycling paths;
- Site assembly.

6.2 Actions needed to reduce risks

- Prior relocation of Brislington Park and Ride to land near Hicks Gate Roundabout within Bath ad North East Somerset;
- Early prioritisation of transportation infrastructure.

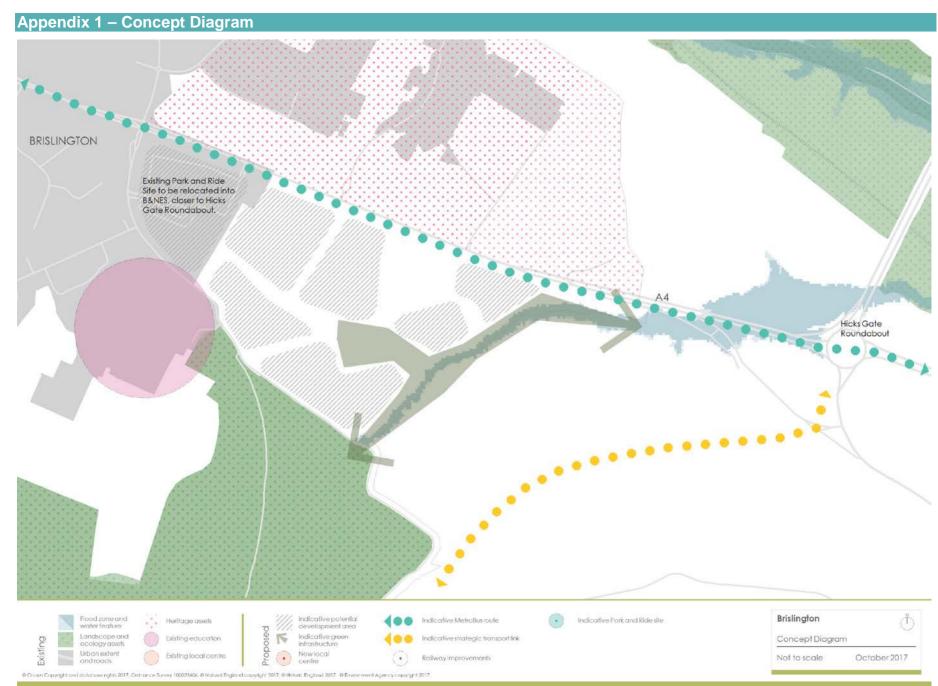
7.0 Indicative trajectory

7.1 Trajectory

Assumed start date of 2031/32, to allow for strategic transportation measures to be funded and programmed. Indicative build out rates: 150 per year.

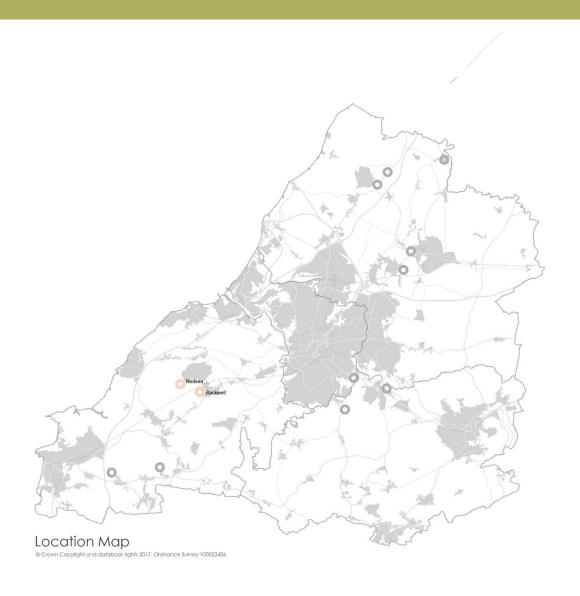
	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27
Brislington	0	0	0	0	0	0	0	0	0	0	0
	2027/28	62/8202	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	98/36	Capacity within	plan period
	0	0	0	0	150	150	150	150	150	7:	50

Post 2036	Total Capacity
0	750



Strategic Development Location – Backwell North Somerset

Date of Issue: October 2017











1.0 Location characteristics

1.1 Site Location

Land to the west of Backwell.

1.2 Size

Approx. 30ha (gross), 18ha net residential area.

1.3 Relevant planning status and designations

- Backwell has an adopted Neighbourhood Plan
- Green Belt to the south of Chelvey Lane (not within area of search)

1.4 Current land use

Predominantly agricultural.

2.0 Suitability (Constraints & Opportunities)

2.1 Strategic Opportunity

The JSP - Towards the Emerging Spatial Strategy consultation identified Backwell as accommodating up to a further 800 dwellings in the plan period to 2036. The potential identified through this assessment is revised to 700.

2.2 Site characteristics

The site predominantly comprises agricultural fields. The area is undulating with higher ground to the east of Grove Farm. Hedgerows and watercourses are extensive across the area reinforcing the rural character of the area. The open aspect immediately to the south west of the village is considered an important feature supporting the West Town Conservation Area and should inform the design and layout of development on this edge. The area to the southwest of the village is also a critical area for horseshoe bat foraging.

2.3 Physical & Environmental constraints

<u>Heritage:</u> Listed Buildings including The Grove to the west of Backwell and the West Town Conservation Area have the potential to be impacted as a result of new development. However careful design can address this issue. Grove Farm lies just on the periphery of the proposed development area and could be set within an open space to retain its character and identity.

Setting of West Town Conservation Area likely to affect development potential immediately to the north. Further investigation required on the setting of importance and the relationship to new development, including the potential to maintain open space on field parcels north of the Conservation Area.

<u>Archaeology:</u> This area is poorly understood archaeologically, but there is the potential for coal mining heritage to exist in the northeast of this area.

<u>Ecology</u>: The area is used by horseshoe bats for foraging and commuting and a particularly sensitive foraging area is identified to the southwest of the area including the field parcels at the junction between West Town Rd and Chelvey Rd¹. This may lead to specific requirements associated with the new development. The suggestion above associated with heritage may provide some safeguarding of the habitat by retaining a margin of open space.

Opportunities to improve ecological linkages between habitats west of Backwell including woodland at Backwell Hill to habitats in the Nailsea SDL should be explored.

The new strategic highway link from the Nailsea SDL to the west of Backwell is likely to interact with this sensitive foraging area at some point so consultation with Natural England will be required and suitable measures taken to address.

Consideration will be given to the protection of nationally significant species and habitats, notably Section 41 habitats and species. Examples of Section 41 habitats include: species rich lowland meadows, wet woodlands, traditional orchards, and reed beds. Examples of Section 41 species that have suffered sharp declines in population and/or distribution, include the Common Toad, Hedgehog, House Sparrow, Brown Hare and Skylark, as well as many insect species. Wildlife corridors and features such as 'stepping stone habitats' and other natural features need to be incorporated into new development to safeguard key habitats identified within Section 41 of the NERC Act (2006).

<u>Landscape</u>: The development area sits on higher land and falls into the J5: Land Yeo and Kenn Rolling Valley Farmland Landscape Character Area of moderate character in good condition.

<u>Flood risk:</u> Area of search located in flood zone 1. There are areas of flood risk to the northwest of the area close to the railway. Whilst the potential development area is identified outside of the fluvial/tidal flood risk areas, the volume of surface water run-off has the potential to cause problems elsewhere particularly on lower lying ground. In places, water in these areas drains away slowly and the water table is high with potential for inundation. Further work is therefore required to understand the flood risk issues associated with development and supporting infrastructure, notably roads, and to identify possible options to mitigate any impacts. These may include both site-specific measures e.g. sustainable drainage systems, and more strategic solutions to enable the local environment to more effectively manage and provide long-term storage of surface water.

2.4 Existing development schemes

Land at Moor Lane is a proposed residential allocation for 65 units.

2.5 Opportunity

Backwell is a village in North Somerset located close to Nailsea, and is located on the main railway corridor and the A370. The village is therefore on the main transport corridor to both Bristol and WSM although improvements would be required to facilitate sustainable development. The area to the west of Backwell offers an opportunity to create a new extension to the village but would require

¹ This area is designated as a bat Juvenile Sustenance Zone, see guidance: http://www.somerset.gov.uk/policies-and-plans/plan

transport mitigation to avoid further impact upon the Backwell signals junction. A new link road from the A370 west of Backwell would provide a connection to the new Nailsea SDL, connecting to an improved rail and transport interchange, and alleviating Station Road.

3.0 Land uses, capacity, availability & viability

3.1 Mix of uses

At this stage mix of uses is proposed to include residential, potential for small-scale retail, employment and open space. Areas for surface water storage are also envisaged but these could be provided off/near-site.

3.2 Employment (type/ha)

Employment provision and location to be addressed through the local planning process. Assumptions provided here are initial scenarios for testing. North Somerset Council are currently preparing an Employment Land Review that will inform employment planning at the SDLs through the local plan.

Likely to be beneficial to consider employment provision in tandem with the Nailsea SDL including potential to provide a new business site well connected to Nailsea and Backwell station and the new MetroBus route. Initial capacity of 10.5ha across both areas to test further through local planning process.

3.3 Housing typology / density

Medium density village extension. Average 40dph. A relatively higher site coverage is assumed taking into account the size of the potential development area and corresponding reduced requirement for non-residential land uses.

The density selected across the development should respect the existing village character and the rural setting present, particularly taking into account the need to safeguard heritage features, including Grove Farm and West Town Conservation Area.

3.4 Capacity

About 700 units.

3.5 Availability

Development being promoted by a single developer. Additional land likely to be required to deliver strategic transport mitigations.

3.6 Viability

Viability likely to be dependent upon alternative sources of funding. See viability evidence for further information.

4.0 Concept Diagram

See Appendix 1 - Concept Diagram

The Concept Diagrams provide the broad location or area of search for growth in each SDL denoted by the diagonal hatching. The extent of this covers the **gross development area** within which the range of land uses and features necessary to support the new development could potentially be provided, including residential, employment, education, retail, leisure, community uses, green infrastructure, and water storage as required. Development areas to be refined through more detailed work through the local planning process.

5.0 Draft policy expectations for location

5.1 Vision

- Opportunity to create an extension of the existing settlement on its western edge, and extend out towards Grove Farm. Development is discouraged beyond Grove Farm to protect the separate identity of Backwell, to prevent coalescence with Chelvey, and to safeguard the setting of the West Town Conservation Area.
- Development is discouraged immediately adjacent to the West End Conservation Area to maintain the open aspect around it that contributes to its character and appearance.

5.2 Housing capacity and other land uses

- About 700 units of a range of types and sizes including affordable provision.
- A primary school on 2ha site. Located to be accessible to surrounding neighbourhoods to maximise walking to school opportunities along safe and attractive routes.
- Expansion of existing secondary school.
- Land to be identified to accommodate strategic transport mitigations and other infrastructure including both on-site, near-site and off-site requirements.
- Consider employment provision in association with the Nailsea SDL, in particular scope to provide a new business site well connected to Nailsea station.
- Community uses, to be identified and integrated through masterplanning.

5.3 Transport

- The development will contribute to a strategic transport package including a new link to the west of Backwell connecting the A370 to the new strategic highway associated with the Nailsea SDL. Improvements required to Nailsea and Backwell station, MetroBus provision and other local network improvements.
- This is a summary headline of the key transport requirements, is not definitive
 of the required transport mitigations and further detailed work will be
 progressed on transport matters. See Joint Transport Study and background
 papers for further detail.

5.4 Green infrastructure

- The approach to green infrastructure should seek to support the rural character of the area for example by creating 'soft' edges to the development blending well into the surrounding countryside and safeguarding heritage features. Multiple roles should be explored for GI including in relation to ecology, recreation, leisure, sustainable drainage and heritage
- Additional strategic green infrastructure to avoid significant impacts to Natura 2000 sites.

5.5 Infrastructure requirements

- Suitable drainage infrastructure including to reduce rate of run-off, and provision for long-term storage, and with benefits to water quality. Opportunities to enhance biodiversity should be explored.
- Ecological mitigation including features designed to safeguard habitats and species, retention of key habitats and replacement where necessary.
- Sustainable energy infrastructure including opportunities for heat networks explored early in order that any enabling measures can be secured to enable an efficient and effective delivery. The form and layout of development, and the distribution of land uses is likely to be a key issue in designing the infrastructure. Management of the infrastructure going forward should also be considered.
- Potential requirements for utilities upgrades.

5.6 **Energy**

Opportunities to secure a zero carbon new settlement will be explored including incorporating a range of sustainable measures, including potential district heating, renewables, energy generation, passivhaus standard homes, homeworking measures and electric car charging facilities etc.

6.0 **Barriers to delivery - critical interventions**

6.1 Key identified risks to suitability, availability and achievability

The critical risks are:

- Delivery of strategic **transportation** improvements, to facilitate development, including programming and land assembly.
- Drainage constraints.
- Ecological/ biodiversity impacts.

6.2 Key actions needed to reduce risks (e.g. investment in new infrastructure, dealing with fragmented land ownership, environmental improvement, or a need to review development plan policy)

- Clear understanding of transport requirements, options, and costs supported by funding strategy and means of delivery. Consensus achieved with development partners on schemes required and means of delivery.
- Review of developer contributions and wider funding strategy as part of selection of appropriate development delivery model.
- Ongoing dialogue between flooding agencies. Further investigations are required to understand the existing drainage conditions of the area, the additional impacts of development including volumes of run-off, and the potential options for mitigation if required.

 It is expected that ecological issues can be addressed through masterplanning and the integration of suitable features/safeguarding on or off site. Further engagement with Natural England required to scope additional evidence required. Ecological issues and mitigation, including on the North Somerset and Mendip Bats SAC to be addressed at the strategic scale across the Backwell and Nailsea SDLs. Particular attention required for nearby sensitive foraging habitat.

7.0 Indicative trajectory

7.1 Indicative lead-in time to initial completions assumed as 11 years, to allow for strategic transportation measures to be funded and programmed. Indicative build-out rate 50-100 dpa, with development completing within JSP plan period. Average annual build rate of 88 dwellings estimated with peak years of 100 units.

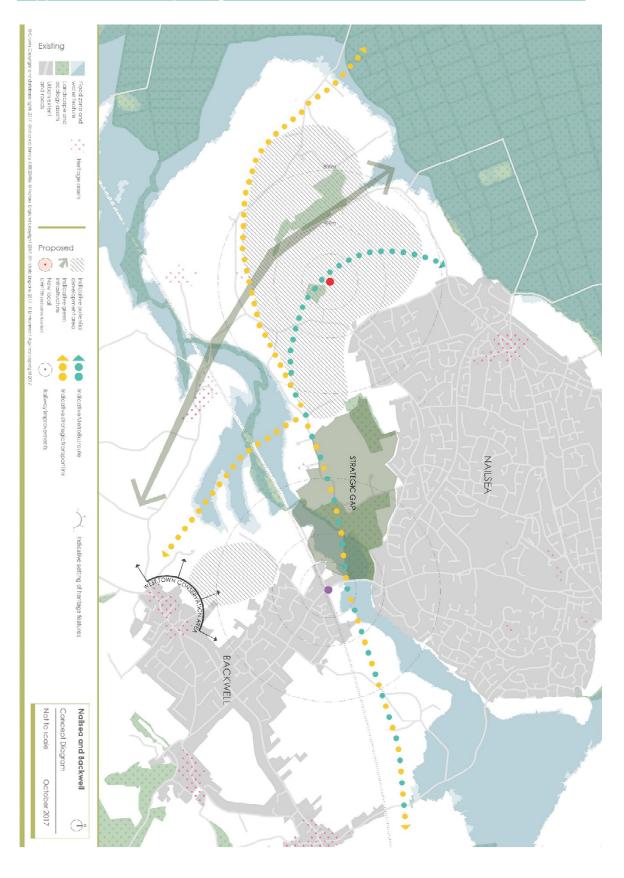
Critical dependencies include provision of strategic transport mitigations including schemes associated with Nailsea SDL, and A370 to Nailsea to the west of Backwell; provision of suitable ecological/environmental mitigation.

	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27
Backwell					,						

2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	2035/36	Capacity within Plan period
	50	75	100	100	100	100	100	75	700

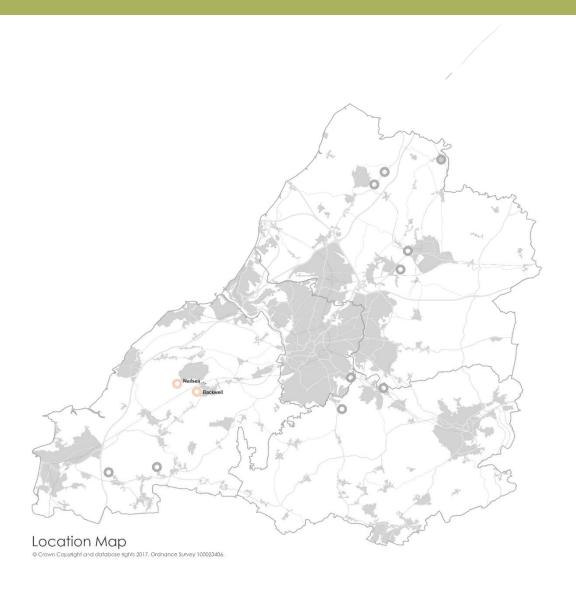
Post 2036	Total Capacity
0	700

Appendix 1 –Concept Diagram



Strategic Development Location – Nailsea North Somerset

Date of Issue: October 2017











1.0 Location characteristics

1.1 Site location

Land to the south west of Nailsea.

1.2 Size

Approximately 157ha gross, 79ha net residential area.

1.3 Relevant planning status and designations

Land to the east of the area is proposed Strategic Gap (SAP, Policy SA9).
 This area also includes four smaller areas proposed as Local Green Space (SAP, Policy SA7).

1.4 Current land use

Predominantly agricultural/open countryside.

2.0 Suitability (Constraints & Opportunities)

2.1 Strategic Opportunity

The JSP - Towards the Emerging Spatial Strategy consultation identified Nailsea as accommodating up to a further 2,800 dwellings in the plan period (to 2036). However, further work indicates potential for around 3,300 dwellings depending on the extent of land included in the development and the approach to residential density.

2.2 Site characteristics

The site predominantly comprises agricultural fields on gently south facing slopes. The landscape rises from the railway to the southern edge of the town. The landform drops away to the west to the Tickenham and Kenn Moor that has a network of ecologically important watercourses that are designated Site of Special Scientific Interest (SSSI). The ecological attributes of the area are supported by important habitats and features that should be assessed, retained, and or enhanced through new development.

The road network in the area is rural including many single lane carriageways.

2.3 Physical & Environmental constraints

<u>Heritage</u>: historic coal mining in the area may need to be investigated to ensure any heritage assets/ features are appropriately safeguarded. Listed Buildings at Nailsea Court and Chelvey have the potential to be impacted and key parts of their settings are likely to include land to the south of the proposed growth area. Further investigations should be carried out during subsequent masterplanning (including visual analysis) and appropriate design choices made to safeguard. This could









include maintaining an open aspect around Youngwood Lane/ Netherton Wood Lane, or assuming a lower density form of development on the southern fringe. There may be an opportunity to create green corridors anchored on Nailsea Court and Chelvey that could provide a degree of safeguarding, as well as potential to set up some interesting visual corridors centred on landmark buildings/ features.

<u>Archaeology:</u> West End is identified as an area of moderate archaeological potential. It is therefore expected that there could be features of interest that may impact upon development.

<u>Landscape:</u> The development area sits on higher land and falls into the K1: Nailsea Farmed Coal Measures Landscape Character Area of strong character in good condition.

A Strategic Gap is proposed to be safeguarded in the emerging North Somerset Site Allocations Plan, and covers a large area of land to the south of Nailsea. It is identified to protect the separate identity of Nailsea and Backwell. The Concept Diagram shows the gap retained in its current proposed form. Options to reconfigure may be considered through the local planning process taking wider strategic development objectives into account including transport and the relationship of new development to the improved Nailsea/Backwell station.

Ecology: The area is known to be used by horseshoe bats for foraging and commuting, with activity at the West End area and flight corridors are expected around the south western edge of the town linking south to key habitats around Backwell¹. The presence of bats may require specific mitigation within new development including for example the inclusion of 'dark corridors'², and retention of habitat areas/ replacement habitat. One opportunity may be to provide a green corridor that links from the west of Backwell (and important bat habitat there), to the south of the Nailsea SDL, through the development on lower ground by Nursebatch and Batch Farm connecting Batch Farm Meadow Wildlife Site, and then through to open countryside to the north. (This suggested network is shown indicatively on the Concept Diagram in Appendix 1). This corridor provides a link to key habitats in the north of the district (woodland on the Tickenham Ridge), and south (woodland at Backwell Hill; important foraging habitat, and habitat near Yatton/ Cleeve).

The nearby SSSI network is also identified as a constraint. Surface water run-off into it is of concern (on water levels and quality) and will likely have to be addressed through an appropriate drainage strategy. Potential development areas to the west of the SDL are of particular relevance given their proximity to the SSSI and may require careful masterplanning to maintain a margin of open land to the SSSI and the inclusion of suitable environmental attenuation features. Lower density (gross and net) may also be appropriate on the western edge reflecting these issues.

Consideration will be given to the protection of nationally significant species and habitats, notably Section 41 habitats and species. Examples of Section 41 habitats include: species rich lowland meadows, wet woodlands, traditional orchards, and

¹ The area to the south west of Backwell between Chelvey Road and the A370 is identified to be within a horseshoe bat Juvenile Sustenance Zone, an important foraging habitat for juvenile bats in close range of key roosts. The following links to Somerset County Council website and guidance on North Somerset and Mendip Bats SAC: guidance on development: http://www.somerset.gov.uk/policies-and-plans/plans/habitat-regulations/

² Dark corridors typically comprise linear green spaces including hedgerow and possibly water features and are designed to specific specifications to maintain a certain level of illuminance.

reed beds. Examples of Section 41 species that have suffered sharp declines in population and/or distribution, include the Common Toad, Hedgehog, House Sparrow, Brown Hare and Skylark, as well as many insect species. Wildlife corridors and features such as 'stepping stone habitats' and other natural features need to be incorporated into new development to safeguard key habitats identified within Section 41 of the NERC Act (2006).

Flood risk: Area of search for development located in flood zone 1. Areas of land at risk of tidal / fluvial flooding are located to the west of the area that coincides with a network of man-made watercourses required to manage surface water on the Tickenham and Kenn Moors landscape. Many of these are also designated SSSI and are highly important ecological features. High water table and poor water conveyance are recognised issues affecting the area and may influence the location, scale and suitability of development and the need for measures to ensure there are no adverse impacts on or outside of the development area. Further work is required to understand the flood risk issues associated with development and supporting infrastructure, notably roads, and to identify possible options to mitigate any impacts. These may include both site-specific measures é.g. sustainable drainage, and more strategic solutions to enable the local environment to more effectively manage long-term storage and surface water. This has the potential to provide some betterment to existing areas where poor water conveyance and drainage is an issue. Such works as required have the potential to reduce the overall capacity of the development and whilst there is some allowance for this already built in, further allowance may be required.

The delivery of green corridors through development located to channel surface water should be considered together with maintenance corridors for watercourses. These could have a functional role as well as place making benefits.

<u>Other constraints:</u> National Grid works - National Grid have a Development Consent Order for a temporary site compound in the area although this only takes a relatively small site. New electricity distribution lines are proposed to the west of the area.

Utilities

Electricity distribution powerlines cross the site and would require an open corridor to be provided within the masterplan, or alternatively relocation. High Pressure Gas Mains run across the site broadly following the same corridor. These have Health and Safety Executive Consultation Zones associated with them to enable HSE to be consulted on development proposals and to control development within them. There may be restrictions on new roads crossing over these that could result in the need for upgrading or diverting.

2.4 Existing development schemes and recent activity

At the western end of the area are four proposed housing allocations – land at West End for 10; land west of Engine Lane for 183; land south of the Uplands for 50; and land at Youngwood Lane for 170. The first two have planning applications. The latter has a current application for a much larger site.

2.5 Opportunity

Nailsea is one of the four main towns in North Somerset well connected to both Weston-super-Mare and only a short distance away from Bristol. It is located on the

main railway corridor with a station, and the A370. The area to the south west of Nailsea offers an opportunity to create a new development well linked to the existing town supported by improved transport infrastructure including MetroBus connection through the new development, linking through to the existing town, and beyond to Bristol via a new improved Nailsea/Backwell station and interchange. There is potentially an opportunity to achieve a higher density of development given that Nailsea is a main town in North Somerset and the enhanced public transport infrastructure potential.

Development in this area provides the opportunity to deliver new development at a critical mass, using best practice principles, with the full range of new services, facilities and employment opportunities, and an improved public transport offer.

3.0 Land uses, capacity, availability & viability

3.1 Mix of uses

At this stage the mix of uses is proposed to include residential, mixed employment including office use (B1(a), rail station improvement and interchange, retail, leisure, recreation, education, various community uses, ecological areas and public open space. Local Centre likely to contain mix of uses with location and scale to be confirmed through local planning process. Key requirement will be to connect MetroBus to the centre. Areas for surface water storage are also envisaged but these could be provided off/near-site.

3.2 Employment (type/ha)

Employment provision and location to be addressed through the local planning process. Assumptions and suggestions provided here are initial scenarios for testing. North Somerset Council are currently preparing an Employment Land Review that will inform employment planning at the SDLs through the local plan.

Compared to other areas of the West of England and in North Somerset, employment land availability is limited in Nailsea. Improvements to highway infrastructure, the station with improved rail frequency, capacity and MetroBus connectivity, may improve the prospects as a business location.

Potential for new B1 office park well connected to enhanced Nailsea/ Backwell station with MetroBus connectivity. Along with the Backwell SDL, initial scenarios to test are for around 10.5ha of B Class land, comprising 6.3ha B1a, 4.2ha B1b and B1c, that could translate to around 55125sqm and 22,050sqm respectively.

3.3 Housing typology / density

Medium density urban extension at an average 42dph. A range of densities should be considered to create variety and character within the new settlement. There is potential for the net density to be increased to reflect a higher density core and form of development, and this could bring about benefits to transport and wider sustainability, however this has to balance with environmental constraints. Lower densities likely to be required to west of development in response to context and environmental constraints.

3.4 Capacity

About 3,300 units.

3.5 Availability

Multiple ownerships/ development interests present, and majority of land being actively promoted.

3.6 Viability

Viability likely to be dependent upon alternative sources of funding. See viability evidence for further information.

4.0 Concept Diagram

See Appendix 1 –Concept Diagram

The Concept Diagrams provide the broad location or area of search for growth in each SDL denoted by the diagonal hatching. The extent of this covers the **gross** development area within which the range of land uses and features necessary to support the new development could potentially be provided, including residential, employment, education, retail, leisure, community uses, green infrastructure, and water storage as required. Development areas to be refined through more detailed work through the local planning process.

5.0 Draft policy expectations for location

5.1 Vision

- Creation of an urban extension to the south west of Nailsea.
- Residential densities considered around 40 to 45dph, applying the principles
 of 'graded densities'. Higher densities are encouraged closer to the train
 station, local centre, and MetroBus route through the development.
- Development around West End, South Common Farm and other parts west of the existing pylon corridor should be at a reduced density and incorporate features to mitigate environmental impacts e.g. open spaces, drainage features as well as to respect the rural setting to the west of the area.
- Integration with existing community with connectivity between new development and existing town.

5.2 Housing capacity and other land uses

- About 3,300 units of a range of types and sizes including affordable provision.
- New employment development shall be investigated and masterplanned into the development. In particular opportunities to create a new business site well connected to Nailsea station should be explored with improved parking, MetroBus connectivity, rail frequency and capacity.
- Four primary schools on 2.4ha each. Located to be accessible to surrounding neighbourhoods to maximise walking to school opportunities along safe and attractive routes.
- A secondary school is required on 10ha site including sixth form provision.
- Primary care health facility.

- Mixed use local centre to be provided, to be accessible to surrounding residential neighbourhoods and well connected to main highway network and public transport routes.
- Community uses, to be identified and integrated through masterplanning.
- Land to be identified to accommodate strategic transport mitigations and other infrastructure including both on-site, near-site and off-site requirements.

5.3 Transport

- The development will contribute to a strategic transport package including
 potential for a new or improved highway link connecting the M5 to the Nailsea
 SDL, with onwards connection to Bristol. Routes to be multi-modal including
 MetroBus provision with connection at an enhanced Nailsea and Backwell station.
 MetroBus connectivity to the station, new local centre, and back into Nailsea are
 required. Additional improvements to the local network required in addition.
- This is a summary headline of the key transport requirements, is not definitive of the required transport mitigations and further detailed work will be progressed on transport matters. See Joint Transport Study and background papers for further detail.

5.4 Green Infrastructure (flood risk/mitigation, ecology, heritage, POS)

- Approach to green infrastructure to support the rural character of the area for example by creating 'soft' edges to the development blending well into the surrounding countryside particularly at the western end of development. Multiple roles encouraged including in relation to recreation, leisure, environmental and heritage safeguarding and sustainable drainage.
- The GI strategy should also seek to respect the setting of local heritage and provide an ecological corridor, provide for a sustainable drainage system and full range of open space including sports pitches, play areas and allotments.
- Retention of a Strategic Gap at the eastern end of the development between Backwell and Nailsea.
- An area of open space should be considered for retention around the Nursebatch Farm Fields SNCI and safeguarded for its ecological importance.
- Additional strategic green infrastructure to avoid significant impacts to Natura 2000 sites

5.5 Infrastructure requirements

- Suitable drainage infrastructure including to reduce rate of run-off, and provision for long-term storage. In particular, potential impacts on the Tickenham, Nailsea, and Kenn Moors SSSI need to be addressed, including management of water quality and levels. Opportunities to enhance biodiversity should be explored.
- Ecological mitigation including features designed to safeguard habitats and species, retention of key habitats and replacement where necessary.
- Sustainable energy infrastructure including opportunities for heat networks explored early in order that any enabling measures can be secured to enable an efficient and effective delivery. The form and layout of development, and the distribution of land uses is likely to be a key issue in designing the infrastructure. Management of the infrastructure going forward should also be considered.
- Potential requirement for utilities upgrade.

5.6 Energy/heat

 Opportunities to secure a zero carbon new settlement will be explored including incorporating a range of sustainable measures, including potential district heating, renewables, energy generation, passivhaus standard homes, homeworking measures and electric car charging facilities etc.

6.0 Barriers to delivery - critical interventions

Key identified risks to suitability, availability and achievabilityThe critical risks are:

- Un-coordinated piecemeal development that fails to secure necessary
 improvements to the range of services, facilities and infrastructure
 requirements and misses the opportunity to secure plan-led, comprehensive
 development. There may be a particular risk associated with the early
 release of development that is being promoted independently in the shortterm
- Delivery of strategic transportation improvements delivered at a suitable time to facilitate development within the JSP plan period. Early prioritisation / delivery would be required.
- Drainage constraints linked to impacts on water quality in adjoining SSSI.
- Ecological/ biodiversity impacts.
- Utilities on site may affect viability and capacity. Potential to hinder optimum development layout.

6.2 Key actions needed to reduce risks (e.g. investment in new infrastructure, dealing with fragmented land ownership, environmental improvement, or a need to review development plan policy)

- Collaborative approach between public and private partners to achieve planning policy framework through local plan process, subsequent masterplanning and development management processes to secure consensus on phasing of infrastructure and approach to delivery.
- Clear understanding of transport requirements, options, and costs supported by funding strategy and means of delivery. Consensus achieved with development partners on schemes required and means of delivery. Opportunities to link distinct sections of the transport route to distinct phases of development should be explored. This is expected to help support their delivery. Pursue opportunities for funding.
- Review of developer contributions and wider funding strategy as part of selection of appropriate development delivery model.
- Ongoing dialogue between flooding agencies. Further investigations are required to understand the existing drainage conditions of the area, the additional impacts of development including volumes of run-off, and the potential options for mitigation if required.
- It is expected that ecological issues can be addressed through masterplanning and the integration of suitable features/safeguarding on or off site. Further engagement with Natural England required to scope additional evidence required. Ecological issues, including impacts on the North Somerset and Mendip Bats SAC, to be addressed on a strategic basis across the Nailsea and Backwell SDLs.
- Further dialogue with utilities and testing of options through masterplanning process.
- Ongoing engagement between the LPA and development interests is necessary, with ongoing mechanisms for engagement identified. Should consider models of delivery at an early stage, legal aspects and matters such as equalisation of land

values to ensure the most effective masterplan and infrastructure provision can be achieved.

7.0 Indicative trajectory

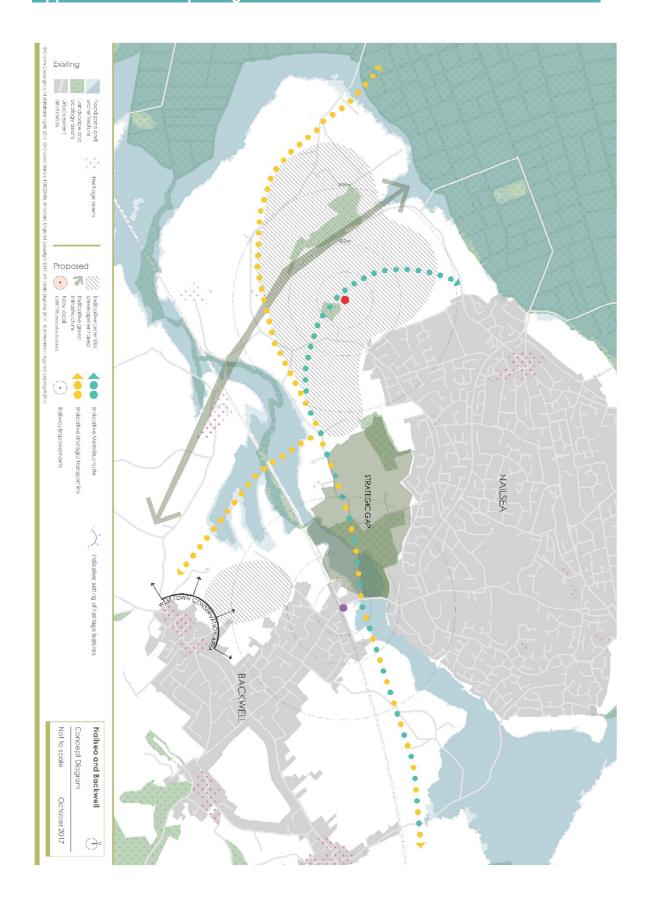
7.1 Indicative lead-in time of 9 years assumed, to allow for strategic transportation measures to be funded and programmed; land to be assembled; and suitable delivery vehicle/structures selected, setup and implemented. Indicative build-out rate of 50-300 dpa. It is currently anticipated that the entire planned development will extend beyond the JSP plan period by an estimated 725. An average annual rate of 234 dwellings is estimated with a peak-year rate of 300 dwellings.

Critical dependencies include provision of strategic transport mitigations; achieving a critical mass of development required to support non-car modes including MetroBus; provision of suitable ecological/environmental mitigation including surface water storage, possible replacement habitat; land assembly, and legal/delivery structures in place.

	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27
Nailsea						/				50	75
	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	2035/36	Capacity	within Plan period
	150	200	300	300	30	300	300	300	300	2	575

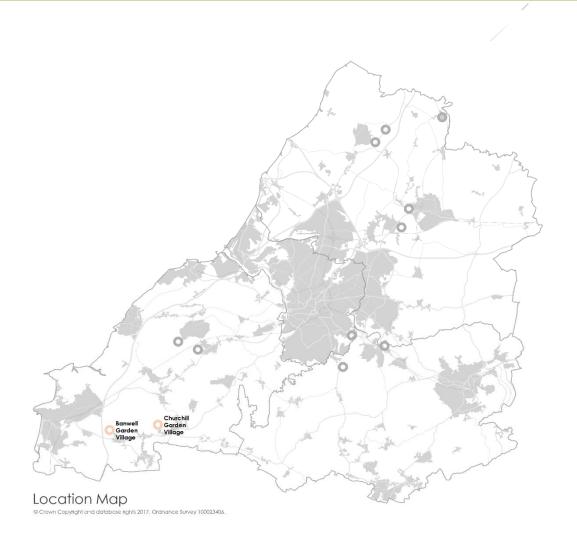
Post 2036	Total Capacity
725	3300

Appendix 1 – Concept Diagram



Strategic Development Location – M5 to A38 Corridor - Churchill North Somerset

Date of Issue: October 2017











1.0 Location characteristics

1.1 Site Location

Land to the northwest of Churchill and Langford.

1.2 Size

Approx. 165ha gross, 85ha net residential area.

1.3 Relevant planning status and designations

 Proposed Local Green Space designation within Langford – Land to the West of Rowan Way.

1.4 Current land use

Predominantly in agricultural use.

2.0 Suitability (Constraints & Opportunities)

2.1 Strategic Opportunity

The JSP - Towards the Emerging Spatial Strategy consultation identified the M5 to A38 Corridor as accommodating up to a further 5,400 dwellings in the plan period to 2036. The background evidence (*Assessment of Strategic Development Locations Beyond Settlement Boundaries*) identified Churchill along this corridor as a location with strategic development potential to be explored further. Further work has identified potential for around 2,800 dwellings at Churchill/Langford that, alongside the potential at Banwell, has reduced the overall dwelling potential on the M5 to A38 Corridor to around 4,700 dwellings.

2.2 Site characteristics

Location predominantly comprises agricultural fields, on undulating land, with a high point around Windmill Hill at around 75m AOD with significant archaeological interest. Hedgerows and watercourses are extensive across the area reinforcing the rural character. King Road passes through the site as well as a number of footpaths. Churchill Academy and Sixth Form is located close to the area off of Churchill Green. Various watercourses run in a northwest direction across the site including Churchill rhyne.

2.3 Physical & Environmental constraints

<u>Heritage</u>: the listed Church of St John the Baptist requires sensitive treatment and its setting may extend some way towards Langford. Any development will need to be sensitive to this feature that may have a significant influence on development capacity achievable in the vicinity. Churchill Green open space immediately to the north of the church likely to have key role in this regard occupying a field parcel bounded by trees and forming an immediate setting to the church and so it would be desirable to retain undeveloped.

The Concept Diagram shows an indicative green corridor linking from Windmill Hill to the west providing some separation of the church from development parcels to the north. Further more detailed visual appraisal is required to ascertain the setting

of importance and the appropriate treatment and layout of any nearby development through more detailed masterplanning.

<u>Archaeology:</u> Area has high archaeological potential. An Iron Age univallate hillfort and Roman Fort is identified at Windmill Hill as well as other notable features of significance in the area generally. Further investigations necessary.

<u>Landscape</u>: The development area sits on higher land and falls into the J2: River Yeo Rolling Valley Farmland Landscape Character Area of moderate character in good condition. It would be desirable to create distinct blocks of development that respect the existing character and form of settlement along the Mendip Hills edge rather than expanses of linear development. This can help to maintain the rural character. The form of development and interaction with surrounding countryside will be important considerations in creating new settlement that blends well with the landscape and will be an important consideration for masterplanning in due course.

Mendip Hills AONB

Although the site is located outside of the AONB, the potential for adverse impact on it is present. The landscape strategy may be beneficial in helping to accommodate development with minimal impact on the AONB.

Ecology: The area is likely to be utilised by horseshoe bats¹ for foraging and commuting particularly from the south of the village to the east and north connecting woodland areas and the Langford Brook. The area has numerous linear hedgerows that are likely to assist bat commuting and some with watercourses providing opportunities for foraging. This may lead to specific requirements associated with the new development including for example the inclusion of 'dark corridors', retention of key habitats, and other measures to safeguard bats and their habitats. One opportunity may be to provide a green corridor from open countryside to the west, connecting to Windmill Hill and woodland features there², and then linking to open countryside and woodland features to the south (shown indicatively on the Concept Diagram). The design of the new link road should also seek to minimise impacts, including for example tree planting with canopy and low level lighting subject to suitability and acceptability.

Consideration will be given to the protection of nationally significant species and habitats, notably Section 41 habitats and species. Examples of Section 41 habitats include: species rich lowland meadows, wet woodlands, traditional orchards, and reed beds. Examples of Section 41 species that have suffered sharp declines in population and/or distribution, include the Common Toad, Hedgehog, House Sparrow, Brown Hare and Skylark, as well as many insect species. Wildlife corridors and features such as 'stepping stone habitats' and other natural features need to be incorporated into new development to safeguard key habitats identified within Section 41 of the NERC Act (2006).

<u>Flood risk:</u> Area of search for development located in flood zone 1. Areas of land at risk of tidal/fluvial flooding are located to the north of the area (outside of the area of search for development) that coincides with a network of man-made watercourses required to manage surface water on the levels landscape, as well as

43

Greater and Lesser Horseshoe Bats are Annex II species notified as mobile qualifying features of the Mendip Limestone Grasslands Special Area of Conservation (SAC) and the North Somerset and Mendip Bats SAC designated under the EC Habitats Directive as part of the Natura 2000 network of European Sites

² The area surrounding Windmill Hill is identified as a biodiversity enhancement area.

key watercourses including the Congresbury Yeo. High water table and poor water conveyance are recognised issues affecting the area that would influence the location, scale and suitability of development and the need for measures to ensure there are no adverse impacts on or outside of the development area.

A strategy for managing surface water will be required. This may include both site-specific measures e.g. suds, and more strategic solutions to enable the local environment to more effectively manage surface water. This has the potential to provide some betterment to existing areas where poor water conveyance and drainage is an issue. Flood catchment modelling may be required in due course.

A series of watercourses flow into the site including Churchill Rhyne and another to the north between Brinsea Farm and Ladymeade Farm. Potential to retain these within the green infrastructure network for enhanced biodiversity value.

Other: The Proposed Southern Strategic Support Main Pipeline runs close to the area on its western edge crossing Brinsea and then broadly following the existing pylon corridor route to Banwell Riverside. This is currently being delivered (planning application ref: 16/P/1095/F2). This may provide some constraint on development, as does the electricity pylon corridor both of which may have easement or wayleave associated. These features form a potential constraint to development beyond, and would have to be suitably addressed through detailed masterplanning

2.4 Existing development schemes

The area has four proposed housing allocations; Pudding Pie Lane for 141; Says Lane for 43; land south of Bristol Road for 41; and Pudding Pie Lane (west) for 35. The first two have planning consent, the others a planning application in progress.

2.5 Opportunity

Churchill and Langford are settlements located some 3-4 miles east of Weston-super-Mare and approx. 5 miles from Bristol Airport, and are two of the multiple settlements located on the main A371/A368/A38 highway corridor. The area to the northwest of Churchill offers an opportunity to create a new garden village well linked to existing settlements and supported by improved transport infrastructure to mitigate impact upon the transport network. This provides an opportunity to take traffic away from existing routes/villages. Green space would surround the garden village, some remaining in existing agricultural use and also providing opportunity for leisure and recreation, ecological mitigation and enhancement, heritage and archaeological safeguarding, and environmental mitigation.

3.0 Land uses, capacity, availability & viability

3.1 Mix of uses

At this stage would be expected to include residential, employment (mixed B Class, and non-B Class), retail, leisure, recreation, education and open space. Local Centre likely to contain mix of uses with location and scale to be confirmed through local planning process. Areas for surface water storage are also envisaged but these could be provided off/near-site, and should be designed to maximise wildlife value.

3.2 Employment (type/ha)

Employment provision and location to be addressed through the local planning process. Assumptions and suggestions provided here are initial scenarios for testing. North Somerset Council are currently preparing an Employment Land Review that will inform employment planning at the SDLs through the local plan.

This area is on the main A38 corridor with good links to Bristol Airport. Improvements to the transport network in this area may provide opportunities for employment development, including business opportunities associated with the airport. Potential to explore employment land opportunities close to the existing mushroom farm at Stock Lane to create a consolidated business park.

Potential for mixed B class employment well connected to new strategic transport routes. Initial scenarios to test are for around 7.4ha of B Class land that could translate to around 40800sqm.

3.3 Housing typology / density

Low Density Garden Village. Average net residential densities of around 30 to 40dph reflecting rural character of area and potential need for lower density development. A range of densities is recommended to create variety and character within the new settlement to respond to context, and to secure higher densities around centres of activity and public transport nodes.

3.4 Capacity

About 2,800 units.

3.5 Availability

Multiple landownerships present.

Additional land is likely to be required to deliver transport mitigations and other offsite infrastructure.

3.6 Viability

Viability likely to be dependent upon alternative sources of funding. See viability evidence for further information.

4.0 Concept Diagram

See Appendix 1 – Concept Diagram

The Concept Diagrams provide the broad location or area of search for growth in each SDL denoted by the diagonal hatching. The extent of this covers the **gross development area** within which the range of land uses and features necessary to support the new development could potentially be provided, including residential, employment, education, retail, leisure, community uses, green infrastructure, and water storage as required. Development areas to be refined through more detailed work through the local planning process.

5.0 Draft policy expectations for location

5.1 Vision

- Development of a new garden village to the north west of Churchill supported by new transport infrastructure.
- Form of development should respect the settlement character of the area and the rural characteristics present. In particular opportunities to safeguard the separate identity of Langford and Churchill should be explored alongside opportunities to create effective transport linkages between areas of settlement.
- Environmental enhancement and functioning of existing settlements once transport improvements are in place.

5.2 Housing capacity and other land uses

- About 2,800 units of a range of types and sizes including affordable provision.
- New employment development shall be investigated and masterplanned into the development. Opportunities to link to the new transport infrastructure should be explored and the scope to support airport related businesses.
- Mixed use local centre to be provided, to be accessible to surrounding residential neighbourhoods and well connected to main highway network and public transport routes.
- Community uses, to be identified and integrated through masterplanning.
- Three primary schools of 2.4ha each to include early year's provision. Located to be accessible to surrounding neighbourhoods to maximise walking to school opportunities along safe and attractive routes.
- A secondary school is required for this and the Banwell SDL with location to be defined through more detailed masterplanning and consideration of educational requirements across North Somerset.
- Land to be identified to accommodate strategic transport mitigations and other infrastructure including both on-site, near-site and off-site requirements.
- Primary health care facility.

5.3 Transport

- The development will contribute to a strategic transport package including a new distributor route connecting to the A38, and connection and improvement to the A368/A38 junction. This is a package of transport works with an early phase identified as the Banwell Bypass. Additional improvements to existing network also required.
- This is a summary headline of the key transport requirements, is not definitive
 of the required transport mitigations and further detailed work will be
 progressed on transport matters. See Joint Transport Study and background
 papers for further detail.

5.4 Green infrastructure

• The principle of multi-functional and interconnected green infrastructure should be pursued to offer multiple benefits including to wildlife and biodiversity, recreation, and flood attenuation and to include requirements for delivery, future maintenance and management.

- The approach to green infrastructure should seek to support the rural character for example by creating 'soft' edges to the development blending well into the surrounding countryside. This is likely to be important in protecting the setting of the AONB.
- Windmill Hill forms a key feature of landscape, heritage and ecological value that should form a focal point within the network of green infrastructure and safeguard the setting of the historic village of Churchill. Churchill Green also considered to have a key role within the green network and is considered to form an important part of the setting to the church.
- Identification of specific uses on green spaces surrounding new settlement particularly between existing settlements including potential for strategic gaps.
- Additional strategic green infrastructure to avoid significant impacts to Natura 2000 sites

5.5 Infrastructure requirements

- Suitable drainage infrastructure including to reduce rate of run-off, and provision for long-term storage, and with benefits to water quality.
 Opportunities to enhance biodiversity should be explored.
- Ecological mitigation including features designed to safeguard habitats and species, retention of key habitats and replacement where necessary.
- Sustainable energy infrastructure including opportunities for heat networks explored early in order that any enabling measures can be secured to enable an efficient and effective delivery. The form and layout of development, and the distribution of land uses is likely to be a key issue in designing the infrastructure. Management of the infrastructure going forward should also be considered.
- Potential requirements for utilities upgrades.

5.6 Energy

• Opportunities to secure a zero carbon new settlement will be explored including incorporating a range of sustainable measures, including potential district heating, renewables, energy generation, passivhaus standard homes, homeworking measures and electric car charging facilities etc.

6.0 Barriers to delivery - critical interventions

Key identified risks to suitability, availability and achievabilityThe critical risks are:

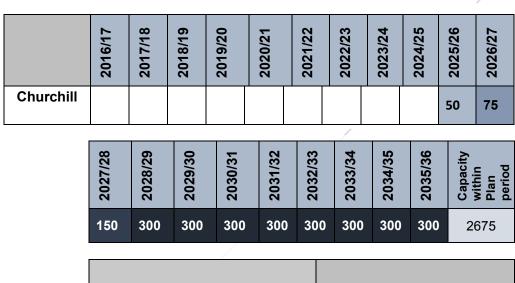
- Un-coordinated piecemeal development that fails to secure in a coordinated way, the necessary provision and improvement of services, facilities and infrastructure.
- Delivery of strategic transportation improvements delivered at a suitable time
 to facilitate development within the JSP plan period. Early prioritisation /
 delivery required to enable development to be delivered. Land assembly for
 highway outside of the SDL will be critical to enabling development.
- Drainage constraints.
- Ecological/ biodiversity impacts.
- Impact on the AONB.

- 6.2 Key actions needed to reduce risks (e.g. investment in new infrastructure, dealing with fragmented land ownership, environmental improvement, or a need to review development plan policy)
 - Collaborative approach between public and private partners to achieve planning policy framework through local plan process, subsequent masterplanning and development management processes to secure consensus on phasing of infrastructure and approach to delivery.
 - Clear understanding of transport requirements, options, and costs supported by funding strategy and means of delivery. Consensus achieved with development partners on schemes required and means of delivery. Pursue opportunities for funding bids where available.
 - Consider utilising New Towns legislation to deliver development effectively with required infrastructure. Review of developer contributions and wider funding strategy as part of selection of appropriate development delivery model.
 - Ongoing dialogue between flooding agencies. Further investigations are required to understand the existing drainage conditions of the area, the additional impacts of development including volumes of run-off, and the potential options for mitigation if required.
 - It is expected that ecological issues can be addressed through masterplanning and the integration of suitable features/safeguarding on or off site. Further engagement with Natural England required to scope additional evidence required. Ecological issues to be addressed on a strategic basis across SDL.
 - Further consideration of landscape strategy including in consultation with the Mendip Hills AONB unit.

7.0 Indicative trajectory

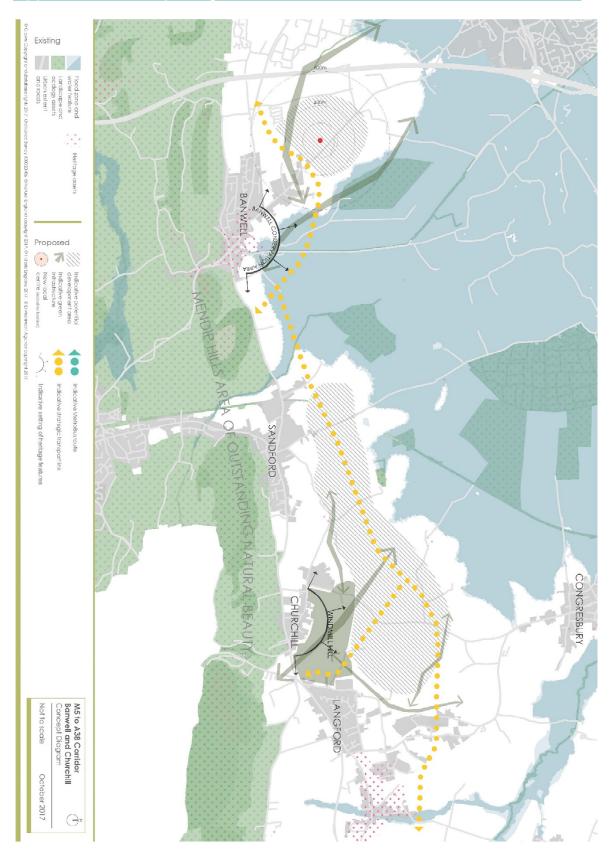
7.1 Assumed lead in time of 9 years, to allow for strategic transportation measures to be funded and programmed, preparatory stages e.g. site acquisition, and setting in place of the Development Plan. Indicative build-out rate of 50-300 dpa. Estimated annual average rate of 243 dwellings.

Critical dependencies include: provision of strategic transport mitigations; funding measures identified and in place during lead-in phase; provision of suitable ecological/environmental mitigation; and land assembly including for enabling infrastructure; legal/delivery structures in place.



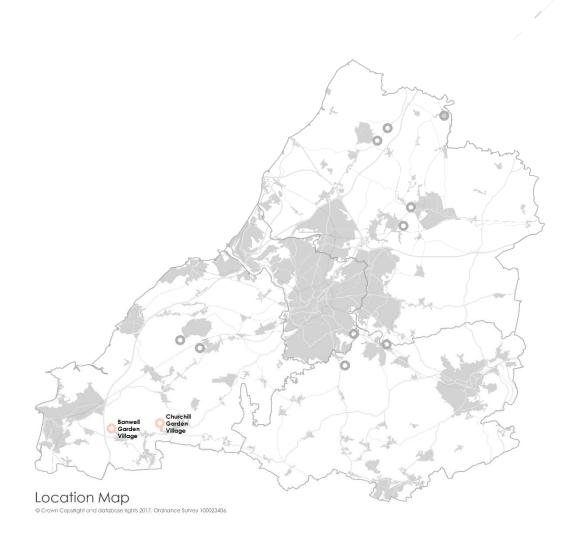
Post 2036	Total Capacity
125	2800

Appendix 1 -Concept Diagram



Strategic Development Location – M5 to A38 Corridor - Banwell North Somerset

Date of Issue: October 2017











1.0 Location characteristics

1.1 Site Location

Land northwest of Banwell.

1.2 Size

Approx. 106 ha gross, 54ha net residential area.

1.3 Relevant planning status and designations

- Mendip Hills Area of Outstanding Natural Beauty (AONB) to the south, wildlife site to the east, and heritage designations to the southeast. Areas of Priority Habitat are present to the east.
- Village has two Local Green Space designations, one at Riverside.
- The Banwell bypass route is a safeguarded scheme in the Sites and Policies Plan, Part 1: Development Management Policies.

1.4 Current land use

Predominantly agricultural.

2.0 Suitability (Constraints & Opportunities)

2.1 Strategic Opportunity

The JSP - Towards the Emerging Spatial Strategy consultation identified the M5 to A38 Corridor as accommodating up to a further 5,400 dwellings in the plan period to 2036. The background evidence (Assessment of Strategic Development Locations Beyond Settlement Boundaries) identified Banwell along this corridor as a location with strategic development potential to be explored further. Further work has identified potential for around 1,900 dwellings at Banwell that, alongside the potential at Churchill/Langford, has reduced the overall dwelling potential on the M5 to A38 Corridor to around 4,700 dwellings.

2.2 Site characteristics

The site is characterised by open, and gently undulating pasture land set against the backdrop of the lower slopes of the AONB. The character of the area to the south of Banwell is heavily influenced by the steep, often wooded slopes of the AONB.

To the east the area drops down to the Locking and Banwell moors landscape and gently rises to the north at Woolvers Hill. The M5 motorway is a dominant feature to the west of the area set in a cutting in parts. To the west of Stonebridge, a shallow valley runs towards the motorway. Wolvershill Road passes through the site linking Banwell back into WsM near J21 of the M5.

2.3 Physical & Environmental constraints

<u>Heritage:</u> area to the east of the village has a particularly rich heritage including a former Abbey, Scheduled Monument, Conservation Area and various listed buildings. The Concept Diagram illustrates an indicative setting to these features.

<u>Archaeology:</u> The area, particularly around Stonebridge and Wolvershill Road, is identified as having moderate to high archaeological value including nationally significant Roman archaeology. The area between Riverside and East Street has the potential for medieval archaeology, palaeochannels and waterlogged archaeology. It is therefore expected that there would be features of interest that may impact upon development potential.

<u>Landscape:</u> The development area sits on higher land and falls into the J2: River Yeo Rolling Valley Farmland Landscape Character Area of moderate character in good condition. Lower lying landscape to east – Locking and Banwell Moors should be avoided due to its flood risk status. It would be desirable to create distinct blocks of development that respect the existing character and form of existing settlements along the Mendip Hills edge rather than expanses of linear development.

Mendip Hills AONB

Although the site is located outside of the AONB, the potential for adverse impact on it is present. The landscape strategy may be beneficial in helping to accommodate development with minimal impact on the AONB.

Ecology: The area is likely to be utilised by horseshoe bats for foraging and commuting particularly to the south of the village. The Banwell Ochre Caves are a key feature nearby and one of the component SAC sites¹. The inclusion of specific features within the new development including for example 'dark corridors'² should be considered as part of a wider ecological strategy including potential for replacement habitat and safeguarding and enhancement of key habitats.

Opportunity to provide a green corridor to the west of Stonebridge that links to the Grumblepill Rhyne corridor at Parklands Village (shown indicatively in the Concept Diagram). This feature would track a depression in the landscape potentially incorporating water management features.

Consideration will be given to the protection of nationally significant species and habitats, notably Section 41 habitats and species. Examples of Section 41 habitats include: species rich lowland meadows, wet woodlands, traditional orchards, and reed beds. Examples of Section 41 species that have suffered sharp declines in population and/or distribution, include the Common Toad, Hedgehog, House Sparrow, Brown Hare and Skylark, as well as many insect species. Wildlife corridors and features such as 'stepping stone habitats' and other natural features need to be incorporated into new development to safeguard key habitats identified within Section 41 of the NERC Act (2006).

<u>Flood risk:</u> The area of search for development is located in flood zone 1. Impacts on flood risk elsewhere need to be considered. Further work is therefore required to understand the flood risk issues associated with development and supporting infrastructure, to identify possible options to mitigate any impacts. These may include both site-specific measures e.g. sustainable drainage systems (taking into account infiltration constraints), and more strategic solutions to enable the local

¹ Special Areas of Conservation – Areas given special protection under the EU Habitats Directive which is transposed into UK law by the Habitats and Conservation of Species Regulations 2010.

² Dark corridors typically comprise linear green spaces including hedgerow and possibly water features and are designed to specific specifications to maintain a certain level of illuminance.

environment to more effectively manage and provide long-term storage of surface water.

<u>Other:</u> The Proposed Southern Strategic Support Main Pipeline (water) runs through the area on its eastern edge up to Riverside. This is currently being delivered (planning application ref: 16/P/1095/F2). This coupled with other constraints on this part of the site make this a particularly sensitive area.

2.4 Existing development schemes

To the east of the village is a proposed housing allocation, east of Wolvershill Road for 44 dwellings (outline approved subject to legal agreement).

2.5 Opportunity

Banwell is located just outside Weston-super-Mare (WsM) on the A371. This main route through the village is subject to significant congestion at peak times exacerbated by a pinch point on the network at West Street. Strategic development would be required to be supported (and would contribute to) new transport infrastructure including the Banwell Bypass. Potential is identified to create a new garden village to the northwest of Banwell.

3.0 Land uses, capacity, availability & viability

3.1 Mix of uses

At this stage the mix of uses is expected to include residential, employment (including distribution (B8)), small-scale retail, leisure and recreation, education and open space. Local Centre likely to contain mix of uses with location and scale to be confirmed through local planning process. Areas for surface water storage are also envisaged that could be required on, off and / or near site.

3.2 Employment (type/ha)

Employment provision and location to be addressed through the local planning process. Assumptions and suggestions provided here are initial scenarios for testing. North Somerset Council are currently preparing an Employment Land Review that will inform employment planning at the SDLs through the local plan.

The area is located close to Weston-super-Mare and the Junction 21 Enterprise Area where there is a significant scale of employment development planned. The role this SDL may play needs to be addressed further in this context.

Potential for distribution type businesses well connected to the M5 and the new Banwell Bypass. Initial scenario to test for around 5ha of B Class land that could translate to around 15,000sqm.

3.3 Housing typology / density

Low to medium density Garden Village. Average net residential densities of around 30 to 40dph. A range of densities are recommended to create variety and character within the new settlement and to respond appropriately to context and environmental constraints.

3.4 Capacity

About 1,900 units.

3.5 Availability

Multiple landownerships present, although majority of land in area of search under control of single developer.

Various other sites submitted in area totalling around 37.1 ha.

Additional land required to deliver transport interventions and other infrastructure necessary to support development.

3.6 Viability

Viability likely to be dependent upon alternative sources of funding. See viability evidence for further information.

4.0 Concept Diagram

See Appendix 1 –Concept Diagram

The Concept Diagrams provide the broad location or area of search for growth in each SDL denoted by the diagonal hatching. The extent of this covers the **gross** development area within which the range of land uses and features necessary to support the new development could potentially be provided, including residential, employment, education, retail, leisure, community uses, green infrastructure, and water storage as required. Development areas to be refined through more detailed work through the local planning process.

5.0 Draft policy expectations for location

5.1 Vision

- To create a new garden village supported by the phased delivery of transport infrastructure.
- The form of development should seek to respect the character and separate identity of Banwell and respond sensitively to the semi-rural context.
- Development form to avoid linear expanses of development. Blocks of development sitting within landscape to be explored further through masterplanning.
- Improved connectivity between WSM, the airport and Bristol.

5.2 Housing capacity and other land uses

- About 1,900 units of a range of types and sizes including affordable provision.
- New employment development shall be investigated and masterplanned into the development. Opportunities to link to new transport infrastructure should be explored and the scope to support distribution type businesses.
- Community uses, to be identified and integrated through masterplanning.
- Two primary schools, one of 2.4ha and the other of 3.4ha for future expansion, both including early years provision. Located to be accessible to

- surrounding neighbourhoods to maximise walking to school opportunities along safe and attractive routes.
- A secondary school is required for this and the Churchill SDL with location to be defined through more detailed masterplanning, and consideration of education requirements across North Somerset.
- Land to be identified to accommodate strategic transport mitigations and other infrastructure including both on-site, near-site and off-site requirements.
- Primary care health facility.
- Mixed use local centre to be provided, to be accessible to surrounding residential neighbourhoods and well connected to main highway network and public transport routes.

5.3 Transport

- The development will contribute to strategic transport including a new link between the M5 and the A38 comprising a package of schemes. To include a new motorway junction (J21a), the Banwell Bypass, and an onward connection to the A38, east of Langford. Additional improvements required to local network.
- This is a summary headline of the key transport requirements, is not definitive
 of the required transport mitigations and further detailed work will be
 progressed on transport matters. See Joint Transport Study and background
 papers for further detail.

5.4 Green Infrastructure

- The principle of multi-functional and interconnected green infrastructure should be pursued to offer multiple benefits including to wildlife and biodiversity, recreation, and flood attenuation and to include requirements for delivery, future maintenance and management.
- Investigation of an area of open space between Banwell and the proposed bypass linking through to open countryside to the east.
- The approach to green infrastructure should seek to support the rural character of the area for example by creating 'soft' edges to the development, blending well into the surrounding countryside. Green infrastructure is also likely to be important in protecting the setting of heritage features, and the setting of the AONB.
- A green corridor linking Stonebridge to the Grumblepill Rhyne at Parklands Village should be investigated including its use for bat foraging and commuting and surface water management. This could form a further phase of the dark corridor already established at Parklands Village.
- Additional strategic green infrastructure to avoid significant impacts to Natura 2000 sites.

5.5 Infrastructure requirements

- Ecological mitigation including features designed to safeguard habitats and species, retention of key habitats and replacement where necessary.
- Suitable drainage infrastructure including to reduce rate of run-off, and provision for long-term storage, and with benefits to water quality.
 Opportunities to enhance biodiversity should be explored. Selected strategy to take into account constraints on infiltration drainage.

- Sustainable energy infrastructure including opportunities for heat networks explored early in order that any enabling measures can be secured to enable an efficient and effective delivery. The form and layout of development, and the distribution of land uses is likely to be a key issue in designing the infrastructure. Management of the infrastructure going forward should also be considered.
- Potential requirements for utilities upgrades.

5.6 Energy

 Opportunities to secure a zero carbon new settlement will be explored including incorporating a range of sustainable measures, including potential district heating, renewables, energy generation, passivhaus standard homes, homeworking measures and electric car charging facilities etc.

6.0 Barriers to delivery - critical interventions

Key identified risks to suitability, availability and achievabilityThe critical risks are:

- Un-coordinated piecemeal development that fails to secure necessary improvements to the range of services, facilities and infrastructure requirements. Pressure to bring forward sites earlier than planned has the potential to lead to ineffective development and could undermine a joined-up, masterplan-led approach to development. This could lead to land uses being poorly arranged.
- Delivery of strategic transportation improvements delivered at a suitable time to facilitate development within the JSP plan period. Early prioritisation / delivery required, particularly for the Banwell Bypass section.
- Drainage constraints.
- Ecological/ biodiversity impacts.
- Heritage issues are significant to the east of the village and should be carefully addressed.
- Impact on the AONB.
- Land assembly ensuring sufficient land is assembled to support development and deliver enabling infrastructure.

6.2 Key actions needed to reduce risks (e.g. investment in new infrastructure, dealing with fragmented land ownership, environmental improvement, or a need to review development plan policy)

- Collaborative approach between public and private partners to achieve planning policy framework through local plan process, masterplanning and development management processes to secure consensus on phasing of infrastructure and approach to delivery.
- Clear understanding of transport requirements, options, and costs supported by funding strategy and means of delivery. Consensus achieved with development partners on schemes required and means of delivery including land assembly, particularly for Banwell Bypass. Pursue opportunities for funding.
- Review of developer contributions and wider funding strategy as part of selection of appropriate development delivery model. Some form of equalisation agreement is likely to be required to support an equitable return for land forming part of the overall development.

- Ongoing dialogue between flooding agencies. Further investigations are required to understand the existing drainage conditions of the area, the additional impacts of development including volumes of run-off, and the potential options for mitigation if required.
- It is expected that ecological issues can be addressed through masterplanning and the integration of suitable features/safeguarding on or off site. Further engagement with Natural England required to scope additional evidence required. Ecological issues to be addressed on a strategic basis across SDL.
- Further consideration of landscape strategy including in consultation with the Mendip Hills AONB unit.
- Further dialogue with Heritage England to ensure proposals provide adequate safeguarding of heritage assets. Requirement for heritage report where SDL relates to heritage assets.

7.0 Indicative trajectory

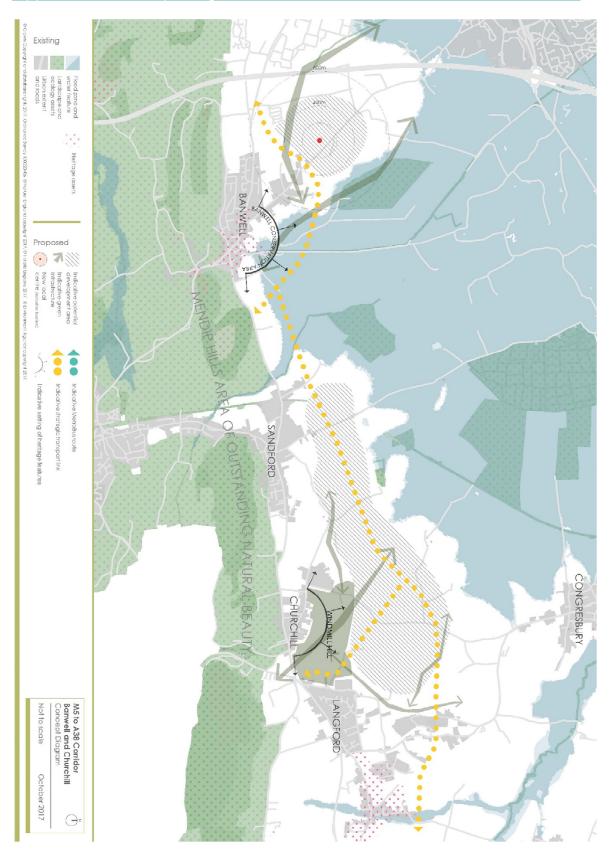
7.1 Indicative lead-in time to initial completions assumed 8 years to allow for strategic transportation measures to be funded and programmed. Lead-in largely dictated by transport matters including requirements for further technical work and land acquisition. Indicative build-out rate dependant on number of development partners- assuming 50 per sales outlet per annum. Estimated annual average rate of 158 dwellings with peak years delivering 200 per year.

Critical dependencies include provision of suitable ecological/environmental mitigation; delivery of transport/ other infrastructure; and legal/delivery structures in place. May require alternative models of delivery to expedite delivery of transport infrastructure to facilitate residential development.

			/										
	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	00/000	2022/23	2023/24	-0,7 000	2024/25	2025/26	2026/27
Banwell										5	0	75	150
// // /													
	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33		2033/34	2034/35		2035/36	Vanacity	within Plan period
	200	200	200	200	20	00	200	150)	75		1900	
	Post 2036								Tota	ı C	apa	city	

1900

Appendix 1 -Concept Diagram



Strategic Development Location – Buckover Garden Village. South Gloucestershire

Date of Issue: October 2017











1.0 Location characteristics

1.1 Site Location (address)

Land east and west of A38 at Buckover, near Thornbury

1.2 **Size**

Approx. 160-170ha.

1.3 Relevant planning status and designations

None. Some small SSSI, SNCI and Listed Buildings.

1.4 Current land use

Agricultural

2.0 Suitability (Constraints & Opportunities)

2.1 Strategic Opportunity

The JSP Emerging Spatial Strategy (Nov 2016) identified Buckover as accommodating 2,200 dwellings in the plan period (to 2036) and up to 3,000 dwellings in total.

Opportunity: Buckover provides opportunity to deliver a new 21st Century Garden Village in the West of England. It broadens the housing supply model via a single ownership with a genuinely visionary approach to placemaking and land value capture. It could assist the case for a step change in public transport provision in the locality including Metrobus Extension to Thornbury, motorway junction improvements and reopening of Charfield rail station. It would also provide a key part of long-term solution to housing pressure in the north of the district and potential growth point for the Oldbury New Nuclear Build.

2.2 Site characteristics.

The site predominantly comprises agricultural fields and sits in a 'bowl' rising up to woodland at the south of the potential development area.

2.3 Physical & Environmental constraints.

<u>Access:</u> From the A38. Local routes and connections back into Thornbury require investigation. M5 J14 is at capacity. The A38, which is a strategic alternative to the M5, bisects the potential development area in two.

<u>Landscape & Heritage</u>: Wooded ridgeline (inc. SNCI) and archaeological interest along southern boundary. Two Listed Buildings in centre of the site.

Pylons: run east-west across the site.

<u>Ecology</u>: Two SSSIs present; the A38 verge and small historic quarry in northeast corner.

2.4 Existing development schemes.

No existing development schemes.

2.5 Opportunities

Relatively unconstrained land and single ownership with a long-term interest, provides opportunity to develop new exemplar settlement unencumbered by existing development in accordance with Garden Village principles, with full range of new services, facilities and employment opportunities, including heat network and community renewable energy.

3.0 Landuses, capacity, availability & viability

3.1 Mix of uses – housing, education, employment, retail/centres, and open space. New settlement, including primary school and 3-16 All-through school, local shops, services and POS.

3.2 Employment (type/ha)

Range of opportunities including office, SME workspaces, logistics, retail & leisure, care home, health & educational facilities, and hotel (11ha in total). Detailed employment provision to be addressed through the local planning process.

3.3 Housing typology / density.

Garden Village. Broad range of housing types from 1-3 storey to create variety and character within the new settlement and offer to all sections of the community. Average net densities of 30-50dph.

3.4 Capacity

Approximately 3,000 dwellings and 11ha of employment land (all employment uses).

3.5 Availability

Single landowner. No known restrictions. Some tenancies.

3.6 Viability

Considered good, but dependent upon innovative approach to land value and land value capture, i.e. opportunity to explore new model based on long-term return on investment and community governance. See viability evidence for further information.

4.0 Concept Diagram

See Appendix 1 - Concept Diagram

5.0 Draft policy expectations for location

5.1 Vision

An exemplar garden village that will be developed along Community Land Trust principles that recycles the uplift in land value into infrastructure, services and facilities and is managed in the long-term interest of the new community.

Housing capacity (types, typology & affordable housing) and other landuses. It will provide around 3,000 dwellings, comprised 35% AH, a full range of types, sizes, new properties for rent, for elderly persons including extra-care facility, custom & self-build and opportunities for SME builders. It will also include a range of employment uses, including 'anchor' business, space for new start-ups, SMEs and live-work community hub, as well as employment to support a new full range of retail and community facilities. Facilities to complement such services available in Thornbury.

5.3 Appearance

Beautifully and imaginatively designed homes with gardens, of a range of traditional and contemporary styles and character areas that respond to South Gloucestershire's built heritage and local natural environment.

5.4 Access

Contribution to strategic transport package including: Metrobus Extension to Thornbury (& Buckover), M5 J14 improvements, Charfield Station re-opening, A38(N) Park & Ride,

local bus service improvements and strategic cycle and pedestrian routes. The A38 also acts as important relief road to the M5. Consideration is therefore also required to ensure it can continue to act as an effective relief road without detriment to the new residents. Developer investment required in local highway, foot and cycle connections to Thornbury, including local shuttlebus provision.

5.5 Green Infrastructure (flood risk/mitigation, ecology, heritage, POS)

A high quality network of strategic planting and open space to reinforce Ridgewood, respect the setting of local heritage and ecology assets, provide for a Sustainable Urban Drainage system and full range of open space including sports pitches, play areas, communal gardens, orchards and allotments. A strategic (open space) gap and or Green Belt between Buckover & Thornbury will be maintained. Its designation and purpose to be confirmed through the SG new Local Plan process.

5.6 Infrastructure requirements (health, education, utilities) etc

The new settlement will provide a primary school and 3-16 All-through school, nursery, health facility, community hub building, range of employment and office spaces for SMEs and larger businesses, local retail units and hotel. Measures to establish the new community, including BGV residents group and management board, community fund and development worker. Reinforcement of the High Voltage electricity network is likely to be required.

5.7 Energy/heat

The new settlement will embed zero-carbon and energy positive solutions throught the planning, design and delivery process across the whole settlement. Incorporating a range of energy conservation and generation measures, including potential district heat network, renewables, passivhaus standard homes, homeworking measures and electric car charging facilities etc.

6.0 Barriers to delivery / critical interventions (Achievability Risks)

6.1 Identified risks to suitability, availability and achievability.

The critical risks are:

- Delivery of strategic transportation improvements, including M5 J14 and Metrobus A38 extension, Charfield rail station, and need to maintain strategic capacity on A38.
- Failure to embed Garden Village landownership / land value capture delivery model required to maximise infrastructure provision and community facilities etc early in delivery process.
- Drainage & Utility strategy / costs required, including consideration of risk that pylons pose to capacity and viability.
- Eventual coalescence with Thornbury.

6.2 Actions needed to reduce risks (e.g. investment in new infrastructure, dealing with fragmented land ownership, environmental improvement, or a need to review development plan policy)

- Early prioritisation of transportation infrastructure.
- Early engagement around viability modelling and land value capture principles.
- Early embedding of long-term community stewardship principles.
- Early consideration of utility strategy.
- Anchor employment strategy to ensure sustainability of new Garden Village.
- Early consideration and bringing forward of a 'strategic gap' policy, including potential greenbelt extension up the eastern edge of Thornbury.

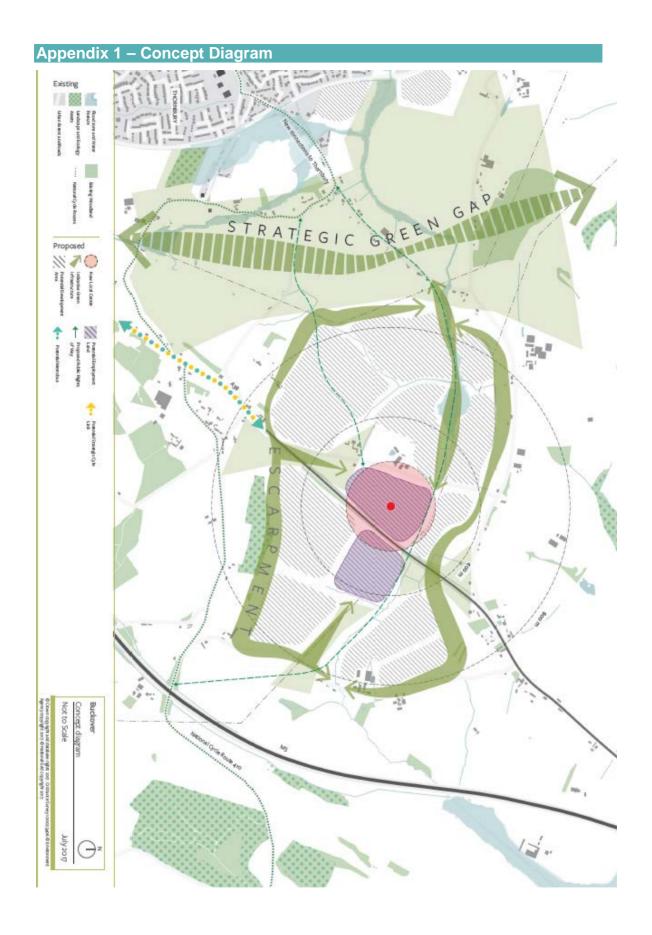
7.0 Indicative trajectory

Assumed lead in time of 10 yrs (from 2017), to allow for strategic transportation measures to be funded and programmed. Indicative build out rates: 50-250pa. Relatively slow build out to allow new community to form. Number of developers (outlets): 1-3. School & community facility triggers tbc. Early local bus / shuttlebus improvements & provisions.

	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27
Buckover											

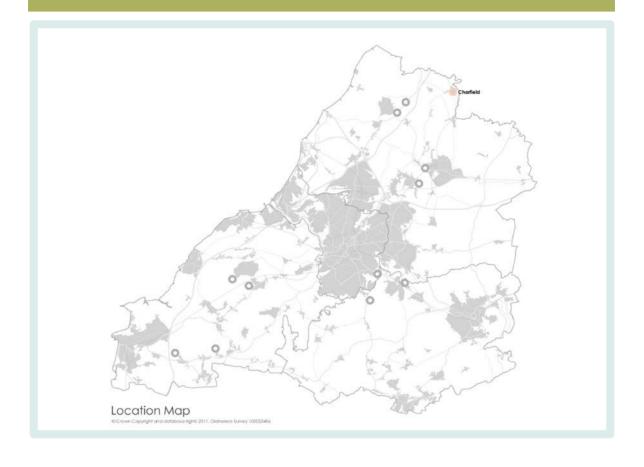
2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	2035/36	Capacity within Plan period
50	100	150	150	200	200	200	200	250	1,500

Post 2036	Total Capacity
1,500	3,000



Strategic Development Location – Charfield South Gloucestershire

Date of Issue: October 2017











1.0 Location characteristics

1.1 Site Location (address)

Charfield – comprising a number of major interdependent development areas around the village.

1.2 **Size**

Approximately 60-70ha (gross).

1.3 Relevant planning status and designations

Land north of Wotton Road west of the rail line is subject to a current planning application for 121 dwellings and a retail outlet (PT16/6924/O). Refused in July 17. Appeal date TBC.

1.4 Current land use

Agricultural

2.0 Suitability (Constraints & Opportunities)

2.1 Strategic Opportunity

The JSP Emerging Spatial Strategy (Nov. 2016) identified Charfield as accommodating up to a further 1,000 dwellings in the plan period (to 2036). Charfield is located outside the Green Belt, has land reserved for the re-opening of a rail station and benefits from a number of local services and facilities. New housing could strengthen the case for reopening of the station, additional bus services and new services and facilities. The future role and function of existing retail and community assets and remaining greenfield land parcels within the centre of the village adjoining the Wotton Road should be reviewed to ensure future needs are assessed, so that new and existing facilities make the most efficient use of land and they maximise the sustainability of the expanded village.

Development at Charfield would also provide a key part of long-term solution to housing pressure in the north of the district alongside new housing at Thornbury, Buckover Garden Village.

2.2 Site characteristics.

The sites predominantly comprise gently sloping agricultural fields.

2.3 Physical & Environmental constraints.

Access: M5 J14 capacity presents significant risk. All the sites are considered accessible, although all require further assessment to establish capacity and mitigation works required. The Wotton Road is busy and is the main road from Wotton-under-Edge to the M5 motorway and therefore requires a comprehensive scheme of improvements and traffic calming.

<u>Listed Buildings & landscape:</u> Land to the west is constrained a steep escarpment and Grade I listed church at Churchend. Land to the east is constrained by flood zone and the Stroud district boundary. Land to the north is of ecological, landscape and heritage interest. Land to the south is of ecological and landscape value. All sites are potentially visible from the Cotswold AoNB.

2.4 Existing development schemes.

Charfield currently has planning permission for circa 170 dwellings in addition to recent site completions for 20-30 dwellings. Land north of Wotton Road west of the rail line is

subject to a planning application for 121 dwellings and a retail outlet (PT16/6924/O), which was refused in July 17. Appeal date TBC.

2.5 Opportunities

Listed Buildings, the escarpment, Elbury Hill and the river flood zone provide the basis of a permanent and varied green infrastructure and public open space strategy. Substantive, planned development provides opportunity to bring forward additional facilities and comprehensive improvement scheme to the Wotton Road and new and improved foot & cycle connections throughout and around the village.

3.0 Landuses, capacity, availability & viability

3.1 Mix of uses – housing, education, employment, retail/centres, and open space. Predominantly residential, with a 1.5FE primary school or replacement of existing school with new 3FE school, new convenience store, improved community facility and new & improved POS.

3.2 Employment (type/ha)

Compared to other areas of the West of England, availability of employment land in the Charfield area is limited. Allocations for new residential development should therefore be accompanied by a substantial amount of new employment land.

Detailed employment provision and location to be addressed through the local planning process. Initial scenario to test is for approx. 5ha of employment land to be distributed at appropriate locations within the new development area and at land northwest of Charfield along the B4509 (including the former Leyhill Prison visitors centre and at Elmtree Farm).

Non B Class employment should also be distributed at appropriate locations across the development.

3.3 Housing typology / density.

A broad range of housing types, predominantly 2 storey, including a significant proportion of smaller market dwellings (apartments and terraced) to supplement / expand the range, type and tenure of existing housing stock in the locality. Average net densities ranging between 30-50dph.

3.4 Capacity

Further technical work has indicated that around of 1,200 dwellings and approximately 5ha of new employment land can be accommodated.

3.5 Availability

All sites have been promoted by landowners/agents.

3.6 Viability

All sites have landowner / developer interest. Considered good. (See viability evidence for further information).

4.0 Concept Diagram

Refer to Appendix 1 – Concept Diagram

5.0 Draft policy expectations for location

5.1 Vision

Charfield will become a more sustainable settlement. New development will enhance the range of housing available, improve the safety and amenity of the Wotton Road, and provide new services and facilities, employment, public transport and walking & cycling opportunities.

5.2 Housing capacity (types, typology & affordable housing) and other landuses. Growth will provide around 1,200 new dwellings, comprised 35% AH, a full range of types, sizes, new accommodation for elderly persons and custom & self-build opportunities, plus new employment space, and improved community facilities.

5.3 Appearance

New dwellings will generally be traditional in appearance respecting Charfield's rural character, but with instances of high quality modern architecture that respond to health & wellbeing and sustainability objectives, to add variety and interest to the village.

5.4 Access

Provide or contribute to strategic transport packages including: M5 J14 improvements, Charfield Station re-opening, local bus services and a comprehensive Wotton Road environmental enhancement scheme. Developer investment required in foot and cycle connections through and around the village, including potential for a new Charfield circular public right of way route and enhanced route to the Renishaw site, KLB school and Wotton-under-Edge.

5.5 Green Infrastructure (flood risk/mitigation, ecology, heritage, POS)

A Green Infrastructure network will enhance and protect the Little Avon River and its flood zone, setting to Elbury Hill, St James' Church, local SSSI & SNCIs and Listed Buildings. New development will also provide Sustainable Urban Drainage systems and full range of new and or improved open space including sports pitches, play areas and allotments.

5.6 Infrastructure requirements (health, education, utilities) etc

The Council will work with landowners, developers and the local community to provide a new or enlarged primary school, new convenience store and improved community facilities, preferably within the centre of the village. Additional employment units will also be provided within the new development areas and along the B4509 adjacent the village settlement boundary. Reinforcement of the existing sewerage network and treatment works is likely to be required.

5.7 Energy/heat

New development will aim to be zero carbon by maximising the range of energy conservation and generation measures, e.g. including renewables, passivhaus standard homes, homeworking measures and electric car charging facilities etc.

6.0 Barriers to delivery / critical interventions (Achievability Risks)

6.1 Identified risks to suitability, availability and achievability.

The critical risks are:

- Un-coordinated piecemeal development that fails to secure necessary improvements to the range of services, facilities and accessibility improvements.
- Delivery of strategic transportation improvements, inc M5 J14 and station reopening,
- Congestion & safety along Wotton Road

- School capacity (will be full once existing permissions are built out)
- Possible reinforcement to existing sewerage network & treatment works.

6.2 Actions needed to reduce risks (e.g. investment in new infrastructure, dealing with fragmented land ownership, environmental improvement, or a need to review development plan policy)

- Early and thorough community and stakeholder engagement is required to assess land uses & facilities demand & options, particularly in light of the existing planning application and appeal for 120 dwellings on land in the centre of the village, which may be better utilised for other uses.
- Consideration / review of developer contributions strategy.
- Continued vigorous promotion of Charfield Station re-opening and early prioritisation / delivery required of M5 J14 improvements.
- Charfield wide access and movement strategy required, including early consideration of a holistic Wotton Road environmental improvement and traffic calming scheme.
- Early engagement with local school academy and the Parish Council / options assessment required.
- Landownership and legal check (see trajectory below).
- Early engagement with Wessex Water.

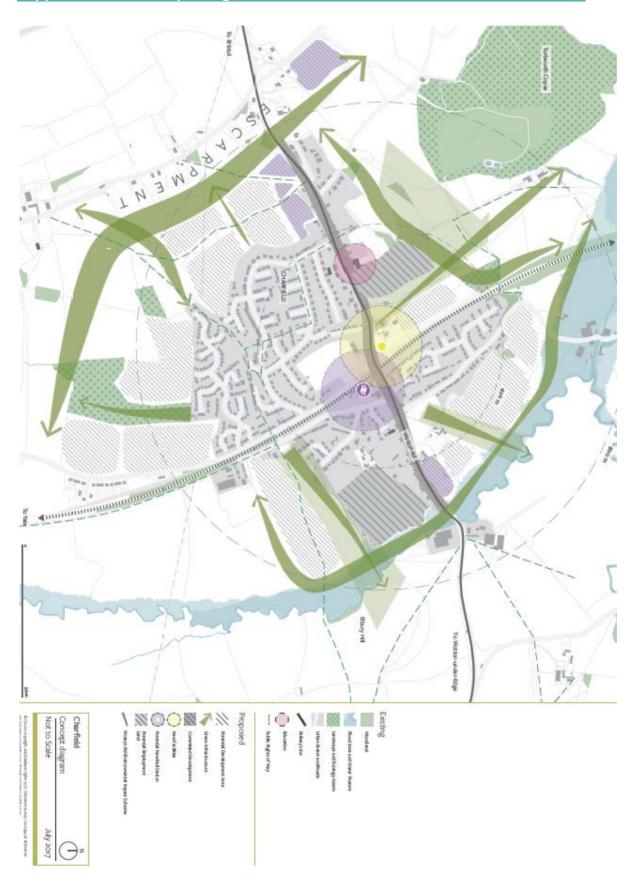
7.0 Indicative trajectory

- 7.1 Potential development areas comprise 4 major land holdings.
 - The major landholding (comprising 4 landowners) is controlled by Commercial Estates Group around the southwest of the village (circa 650-750 dwellings).
 - Bloor homes have made representations relating to land off the Wotton Road NE of the village centre (circa 250 dwellings).
 - Barratt currently have a planning application for 121 dwellings on land off the Wotton Road, adjacent the railway in the centre of the village. However, the Council is concerned that this does not represent best use of land, in this central location, ahead of community engagement relating to land-use and service requirements and has refused the application. Appeal date TBC. Use and capacity of this site is thus still tbc.
 - Land has also been promoted south of the Crest Nicholson scheme, through which access would be required. Capacity would be restricted by vehicular access requirements (circa 150 dwellings).

A thorough landownership and legal check is required to corroborate the stated positions.

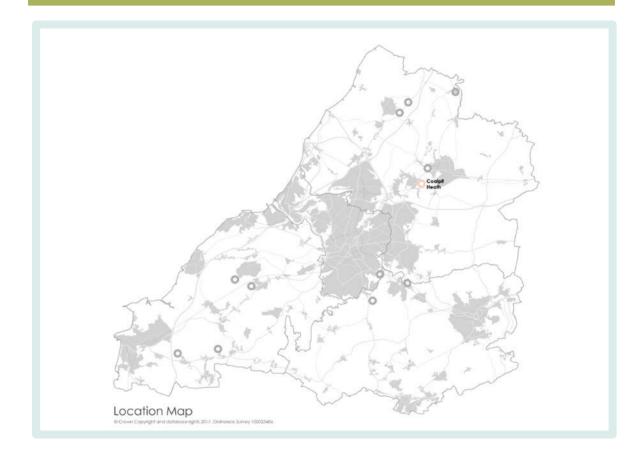
	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	20122122	2022123	2023/24	2024/25	2025/26	2026/27
Charfield							5	50	50	100	150	150
	2027/28	2028/29	2028/29 2029/30 2030/31		2031/32	2032/33		2033/34	2034/35		Constitution	Capacity within Plan period
	150	150	150	100	10	0 50)					
	Post 2036								Tota	Capa	city	
		0								1,200		

Appendix 1 – Concept Diagram



Strategic Development Location – Coalpit Heath South Gloucestershire

Date of Issue: October 2017











1.0 Location characteristics

1.1 Site Location (address)

Land east of Roundways to Frog Lane, Coalpit Heath.

1.2 **Size**

Approx. 75ha

1.3 Relevant planning status and designations

No previous planning history. Green Belt.

1.4 Current land use

Agricultural

2.0 Suitability (Constraints & Opportunities)

2.1 Strategic Opportunity

The JSP Emerging Spatial Strategy (Nov 2016) identified Coalpit Heath as accommodating a further 1,500 dwellings in the plan period (to 2036).

Coalpit Heath offers close proximity to the Science Park and EGE Enterprise Area, and Bristol North Fringe. Strategic development along the A432 Badminton Road, in combination with proposed growth at Yate would support investment in rail and metrobus extension to Yate. It would also support existing and provide new services and facilities and employment opportunities in the locality.

2.2 Site characteristics.

The site predominantly comprises agricultural fields and generally rises up to a north-south running ridge along the centre of the site and slopes down to Frog Lane. Some historic earthworks are evident in the fields nearest to Roundways. The historic Dramway runs east west across the southern part of the site.

2.3 Physical & Environmental constraints.

<u>Access:</u> From the Badminton Road/Frog Lane, Roundways and Woodside Road. Local junction improvements required.

<u>Landscape</u>: Ridgeline is highly visible from Yate and the BNF. Consideration required to master planning and architectural response to mitigate impact.

Historic mine workings: Site was bounded by Frog Lane colliery to north and Ram Hill colliery to the south. Extent and depth of mine workings to be determined. Preliminary investigations suggest that the western edge of the site is at risk from historical shallow coal mining and associated mine entries and to a lesser extent deeper underground workings. Some of the mine entries have been secured whilst some have not. Historic bell pits also appear to be present in the west of the westernmost fields. The mine workings also deepen to the east. Risk of subsidence is considered low. Further more detailed investigations are required, particularly across the western most fields, although remedial measures are considered capable of addressing the mine workings. Heritage: Historic Dramway across southern part of site and Listed Building settings to take account of through master planning.

2.4 Existing development schemes.

No existing development schemes.

2.5 **Opportunities**

The potential development area provides opportunity to provide a new residential / mixed-use neighbourhood in close proximity to a possible Metrobus extension route. Former mine workings could potentially provide water source for heat networks.

3.0 Landuses, capacity, availability & viability

3.1 **Mix of uses – housing, education, employment, retail/centres, and open space.**Predominantly residential, with 1 or 2 primary schools, new local centre retail to serve the development, community hub/facility, new POS & mining heritage interpretation facility.

3.2 Employment (type/ha)

Detailed employment provision and location to be addressed through the local planning process. Initial scenarios to test are for around 5ha of small scale (B-use class) employment units for SME's (e.g. offices, workshops and logistics). Non B-use Class employment (e.g. small scale retail) should also be distributed at appropriate locations across the development.

3.3 Housing typology / density / capacity.

A broad range of housing types from 2-4 storey, including a significant proportion of smaller house types (apartments and terraced dwellings) to supplement existing housing stock in the locality. Average net densities ranging between 30-70dph.

3.4 Capacity

Further testing / technical work has identified that around 1,800 dwellings and approximately 5ha of employment land can be delivered at this SDL.

3.5 Availability

Potential development area has 100% landowner / developer interest, approximately 50:50 Bloor & Edward Ware Homes.

3.6 Viability

Considered good, (subject to no significant anomalies identified as consequence of historic mine workings). Refer to viability evidence for further information.

4.0 Concept Diagram

Refer to Appendix 1 – Concept Diagram

5.0 Draft policy expectations for location

5.1 Vision

A comprehensive development scheme delivering a high quality new neighbourhood that responds positively to the localities rich mining heritage and visually prominent aspect.

Housing capacity (types, typology & affordable housing) and other landuses.

A new modern neighbourhood of around 1,800 new dwellings, comprised 35% AH, a full range of types, sizes, new accommodation for elderly persons and custom & self-build opportunities, plus new employment space, and new community facilities.

5.3 **Appearance**

Dwellings will generally be modern in appearance, responding to health, wellbeing and sustainability objectives, providing a fresh new style to the locality, but with instances of high quality traditional architecture that respond to the area's history and site characteristics to add interest and variety.

5.4 Access

The development will provide or contribute to a strategic transport package including: Metrobus extension along the Badminton Road to Yate / Chipping Sodbury, Winterbourne & Frampton Cotterell Bypass, A432 Park & Ride west of Yate, Yate Station enhancement, and strategic cycle route and local bus services. Developer investment will also be required in local highway improvements and the local network of foot and cycle connections. Vehicular access will be off the Badminton Road / Frog Lane, Roundways and Woodside Road.

5.5 Green Infrastructure (flood risk/mitigation, ecology, heritage, POS)

A Green Infrastructure network will reinforce the new Green Belt boundary along the rail cutting, provide attractive routes through the site to the nearby countryside (including along the historic Dramway), break up development impact along the ridgeline and protect the setting to Listed Buildings. New development will also provide Sustainable Urban Drainage systems and the full range of new open space including sports pitches, play areas and allotments. POS may need to be located on areas worst impacted by historic coal mining.

5.6 Infrastructure requirements (health, education, utilities) etc.

A new primary school, new convenience store/retail opportunity, small scale employment units for SMEs, (office space, workshops, logistics), care home and extracare facility will be provided. Reinforcement of the high voltage electricity network likely to be required. Diversion of or 'plan around' a strategic gas main.

5.7 Energy/heat

New development will aim to be zero carbon by maximising the range of energy conservation and generation measures, e.g. including renewables, passivhaus standard homes, homeworking measures and electric car charging facilities etc. A district heating network will also be investigated.

6.0 Barriers to delivery / critical interventions (Achievability Risks)

6.1 Identified risks to suitability, availability and achievability.

The critical risks are:

- Historic mineworkings. Impact on capacity, abnormal cost of filling, capping and additional foundations.
- Landowner / developer disagreement & over valuation of land.

6.2 Actions needed to reduce risks (e.g. investment in new infrastructure, dealing with fragmented land ownership, environmental improvement, or a need to review development plan policy)

- Independent engineering review of developer land (geophysics and Lidar) surveys.
- Landownership and legal check.
- Council pressure to require land equalisation agreement / comprehensive approach and realistic land valuation.

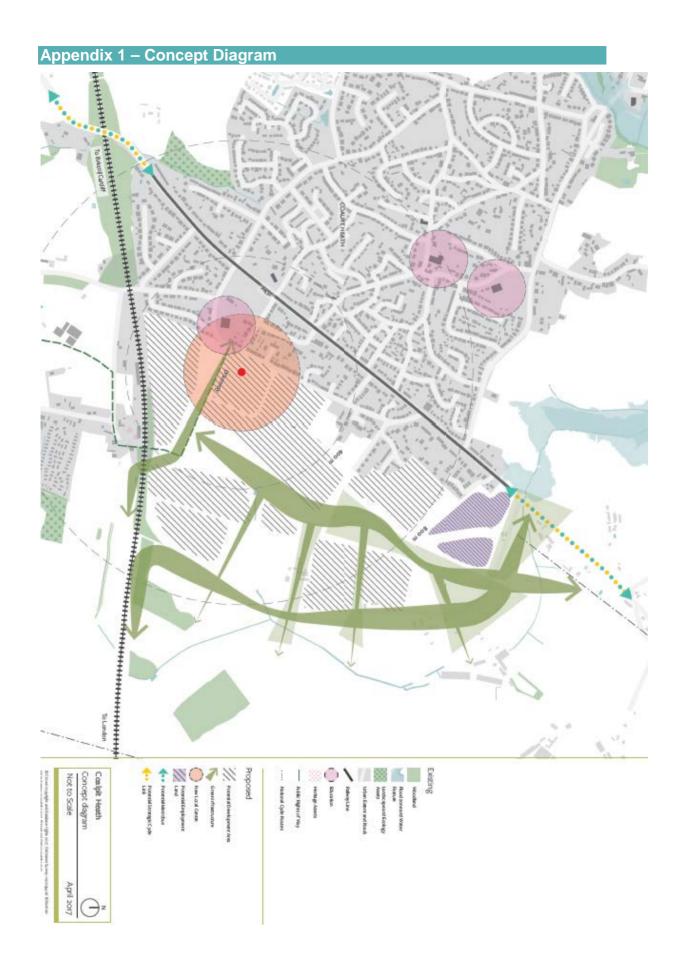
7.0 Indicative trajectory

7.1 Potential development areas comprise two major land holdings controlled by Bloors and Edward Ware Homes. 2-3 outlets. Start subject to certainty around programming of strategic transport package.

	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27
Coalpit Heath							50	100	100	150	150

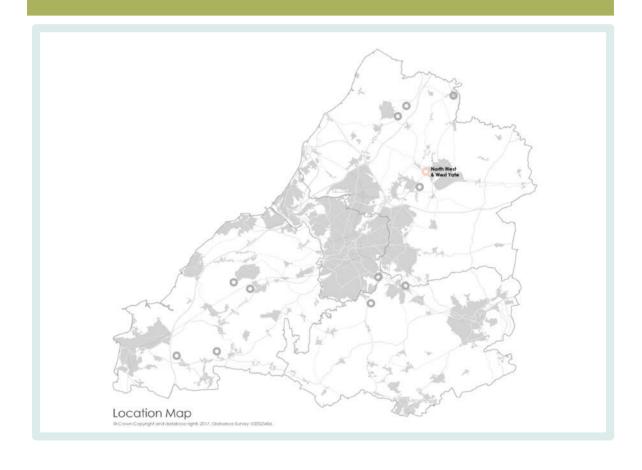
2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	2035/36	Capacity within Plan period
150	150	175	150	150	150	150	100	75	1,800

Post 2036	Total Capacity
0	1,800



Strategic Development Location – Northwest & West Yate South Gloucestershire

Date of Issue: October 2017











1.0 Location characteristics

1.1 Site Location (address)

Land comprising two broad locations to the northwest and west of Yate.

1.2 **Size**

Total area of approximately 160ha (gross).

1.3 Relevant planning status and designations

Green Belt (with exception of land at Engine Common).

1.4 Current land use

Predominantly agricultural & paddocks.

2.0 Suitability (Constraints & Opportunities)

2.1 Strategic Opportunity

The JSP Emerging Spatial Strategy (Nov 2016) identified the 'Yate Strategic Corridor' as accommodating a further 2,600 dwellings in the plan period (to 2036).

Yate & Chipping Sodbury is the 4th largest settlement in the West of England, with good links including rail to the Bristol Urban Area. Land to the west of Yate has close proximity to major employment areas and the rail station plus is closely related to the proposed Metrobus extension along the Badminton Road.

2.2 Site characteristics.

The potential development area is characterised by small historic parliamentary field enclosures at its eastern edge adjacent Engine Common, then predominantly comprises larger agricultural fields and paddocks around the northwestern part of Yate, is generally flat, before sloping down to the Frome south of Nibley Lane. Pylons cross land adjoining the Badminton Road. South of Badminton Road, the northern half of this western edge, is open agricultural fields that slope gently down westwards from the Nibley Lane to a drainage channel and pylon running north – south. The southern part is surrounded by rail lines predominantly on embankments. A pylon crosses from northwest to southeast. Land is mainly used as paddocks and has a neglected feel. Some is filled ground.

2.3 Physical & Environmental constraints.

2.4

Access: New highway access points will be required off the Badminton Road (across the Frome valley), Yate Road, Iron Acton Way and possibly Stover Road. A new crossing over the Yate-Thornbury rail track bed *may* be required. South of the Badminton Road new highway access points will be required off the Badminton Road from the north and possibly the industrial estate to the west across the Nibley Lane. A new rail crossing and widening of the Nibley Lane east of the rail line will also be required. Other: Flood plain and pylons run through the centre of the locality and across land off the Westerleigh Road in the south of the potential development area restricting developable area and residential potential.

2.5 Existing development schemes.

Site at Engine Common (PK12/1751/F) for 210 dwellings refused in 2013. A planning application (PK17/608/O) for up to 90 dwellings was also refused in July 2017.

2.6 Opportunities

Pool Farm and petrol station along the Yate Road could provide the basis of a new local centre to serve the north western development area. Alternatively, it may be more appropriate to locate a new local centre off Stover Road, closer to the rail station. The Frome Valley, rail line and fields to rear of properties along North Road, Engine Common provide the basis of a Green Infrastructure strategy, plus new substantive buffer planting to create a permanent and softened edge to Yate. South of the Badminton Road, development could provide an improved edge and employment development in close proximity to the Badminton Road (new Metrobus extension route and strategic cycle route) and the rail station. Nibley Lane could be downgraded to a green (foot / cycle route). The southern part of the area is compromised by rail lines, pylons and filled ground, hence is not considered suitable for residential use, but could provide new employment land (B2-B8), providing for new and businesses potentially decanted from possible regeneration of the Beeches Estate for higher value, more intensive employment and residential uses in close proximity to the rail station.

3.0 Landuses, capacity, availability & viability

3.1 Mix of uses – housing, education, employment, retail/centres, and open space.

Predominantly residential to northwest of Yate, with a primary school, new small scale retail / local centre, community hub/facility, new POS. West of Yate possible residential and or employment area.

3.2 Employment (type/ha)

Detailed employment provision and location to be addressed through the local planning process. Initial scenarios to test as follows:

- Northwest Yate: Some small-scale employment units for SMEs (e.g. offices, workshops) as part of a high density mixed-use new neighbourhood. Non B Class employment should also be distributed at appropriate locations across the development
- West Yate: Area west of the Badminton Road Trading Estate for 11ha of high quality (B1, B2 uses) extension to the trading estate, remaining area within rail land to the southwest, 19ha B2, B8 use.

3.3 Housing typology / density.

<u>Northwest Yate:</u> A broad range of housing types from 2-4 storey, including a significant proportion of smaller house types (apartments and terraced dwellings) to supplement existing housing stock in the locality. Average net densities ranging between 30-70dph.

3.4 Capacity

Northwest Yate: The SDL comprises approx. 100-120ha of land which has capacity for a minimum of 2,000 dwellings and supporting facilities and POS.

3.5 Availability

Some developer / landowner interest at Engine Common and South of Badminton Road. Landowner interest subject to ongoing investigation on the remainder of the search area.

3.6 Viability

Considered satisfactory, subject to significant public sector involvement in land assembly and infrastructure delivery. (Refer to viability evidence for further information).

4.0 Concept Diagram

Refer to Appendix 1 – Concept Diagram

5.0 Draft policy expectations for location

5.1 Vision

Northwest Yate will provide a new high quality, high density, mixed-use residential neighbourhood that connects to a regenerated rail station and Beeches Industrial Estate. It will provide new school(s) and new centre off the Yate or Stover Road, improved connections to the station and green infrastructure throughout the locality. West Yate is favoured for a new strategic employment area (approx. 30ha), comprising high quality office opportunities off the Badminton Road and B2/B8 opportunities within the railway land.

5.2 Housing capacity (types, typology & affordable housing) and other landuses.

Northwest Yate has capacity for around 2,000 new dwellings, of which at least 1,000 will be delivered within plan period, comprising a broad range of housing types from 2-4 storey, including a significant proportion of smaller house types (apartments and terraced dwellings) to supplement existing housing stock in the locality and provide a new offer, complemented with high quality community space and public realm, 35% AH, a range of types, sizes, new accommodation for elderly persons and some custom & self-build opportunities, plus new small scale employment space, and new community facilities.

5.3 Appearance

Dwellings will generally be modern in appearance, responding to health, wellbeing and sustainability objectives, providing a fresh new style to the locality but with instances of high quality traditional architecture that respond to the area's history and site characteristics to add some interest and variety. The approach should contrast Yate's 'modern' distinctiveness to Chipping Sodbury's more historic character.

5.4 Access

The development will provide or contribute to a strategic transport package including: Metrobus extension along the Badminton Road to Yate / Chipping Sodbury, Winterbourne & Frampton Cotterell Bypass, A432 Park & Ride west of Yate, a strategic cycle route, Yate Station enhancement and local bus services. Developer investment will also be required in local highway improvements and the local network of foot and cycle connections. An on-site rail crossing, and a new rail bridge is also likely to be required across the Nibley Lane.

5.5 Green Infrastructure (flood risk/mitigation, ecology, heritage, POS)

Green Infrastructure network will reinforce the new Green Belt boundary, protect the river valley, linear settlement of Engine Common and Nibley Village, provide an attractive segregated route along the Frome Valley Walkway, and enhance North Road and Frome river corridor through the Beeches Estate. New development will also provide Sustainable Urban Drainage systems and the full range of new open space including sports pitches, play areas and allotments. The historic parliamentary enclosures, which comprise small to medium sized fields, reinforced by a strong mature hedgerow network and large number of trees, north of Mission Road and east and west of North Road will also need to be protected by a new landscape and or Green Belt designation.

5.6 Infrastructure requirements (health, education, utilities) etc

A new primary school and 3-16 all through school, new convenience store/retail opportunity, small scale employment units for SMEs, (workshops), care home and extra-care facility will need to be provided, plus new employment areas south of the Badminton Road.

5.7 Energy/heat

New development will aim to be zero carbon by maximising the range of energy conservation and generation measures, e.g. including renewables, passivhaus standard homes, homeworking measures and electric car charging facilities etc. A district heating network(s) will also be investigated.

6.0 Barriers to delivery / critical interventions (Achievability Risks)

6.1 Identified risks to suitability, availability and achievability.

The critical risks are:

Multiple landownerships & potential new rail crossing(s).

6.2 Actions needed to reduce risks (e.g. investment in new infrastructure, dealing with fragmented land ownership, environmental improvement, or a need to review development plan policy)

- Immediate landownership and legal check. Direct contact of landowners and engagement.
- Early consideration of the role and designation of a Mayoral Development
 Corporation to enhance the prospect of land assembly, infrastructure delivery
 and the regeneration of existing industrial areas to bring forward a coherent and
 well connected new residential development.
- Formulation of Project Plan, comprising:
- Detailed feasibility (capacity, access & movement, rail crossing) study
- Employment market assessment.
- Landownership / delivery model / infrastructure delivery options assessment, inc review of CPO & Devo powers and Council delivery aspirations.
- Council produced SPD & Outline Planning Application.
- CPO, infrastructure provision etc
- Early consideration of extent and purpose of new landscape and or Green Belt designation at Engine Common either side of North Road, north of Mission Road.

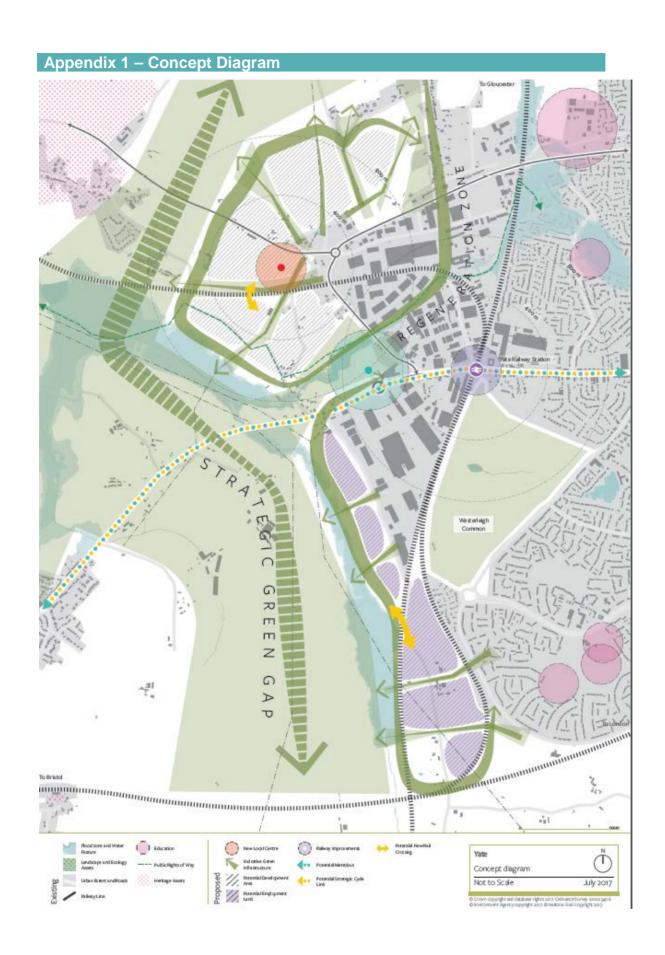
7.0 Indicative trajectory

7.1 Potential early releases at Engine Common and south of Badminton Road. Otherwise 10yr lead in re majority of residential development at Northwest Yate due to land assembly issues.

	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27
North West Yate							25	25	50	50	50

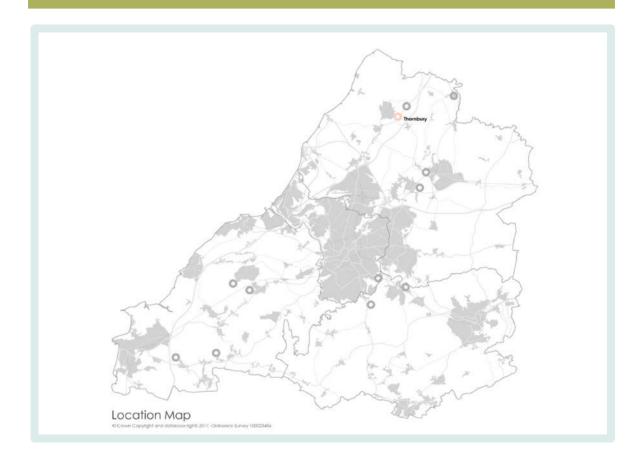
2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	2035/36	Capacity within Plan period
50	50	50	50	50	100	150	150	150	1,000

Post 2036	Total Capacity
1,000	2,000



Strategic Development Location – Thornbury South Gloucestershire

Date of Issue: October 2017











1.0 Location characteristics

1.1 Site Location (address)

Land at Thornbury around the town's northern and eastern edge off Butt Lane & Morton Way.

1.2 **Size**

Approx. 35ha (Gross).

1.3 Relevant planning status and designations

- Land west of Gloucester Road 130 dwellings (ref PT16/4774/O) approved Aug 17.
- Land at Cleve Park 350 dwellings (ref PT16/3565/O) refused in March 17 s78 Appeal pending.
- Land at NE Thornbury (south of Gloucester Road) is also subject to a planning application for some 370 dwellings (PT17/2006/O).

1.4 Current land use

Agricultural

2.0 Suitability (Constraints & Opportunities)

2.1 Strategic Opportunity

The JSP Emerging Spatial Strategy (Nov. 2016) identified Thornbury as accommodating up to a further 600 dwellings in the plan period (to 2036).

Opportunity: Development would serve to complete the eastern expansion of the town along Morton Way. Additional housing will assist to address demand in the north of the district and assist the case for Metrobus extension to Thornbury & Buckover GV. Potential to reinforce recreational access and green infrastructure objectives to the east of Thornbury in potential gap to Buckover Garden Village. Additional employment land could assist sustainability objectives.

2.2 Site characteristics

Predominantly comprising gently sloping agricultural fields.

2.3 Physical & Environmental constraints

<u>Access:</u> Highways England continue to consider mitigation required to increase capacity at M5 J14. <u>Listed Buildings & landscape</u>: Land at Crossways is subject to some flooding. Crossways and Cleve Wood are SNCIs.

2.4 Existing development schemes

Thornbury currently has planning permission for circa 625 dwellings at Park Farm & Post Farm. Land west of Gloucester Road has recently been approved for 130 dwellings. Land at Cleve Park was recently refused permission for up to 350 dwellings and a retail/community space and care home, as not in accordance with Core Strategy policy CS32 and the scale and massing of buildings not in keeping with the character of the local area.

2.5 Opportunities

Planned development provides opportunity to bring forward additional small scale retail and employment opportunities to serve the eastern side of the town and assists the case for the Metrobus extension and enhance green infrastructure in the locality.

3.0 Landuses, capacity, availability & viability

3.1 Mix of uses – housing, education, employment, retail/centres, and open space. Predominantly residential, with a new convenience store or community facility, care

home & improved POS.

3.2 Employment (type/ha)

Detailed employment provision and location to be addressed through the local planning process. Initial scenario to test is around 5ha of employment land for SMEs (workshops, logistics) at Crossways.

3.3 Housing typology / density.

Predominantly traditional design at net densities ranging between 30-50dph, including some self-build homes and accommodation for elderly persons.

3.4 Capacity

A maximum of 500 dwellings, plus 5ha of employment land at Crossways, from the SDL specified land parcels.

3.5 Availability

All sites have landowner / developer interest, although for residential development at Crossways.

3.6 Viability

Considered good. Refer to viability evidence for further information.

4.0 Concept Diagram

Refer to Appendix 1 - Concept Diagram

5.0 Draft policy expectations for location

5.1 Vision

Thornbury will provide further high quality housing which will contribute to sustaining the town centre and meet need in the north of the district alongside development at Buckover Garden Village and Charfield. Access to facilities, employment opportunities and open space and countryside will be improved along the Town's eastern edge.

5.2 Housing capacity (types, typology & affordable housing) and other landuses.

Growth will provide a maximum of 500 new dwellings (over and above existing permissions at Park Farm, Thornbury Fields & Post Farm), comprising 35% AH, a full range of types, sizes, new accommodation for elderly persons and custom & self-build opportunities, plus new employment space and community facilities.

5.3 Appearance

New dwellings will generally be traditional in appearance respecting Thornbury's market town character, but with instances of high quality modern architecture that respond to health & wellbeing and sustainability objectives, to add variety and interest to the town.

5.4 Access

The development will contribute towards local and strategic transportation schemes, including potentially: Metrobus Extension to Thornbury (& Buckover), A38(N) Park & Ride, M5 J14 improvements, Charfield Station re-opening, local bus service improvements, local highway, and foot and cycle improvements.

5.5 Green Infrastructure (flood risk/mitigation, ecology, heritage, POS)

A Green Infrastructure network will protect Crossways & Cleve Wood, the setting of Hacket Farm, rural nature of Hacket Lane, Clay Lane & Crossways Lane and extend the Pickedbrook Rhine streamside walk. Development will also provide Sustainable Urban Drainage systems and range of new and or improved open space including, play areas and allotments. A Strategic Green (open space) Gap and/or new greenbelt between Thornbury and Buckover Garden Village will be maintained.

5.6 Infrastructure requirements (health, education, utilities) etc

CIL contributions towards existing facilities within Thornbury (subject to SGC capital programme decisions).

5.7 Energy/heat

New development will aim to maximise the range of energy conservation and generation measures, e.g. including renewables and homeworking measures.

6.0 Barriers to delivery / critical interventions (Achievability Risks)

6.1 Identified risks to suitability, availability and achievability. The critical risks are:

• None identified. Most of the remainder of the requirement is subject to a current appealed planning application.

6.2 Actions needed to reduce risks (e.g. investment in new infrastructure, dealing with fragmented land ownership, environmental improvement, or a need to review development plan policy)

- Early community and stakeholder engagement is required to assess options for land at Crossways, which could comprise residential, employment or mixed-use.
- Preparation of a Community Facilities Audit and close working with Thornbury Neighbourhood Plan Team.
- Liaison with the LEA to understand emerging education situation.
- Continued vigorous promotion of Charfield Station re-opening and early prioritisation / delivery required of J14 improvements.
- Early consideration of extent and purpose of strategic green gap to Buckover. Potential extension to Green Belt in this locality.
- Early engagement with Buckover GV promoters to assess needs for new school(s).

7.0 Indicative trajectory

7.1 2-3 year lead in for land west of Gloucester Road contribution from other sites anticipated post 2022. 1 outlet per site. 50 dwellings per annum per site. Starts 2019/20, completion by 2030.

	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27
Thornbury				30	50	50	50	50	50	50	50

2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	2035/36	Capacity within Plan period
50	50	20							

Post 2036	Total Capacity
0	500

