

NA3 Wolborough Development Framework Plan

CONSULTATION DRAFT



Urban &
Landscape
Design

01

Introduction

About this document	p5
Background	p7
Planning policy	p7
Key challenges & opportunities	p9
Report structure	p11

02

Vision (part 1)

The Wolborough vision	p13
The objectives	p13
Concept plan	p13

03

The Framework plan (part 2)

Development framework	p15
Movement strategy	p19
Density strategy	p23
Land use strategy	p25
Landscape (GI) strategy	p27
GHB design framework	p31
Drainage strategy	p33
Heritage strategy	p39
Main street design	p41

04

Design code (part 3)

Design elements	p43
Main street	p44
Connecting streets	p46
Green edge	p48
Green links	p50
Green spine	p52
Neighbourhood hub	p54
Neighbourhoods	p56

05

The way forward (part 4)

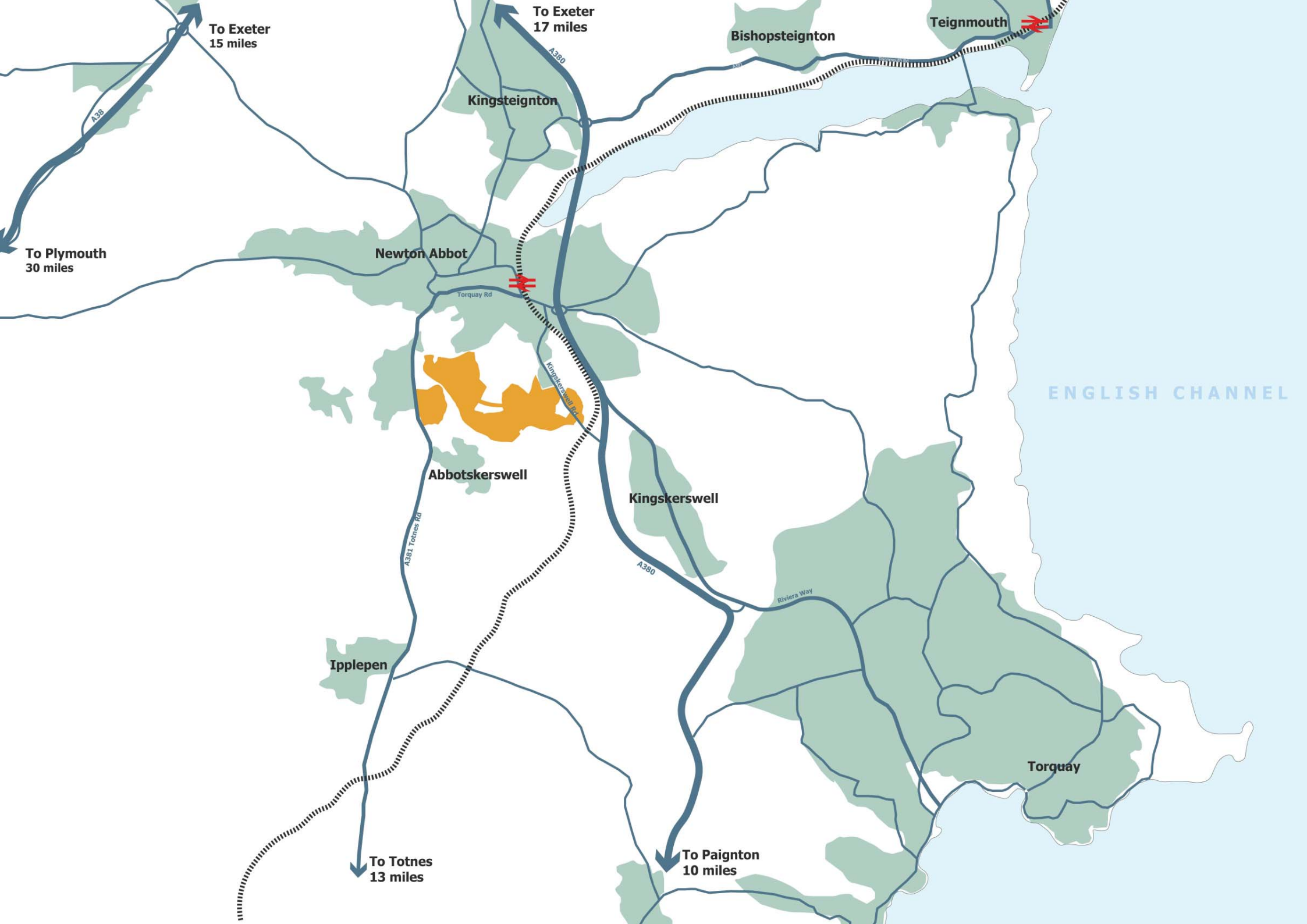
Infrastructure schedule	p69
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06

Appendix

Wolborough Fen Monitoring strategy

CONTENTS



Introduction

About this document

1.1 The NA3 Wolborough Development Framework Plan (DFP) amplifies the requirements of Policy NA3 Wolborough of the Teignbridge Local Plan 2013 - 2033. The Local Plan was adopted in May 2014. Policy NA3 allocates land to the south of Newton Abbot for the development of approximately 120 hectares of land for a mix of uses. The principle of development is agreed.

1.2 The DFP sets out how the proposals at NA3 can be planned, delivered and phased comprehensively and in a sustainable form across the allocation. It is intended that this document will be an adopted Supplementary Planning Document (SPD) but we would welcome views on whether it should be a Development Plan Document (DPD), or a non-SPD guidance document.

1.3 The DFP is flexible and is accompanied by a Development Framework Plan (map) (see page 14). The Development Framework provides an interpretation of how the policy requirements and principles set out in the DFP can be delivered on-site. However, should additional and/or more detailed studies and surveys be carried out at the planning application stage, these will be considered.

1.4 Variations from the DFP, for example precise boundary locations or necessary changes to infrastructure locations based on more detailed evidence, will be considered on their merits as part of the planning application process, and will not require a revision to the DFP. The Local Plan requires a comprehensive landscape and design led masterplan for the strategic allocation to support development proposals. Once adopted, it is considered that planning applications that adhere to this document would meet that requirement. However, it is recognised that it may also be possible to bring forward development based on an alternative developer-led comprehensive masterplan for the whole allocation.

1.5 There have been a number of planning documents and concept masterplans prepared for the site since the Local Plan was adopted. The aim of this document is to integrate relevant policy and guidance and set out advice on how the site as a whole, and as smaller neighbourhood areas can be developed to deliver new homes and services in this area over the next 15 years. TDC and WYG have worked with landowners and key stakeholders whilst being guided by the design principles and development requirements of the Teignbridge Local Plan.

1.6 The preparation of this draft DFP has been informed by technical work, as well as discussions with key stakeholders including Natural England, Historic England and Devon County Council. It has also been developed following input from landowners and their professional representatives. All of this work has culminated in this consultation document that is now published for wider public comment and community engagement.

1.7 This site is controlled by two land owners. A planning application has been submitted on part of the site and covers three out of the four neighbourhood areas, as shown on page 16. The DFP has given full consideration to the 'made' Neighbourhood Development Plans for Newton Abbot and Abbotskerswell, which forms part of the statutory development plan for the area.

1.8 The draft DFP has been subject to a Strategic Environmental Assessment (SEA). It has also been subject to an Appropriate Assessment for the purposes of the Habitat Regulations (HRA). The draft DFP has been modified to incorporate recommended mitigation measures that have been identified through the HRA Appropriate Assessment. Draft SEA and HRA documents are published alongside the DFP and TDC are also seeking comment on these documents.

1.9 The indicative timetable for the preparation of the DFP is as follows:

Aug - Sept 2018	Eight week public consultation
Sept - Oct 2018	Review comments and amend Development Framework Plan as necessary
Dec 2018	Executive adopt Development Framework Plan

How can I comment on the Development Framework Plan?

1.10 The draft version of the DFP, SEA and HRA will be available for comment for eight weeks from August 2018. All documents can be viewed on the Council's website at www.teignbridge.gov.uk/wolborough. Any comments received through the public consultation must be in writing which can be done by:

- Completion of the online questionnaire at www.teignbridge.gov.uk/wolborough
- Via e-mail at forwardplanning@teignbridge.gov.uk
- Posting your comments to Spatial Planning, Teignbridge District Council Offices, Forde House, Brunel Road, Newton Abbot, TQ12 4XX.

Please note: this consultation is seeking comments about how, when and where different aspects of the allocation are developed. The principle of whether or not the development will take place has already been determined through the adoption of the Teignbridge Local Plan and therefore the Council will not be able to consider comments relating to this as part of this consultation.



Background

1.11 The requirements for a masterplan to be prepared for this allocation is set out in Policy NA3 of the Council's adopted Local Plan (2013-2033) which states that:

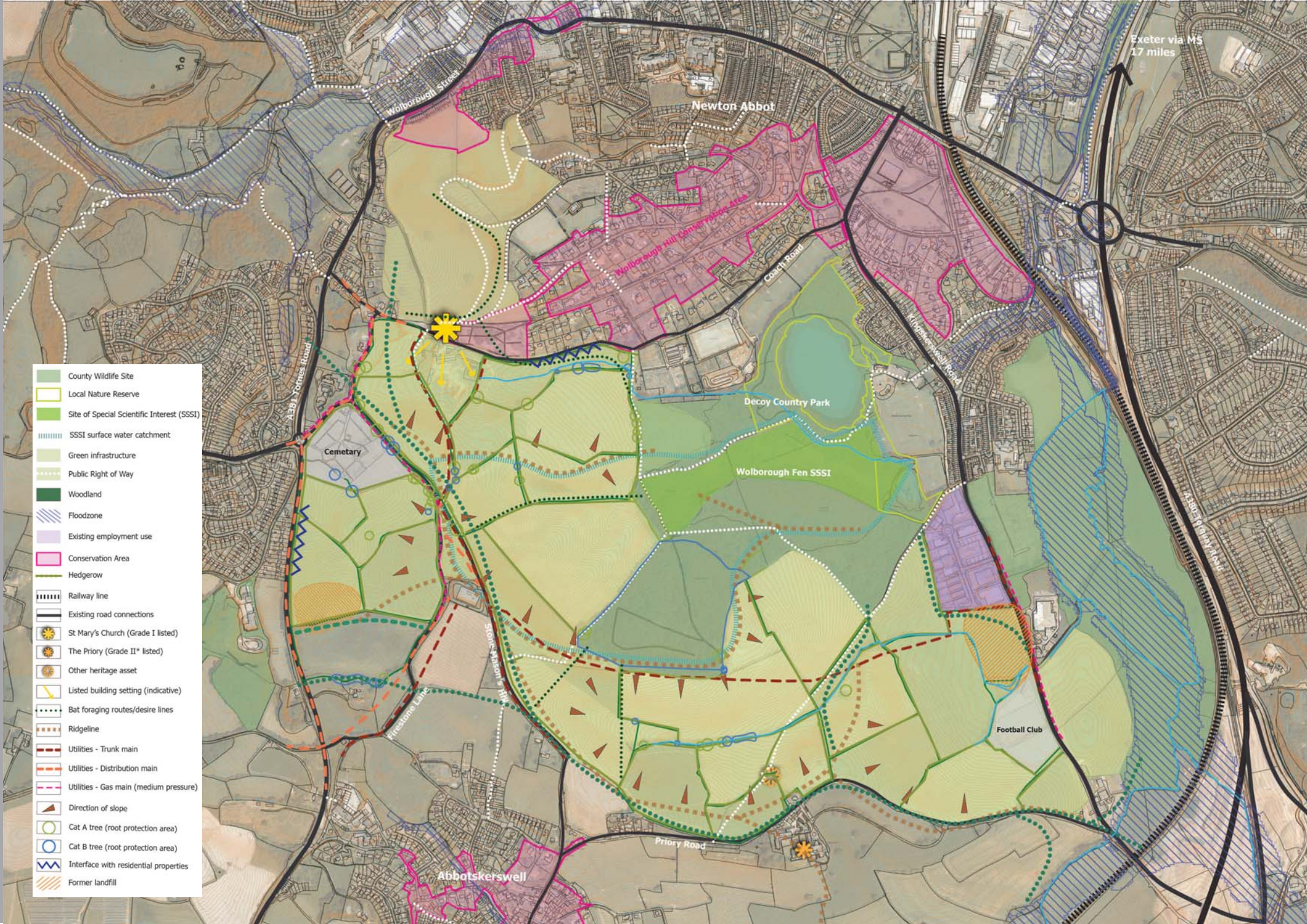
"A site of approximately 120 hectares is allocated at Wolborough to deliver a sustainable, high quality mixed-use development which shall:

Include a comprehensive landscape and design led masterplan for the strategic site allocation, produced with meaningful and continued input and engagement from stakeholders;..."

1.12 TDC adopted its Local Plan in May 2014. The local plan sets out where and how new development will be managed across the district in the period up to 2033. Included within the Local Plan is an allocation for land to the south of Newton Abbot for the development of approximately 120 hectares of land for a mix of uses, including employment, housing, community facilities, a road vehicular connection between the A380 South Devon Highway with and the A381 Totnes Road, and large areas of green infrastructure. This area of land is referred to in the Local Plan as NA3 Wolborough. It stretches from the A381 Totnes Road, eastwards to the Kingskerswell Road. The allocation is bounded in part by Coach Road to the north, and Priory Road to the south.

1.13 The NA3 policy states that to deliver a sustainable, high quality mixed-use development shall:

- a) include a comprehensive landscape and design led masterplan for the strategic site allocation, produced with meaningful and continued input and engagement from stakeholders;
- b) deliver 10 hectares of land for employment development, for office, general industrial or storage and distribution uses as appropriate to the site and its wider context, ensuring that there is also a mix of unit size to enable businesses to start up and expand; support will also be given to employment generating uses provided that they are compatible with the immediate surroundings and do not conflict with town centre uses;
- c) deliver at least 1,500 homes with a target of 20% affordable homes
- d) provide social and community infrastructure including a youth centre, local shops, community facilities and a site of 5 hectares for a 420 place primary school including early years provision and a secondary school or other further education facility;
- e) provide a vehicular route connecting the A380 South Devon Link Road with the A381;
- f) create a network of green infrastructure that contributes to the overall strategic network;
- g) respect the setting of the parish church of St Mary the Virgin;
- h) provide a green buffer between development and Decoy woods;
- i) protect and enhance Wolborough Fen Site of Special Scientific Interest and flight routes and foraging areas of greater horseshoe bats;
- j) enhance or mitigate any impact on county wildlife sites, cirl bunting territories and barn owl sites;
- k) maximise opportunities for the generation of on-site renewable energy at a domestic scale and investigate opportunities for community scale renewable energy generation
- l) create areas for local food production
- m) provide formal and informal recreation space
- n) a bespoke Greater Horseshoe Bat mitigation plan for Wolborough must be submitted and approved before planning permission will be granted. The plan must demonstrate how the site will be developed in order to sustain an adequate area of non-developed land as a functional part of the foraging area and strategic flyway used by commuting Greater Horseshoe Bats associated with the South Hams SAC. The plan must demonstrate that there will be no adverse effect on the SAC alone or in combination with other plans and projects.



Key challenges and opportunities

1.14 As one of the largest allocations in the Local Plan, NA3 is a strategically important site for the district and combines new homes with employment opportunities, as well as essential transport links, education and community facilities. Across the site, there are a number of constraints which have posed significant challenges in determining how development should be distributed. The context plan on page 8 identifies the constraints that are summarised here:

CHALLENGES

Topography

Undulation across the site and different ridge lines. Steep slopes, landforms and curves to address and make sense of. Significant areas of the site have gradients steeper than 1:5, making development on these areas highly challenging.

Flood risk and drainage

Surface water needs to be carefully managed on sensitive parts of the site that form the catchment for the Wolborough Fen SSSI. Existing watercourses should be retained and incorporated as part of plans for development.

Landscape character

Woodland, hedgerows, rolling hills, farmland, existing views into and out of the site and the network of PROW.

Heritage

Setting of the Grade 1 listed parish church of St Mary the Virgin, Wolborough Hill Conservation Area, St Augustine's Priory, and non-designated heritage assets of Wolborough Barton Farm and Hennaborough Barn.

Site features and ecology

Features to be considered, include:

- a network of high quality, unimproved meadows supporting a herb rich plant community
- areas of dry stone walls and unimproved meadows likely to support reptiles
- small copses of mature broadleaved woodland providing bird nesting sites, bat roosting sites and potential flyways,
- watercourses
- Wolborough Fen SSSI
- South Hams SAC
- The southern extent of NA3 falls within a strategic flyway for greater horseshoe bats
- Category A and B trees and significant hedgerows
- Archaeological potential with regard to known prehistoric and Romano-British activity.

Utilities

A south west water trunk water mains crosses the site. An area of land 40m x 30m in size is required to be set aside for a new electricity substation.

Ground conditions

Two former landfill sites - land to the west of the site off Totnes Road, and to the east of the site off Kingskerswell Road.

OPPORTUNITIES

- To provide a substantial number of new homes (including affordable homes) within a rich landscape setting that raises the bar for design quality in the area using innovative architecture, including the use of robust and locally distinctive materials to reflect the character of Newton Abbot.
- The provision of a new main street connecting the A381 to the A380 South Devon Link Road. This new road will open up the allocation for development as well as improving accessibility into, out of, and across Newton Abbot.
- To create highly sustainable new neighbourhoods that integrate and improve existing public rights of way and adds to the area's strategic cycle network to connect central Newton Abbot and its railway station with the surrounding area.
- To maintain the unique landscape setting of the site whilst supporting local ecology and preserving landscape heritage through the retention of significant landscape features. This includes the retention of existing woodland and the creation of a green buffer between proposed development and the southern boundary to provide a strategic wildlife corridor and to help retain the site's landscape setting.
- Promote employment uses and strengthen the local economy through the creation of new jobs and employment spaces.
- Create a new neighbourhood hub centred around Wolborough Barton Farm offering a range of community facilities, to serve the new and existing community.
- Build on the rich and distinctive character of Italianate architecture found in Newton Abbot.
- Relationship to Decoy Country Park
- Retaining agricultural land.



Report structure

1.15 This report is structured into four parts:

Part 1 – sets out the vision and objectives for the NA3 site

Part 2 – introduces the development framework plan for the site and the number of different strategies that have fed into this, including: movement, density, land use, landscape (green infrastructure), greater horseshoe bat framework, SuDS, heritage and infrastructure.

Part 3 – describes the character elements across the site and the appropriate design principles that apply. It also sets out the specific requirements for the four neighbourhoods.

Part 4 – sets out the important considerations in terms of the delivery of the site. A table is provided with the minimum requirements in terms of the delivery of infrastructure, utilities and facilities across the site.



Part 1: Vision

The Wolborough vision

2.1 The development at NA3 will be guided by the overarching vision as set out in Local Plan Policy S14 Newton Abbot:

‘Newton Abbot will be the business, educational, leisure and retail centre for South Devon as part of the Heart of Teignbridge. It will be an active community whose members are involved in building an exciting future based on tradition, sustainability, enterprise and openness to change.’

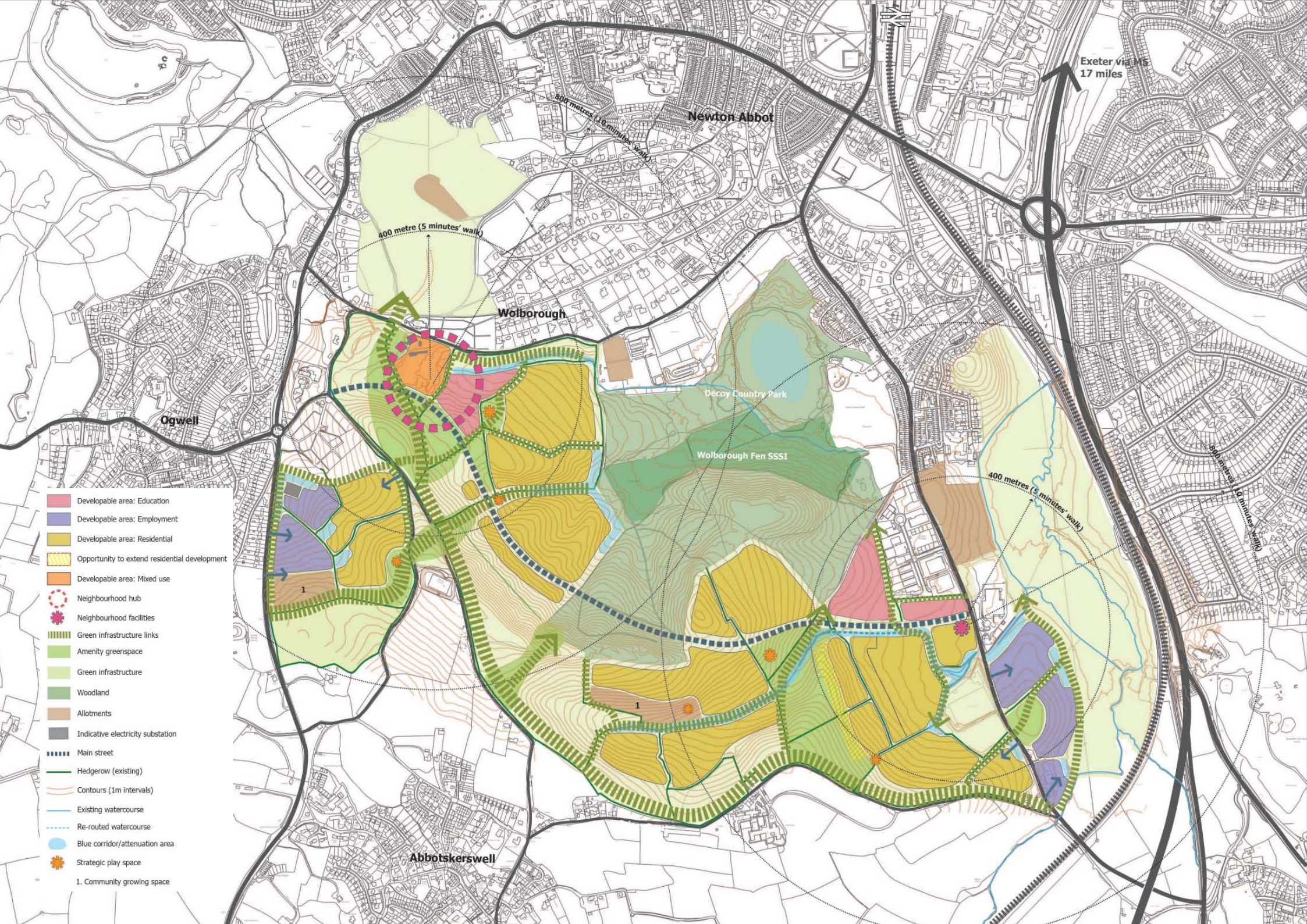
2.2 The area of land allocated at Wolborough will help to deliver this overarching vision for the heart of Teignbridge. It has many distinctive and distinguishing features which should be celebrated through the design of the development, adding value to both the townscape of Newton Abbot and the community that it serves. The following objectives have been written to reflect this and should remain at the heart of any designs and proposals prepared for the site as and when applications for development are submitted for consideration by TDC.

The objectives

2.3 If NA3 Wolborough is to be a successful, sustainable urban extension we need to create a flexible framework that opens up opportunities for a mix of types of development within this area. With a commitment to creating a landscape led design that respects and incorporates the existing characteristics and landscape assets.

2.4 To achieve this the area should include the following:

- Respect for the setting of the Grade 1 listed parish church of St Mary the Virgin
- House types that are flexible and attractive to a range of people and the site topography
- An economic offer that provides space for small and medium enterprises and allows for a significant proportion of locally owned and run businesses and community organisations in attractive settings
- Flexibility in the scale and types of employment uses to achieve a range of new employment opportunities across the site
- A range of space types and affordabilities for residential and non-residential uses
- Varying types and tenures, including affordable housing, custom build plots and other specialist forms of housing to meet a diverse range of needs
- Well-integrated, varying densities across the site to respond to landscape setting and topography, with increased densities in locations that can maximise housing delivery
- Creative re-use and sensitive adaptation of old buildings
- Locate community facilities, shops and offices within a centralised ‘neighbourhood hub’ to maximise commercial viability and make sure local facilities are within a five minute walking distance for the surrounding community
- Protection of green corridors and the integration of green spaces throughout the development to protect the local Greater Horseshoe Bat population and to make sure net gains for other biodiversity while achieving multifunctional green infrastructure benefits
- Protection and enhancement of the Wolborough Fen Site of Special Scientific Interest, and Decoy Woods
- High quality, well managed, well defined, easily accessible open space.
- Legible routes with clear physical and visual links to local landmarks and their surroundings
- A green and walkable development, making the most of existing lanes and connections and linking these into new networks of footpaths, cycleways and sustainable streets
- High quality and locally distinctive design with active street frontages and positive landscaped edges blending naturally into the surrounding countryside
- A development with the use of efficient design, renewable energy technologies, quality construction and that maximises opportunities for sustainable travel
- High quality and sustainable design to contribute to good place-making, and health and well-being. Creating a strong locally distinctive sense of place that is safe, inclusive and accessible to all.



Part 2: The Framework Plan

Development framework

Policy NA3 Wolborough criteria (a) to (n)

3.1 The Development Framework has been prepared in response to the objectives and principles for the site so it can be used to set the overarching structure for the future development of the site. An understanding of the extent of proposed infrastructure requirements and site challenges has shaped the distribution of land uses and informed recommendations about how the site can be developed in the most viable way.

3.2 The plan on page 16 shows a series of new neighbourhoods, including:

Development parcels on slopes that are flatter than 1 in 6 metres in gradient.

Development parcels that seek to avoid the most visually sensitive and steeply sloping areas of the site.

A main street through the site linking Totnes Road to Kingskerswell Road. This route has changed from the Local Plan Proposals Map. The new alignment pulls the route away from the listed church and shows an alignment with an access to the south of the Decoy Industrial estate on the eastern part of the site. The main street has been designed to minimise the need for engineering works, especially when passing through existing woodland.

Separate access points off Kingskerswell Road and Totnes Road.

Approximately 7 ha of employment land across the site. Additional employment uses could also form part of the mixed use neighbourhood hub and will be of a scale and type sensitive to the nearby residential uses.

Sensitive development within the setting of the church/ farm to retain the existing landscape character.

A network of green infrastructure links and green spaces to provide informal and formal space, allotment and growing areas, bat flyways, dark corridors and ecological buffers.

An area for an electricity sub-station.

An agreed Sustainable Urban Drainage (SUDs) strategy and site attenuation areas based on the creation of a series of blue corridors.

The retention and enhancement of important landscape features such as existing hedgerows and mature trees, where these are compatible with future land uses in the long term.

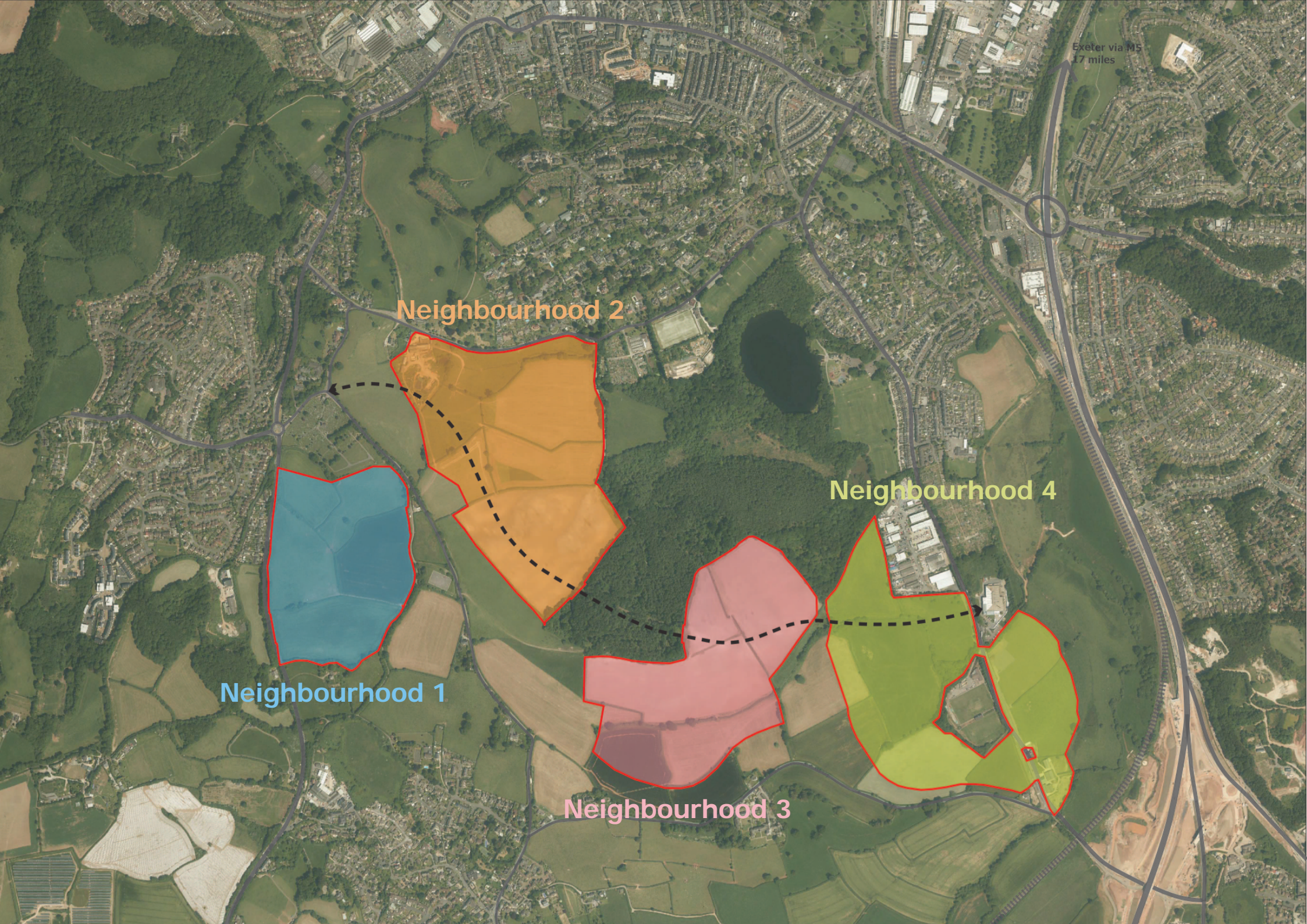
Retained public rights of way and the development of a new interconnected network of footpaths and cycle routes with connections to strategic cycleways.

A masterplan approach that is preferred by TDC, but that recognising that alternative approaches may be appropriate.

3.3 The framework principles

- Create attractive, well designed buildings to respond to the site topography, local character and suitable for different elements of the local community.
- Deliver appropriate densities to support local needs nearby and create a viable and sustainable community.
- Source local sourcing of materials where possible and appropriate.
- Provide efficient and attractive multi-functional design approaches to managing surface water that maximise biodiversity, work well with the landscape, create high quality amenity spaces and demonstrate a positive approach to the SuDS.
- Enhance natural habitats beyond those that currently exist.
- Provide convenient access to public transport and a efficient bus service along the main street.
- Create attractive places where people wish to work and that are serviced with well designed and coordinated infrastructure and community facilities.
- Create well defined, easily accessible, high quality open space that is well managed.
- Promote employment buildings and spaces that relate well to the residential areas and existing properties and create a positive entrance to the town.

This section discusses the strategies in turn that have fed into the Development Framework.



Exeter via M5
17 miles

Neighbourhood 2

Neighbourhood 4

Neighbourhood 1

Neighbourhood 3

Neighbourhoods

The concept underpinning the DFP for NA3 Wolborough revolves around the creation of four distinct neighbourhoods connected by a main street and a comprehensive network of green infrastructure (see page 16).

The character of the four neighbourhoods should draw on the unique attributes of their context and should seek to reflect local residential character and architectural precedents as described in the TDC Design Guide. The different characteristics of form and appearance will help differentiate the neighbourhoods whilst addressing the site constraints and topography, and achieving modern residential standards, particularly in terms of access.

Some of the character elements (discussed in section 4) are distinct to one or more neighbourhood areas where as others are found in all four areas. The character elements that span all four neighbourhoods do so to provide continuity to the adjacent settlements, green spaces and rural edges. These elements will help integrate the site into its immediate context and must be consistent in design and character.

Employment

Policy NA3 criteria (b) - deliver 10 hectares of land for employment development, for office, general industrial or storage distribution uses as appropriate to the site and its wider context, ensuring that there is also a mix of unit size to enable businesses to start up and expand; support will also be given to employment generating uses provided that they are compatible with the immediate surroundings and not conflict with town centre uses.

The DFP shows 7 hectares of employment land across the site. Any shortfall will be delivered elsewhere across the site equivalent to the area requirements or at a jobs density of 100 jobs per hectare. In the event that it is not possible to achieve this on site because it would compromise the delivery of other policy objectives, provision for off-site delivery of serviced employment land may be appropriate.

Set out below is the basis of an appropriate S106 obligation to deliver the employment land:

- The developer is to market the serviced employment land for a maximum period of 3 years;
- The land is to be serviced, access roads brought in, the site levelled, unencumbered and ready for immediate development prior to marketing;
- The 3 year marketing period is to commence no later than the practical completion of 30% of the dwellings;
- In the event that the land fails to sell within the 3 year marketing period, the developer will offer the site to Teignbridge District Council (TDC). Transfer of the site to TDC will be at £1 if no arm's length interest has materialised within the 3 year marketing period; or if some arm's length interest was generated but failed to result in a sale, the developer jointly with TDC but at the developer's expense, will commission an independent valuation of the site. TDC will then have an option to acquire the site at the value as established by the independent valuer;
- If TDC is not minded to take the land, the developer may offer a cash settlement to TDC in lieu of delivery of the employment provision but this will be at the sole discretion of TDC.

Housing

Criterion (c) deliver at least 1,500 homes with a target of 20% affordable homes;

There is a clear need for housing to meet the needs of communities in Teignbridge. TDC recognises this and places great importance on the delivery of new homes, including affordable and market housing, as well as more innovative solutions such as custom build homes. The NA3 allocation forms one of the largest development area, creating a real opportunity to provide many homes within a sustainable urban extension.

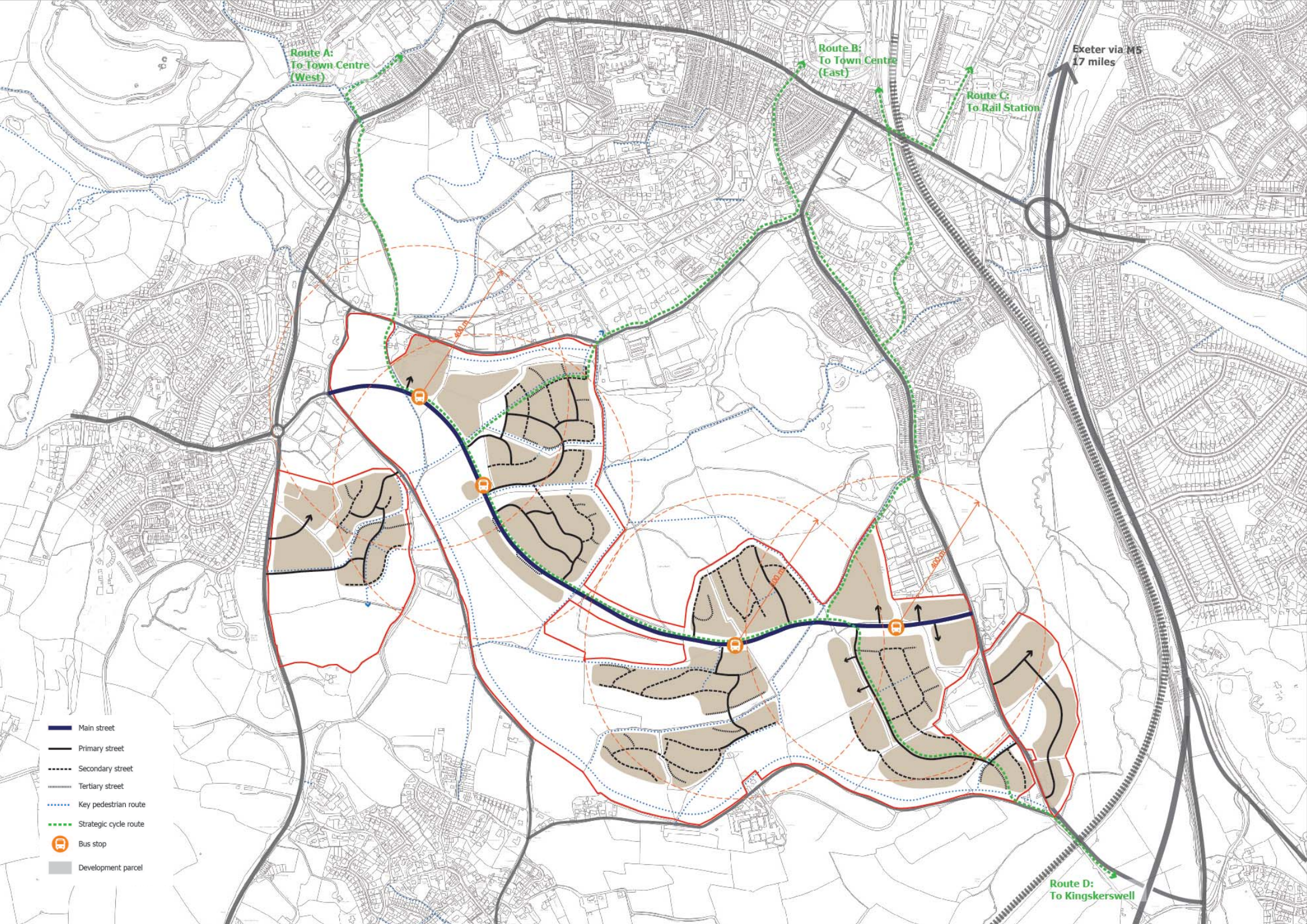
Policy objectives

I. Deliver at least 1,500 homes of which 20% should be affordable, subject to viability.

II. 5% of the homes will be made available as custom build plots.

General objectives

- Affordable housing will be distributed throughout all phases of the development, proportionate to the overall number of homes proposed within the application area. The mix will be negotiated on the basis of evidenced housing need. Early discussions with the TDC's Affordable Housing Team are encouraged.
- The provision of specialist housing for people with disabilities should be explored.
- Custom build plots should be concentrated in a small number of parcels and be located where there is an existing access, i.e. access to the site is not reliant on the vehicular through route being in place. In addition to easing construction management, this will enable earlier plot delivery and thus an earlier capital receipt. The Council has adopted a Custom and Self Build Supplementary Planning Document (SPD)¹ which provides further information.



Movement strategy

Policy NA3 criteria (e)

3.4 To establish a coherent movement pattern, it is necessary to have a clear hierarchy of street types. The appropriate use of these streets in conjunction with built form and landscaping will be the basis for creating this hierarchy.

3.5 The need to provide adoptable highway standards cannot be separated from the overall function and character of the street. Well-designed streets contribute significantly to the quality of the built environment, and play a key role in the creation of sustainable, inclusive, mixed communities. Streets within the development should be designed as places for walking, socialising, playing or simply enjoying.

3.6 The street hierarchy is made up of four different street types. The locations of these is shown indicatively on the movement strategy plan with detailed design guidance provided in part 3 (see page 43). Where street widths are given, these should be seen as a minimum with scope for widening to follow the shape of the built form. It should be noted that some larger development parcels will contain internal streets that are not shown on the adjacent plan. The design of these streets will be determined through the planning process.

Main street

3.7 The development will be served by a single tree lined street running on an east west alignment through the site. The route for the main street is informed by a vertical and horizontal design review from which the wider masterplan requirements have been developed. The carriageway is designed to a minimum width of 6.5m with widening on its bends (further details are provided on page 41). The main street will have different characters along its length that respond to its location within the site.

3.8 As a minimum a 3.5m wide shared foot cycle way will be provided along one side of the main street with a footpath along the other side. In certain locations the footpath may run separately from the main street to address the slopes and enable access to the different development parcels. Side junctions are to be designed to give priority to bicycles and pedestrians using the main street.

3.9 Junctions onto the main street will be by way of priority arrangement thus maintaining priority on the main street for the through movement of vehicles. Where capacity requires, right turn lanes from the main street will be accommodated. Direct access to residential properties should be provided, where appropriate to help reduce vehicles speeds and create a pedestrian friendly environment.

3.10 Early delivery of the main street from Totnes Road to Kingskerswell Road is essential. The purpose of the street will be much more than that of just addressing highway capacity constraints. It will provide a crucial connection between home and community facilities across and beyond the allocation, access to which will be integral to establishing a sustainable and cohesive development from the outset.

Connecting streets

Primary internal street

3.11 Primary routes provide access from the main street to each land parcel. They will be designed to a minimum width of 5.5m with 2m footways provided along both sides of the carriageway. Direct frontage access can be provided where necessary. Where the primary route carries a foot/ cycle link that continues to provide connection with off-site highway infrastructure a 3m wide shared foot/ cycleway will be provided.

Secondary internal street

3.12 Secondary routes provide access from the Primary Route to dwellings. They will be designed to a minimum carriageway width of 5m. A single 2m footway will be provided along either side of the carriageway. Most of the accesses to dwellings will be provided from secondary routes with driveway access provided. Where the primary route carries a foot/cycle link that continues to provide connection with off-site highway infrastructure a 3m wide shared foot/cycleway will be provided.

Tertiary street

3.13 Mews streets/ shared routes provide access from secondary internal streets to a small cluster of dwellings and green edges. They will vary in width and been designed to a minimum width of 4.5 metres with no designated footway.

Public transport

3.14 The main street will provide a high quality bus link to accommodate new and/or redirected bus services. Four bus stops will be provided on the main street positioned to achieve a maximum 400m walking distance for most residents/ employees across the masterplan area. Cycle links to the town centre and railway station are encouraged.

Green routes



3.15 Green routes will be provided through and within the site providing both internal connection between land parcels and links to existing infrastructure which facilitate sustainable links to key areas of development and infrastructure. In total the site lends itself to facilitating four 'external' green routes which tie in to existing routes. The four route designations and their points of connection are summarised as follows:

Route A: Local Centre to Newton Abbot Town Centre (West)

The route runs from the Main Street to the northern site boundary along an existing public right of way. At the northern site boundary the route crosses Coach Road to run north along an existing signed pedestrian/ cycle link that connects to Wolborough Street where there is good onward connectivity to the town centre that runs along the River Lemon. This will provide a route to the western side of Newton Abbot Town Centre.

Route B: Local Centre to Newton Abbot Town Centre (East)

The route runs from the Main Street to the northern site boundary along a green link incorporated into the residential parcel to be located east of the school. At the northern site boundary the route continues as an on road cycle only link. This will provide a route to the eastern side of Newton Abbot Town Centre.

Route B ties in to routes A and B at a junction on the Main Street

Route C: Main Street to Train Station.

The route runs from the main street to the eastern site boundary, and beyond onto Kingskerswell Road, along an existing public right of way. The route crosses Kingskerswell Road to continue onto the rail station.

Route D: Neighbourhood Hub to Kingskerswell Centre

The route runs from the local centre, along the Main Street before turning south along a primary route to provide connection onto Priory Road and then Kingskerswell Road before continuing onto Kingskerswell village centre. From the south east site boundary this green link continues on-road as a cycle only link.

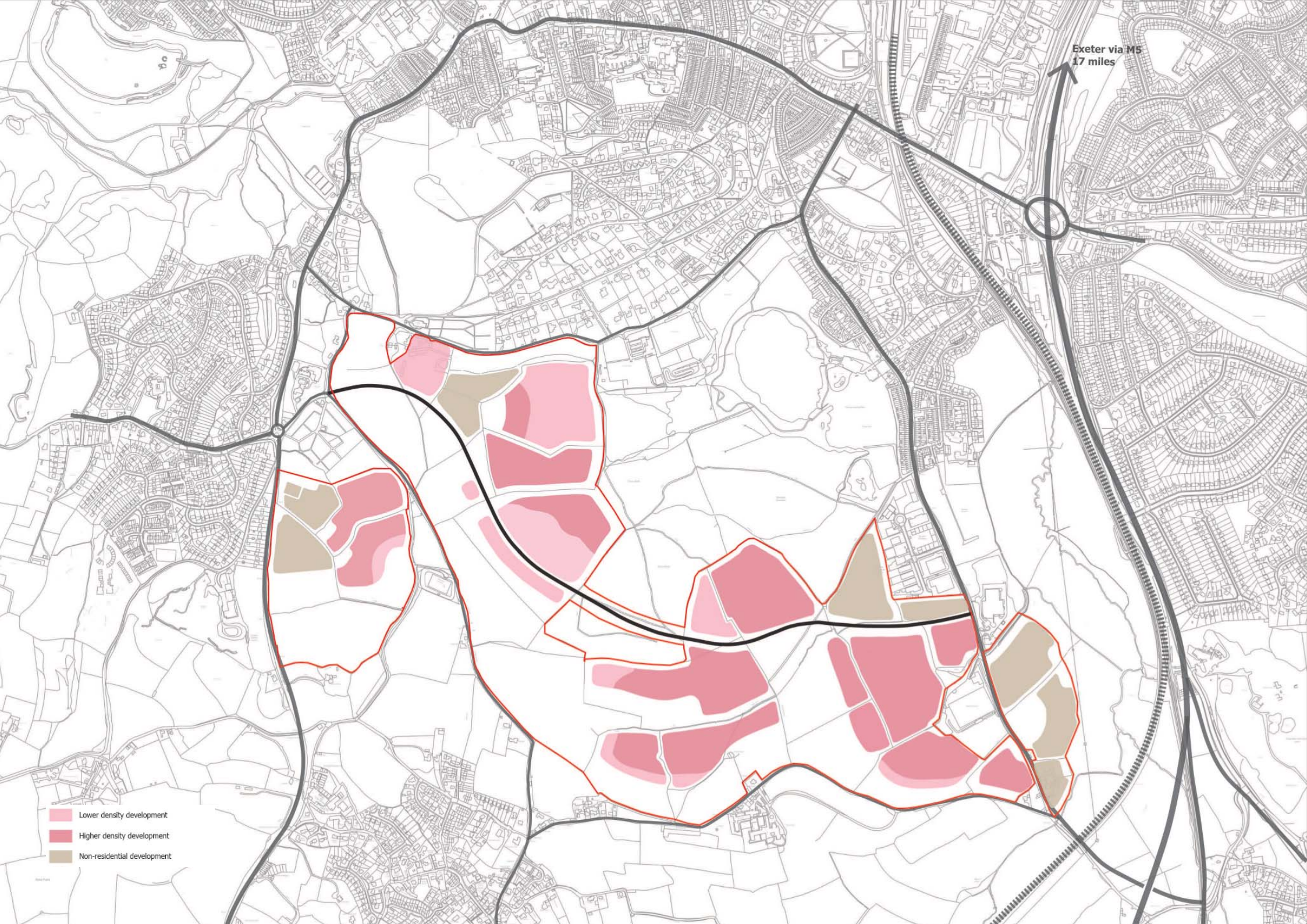
Internal Green links

Policy NA3 Criteria (f) (l) and (m)

3.16 Internal green links provide connection across the site to provide permeability and tie the site into the external links and wider transport infrastructure. The focus of the internal links is a foot/ cycle path that runs along the majority of the southern site boundary providing connection between Kingskerswell Road and Coach Road. The northern and easternmost limits tie into external routes A and D respectively.

From this primary internal link a series of ten further links pull together the respective land parcels including the employment parcels to the east, with western frontage on to Kingskerswell Road, and the employment parcels with frontage onto Totnes Road.

Where provided as shared foot/ cycle links these paths will be a minimum of 3.5m wide. Foot only links will be a minimum of 2m wide.



Exeter via M5
17 miles

- Lower density development
- Higher density development
- Non-residential development

Density strategy

Policy NA3 Criteria (a) to (n)

3.17 The density and scale of space between units of development will vary across the site and across the different development parcels to respond to the site sensitivities and challenging topography. Residential development is indicated at a range of densities, separated into two levels of character as follows:

Higher density development - up to 38 units per hectare

Lower density development/ greater proportion of green space - approximately 20 - 25 units per hectare

3.18 Higher densities will be achievable in the lower or less prominent areas, as illustrated on the drawing on page 22. Lower density development with a higher proportion of open space will be focused toward the external edges of the site facing outwards to the wider countryside and to respect the setting of the listed church and Conservation Area. High density units may be achievable in these areas with apartments or the provision of a residential care facility. The aim should be to make sure that there is open space of sufficient size in these areas to support the long term establishment of large trees.

3.19 The approach taken demonstrates that 1300 homes can be delivered. With higher density units and innovative approaches to development on steeper slopes beyond the masterplanned developable area it may be feasible to deliver the 1500 dwellings that are allocated.

3.20 Further information is provided under land use on page 25.

- Developable area: Residential (lower density)
- Developable area: Residential (higher density)
- Potential opportunity to extend residential parcels
- Developable area: Employment
- Developable area: mixed use
- Neighbourhood facilities
- Developable area: School
- Formal/informal green space (parks)
- Natural green space (accessible)
- Children and young people's space
- Ecological buffer
- Community growing space/allotments
- Land retained in agricultural use
- Attenuation area/blue corridor
- Electricity substation location options (40 x 30 m)



Land use

Policy NA3 criteria (a) to (n)

3.21 The following land use budget illustrates how development will be distributed across the site. The numbers correspond to the drawing opposite. It demonstrates that the site can accommodate approximately 1,300 homes, over 7 ha of employment land as well as providing sufficient land for primary and secondary schools facilities. Detailed information is set out below:

RESIDENTIAL

Parcel	Area (m2)	Area (ha)	Density	Units
R1	20,738	2.07	38	78
R2a	13,786	1.38	35	48
R2b	6,393	0.64	25	16
R3a	7,574	0.76	35	27
R3b	35,545	3.55	20	71
R4	25,540	2.55	32	82
R5	1,684	0.17	25	4
R6a	26,355	2.64	25	66
R6b	18,529	1.85	35	65
R7	10,662	1.07	20	21
R8	10,367	1.04	25	26
R9	39,856	3.99	35	139
R10a	4,721	0.47	25	12
R10b	40,397	4.04	35	141
R11a	5,839	0.58	20	12
R11b	10,551	1.06	35	37
R12a	25,137	2.51	30	75
R12b	2,424	0.24	20	5
R13	9,446	0.94	38	35
R14	11,556	1.16	35	40
R15	8,731	0.87	39	34
R16a	21,934	2.19	30	66
R16b	5,473	0.55	25	14
R17	10,246	1.02	30	31
R18	32,274	3.23	38	121
Total	405,758	40.6	30	1266
Mixed use				
M1	15,585	1.56		10
M2	10,699	1.07		30
Total	26,284	2.63		40
TOTAL				1306

EMPLOYMENT

Parcel	Area (m2)	Area (ha)
E1	10,199	1.02
E2	15,955	1.60
E3	22,080	2.21
E4	16,223	1.62
E5	6,954	0.70
Total	71,411	7.14

SCHOOL

Parcel	Area (m2)	Area (ha)
S1 (Primary)	17,623	1.76
S2 (Secondary)	32,000	3.20
Total	49,623	4.96

MIXED USE

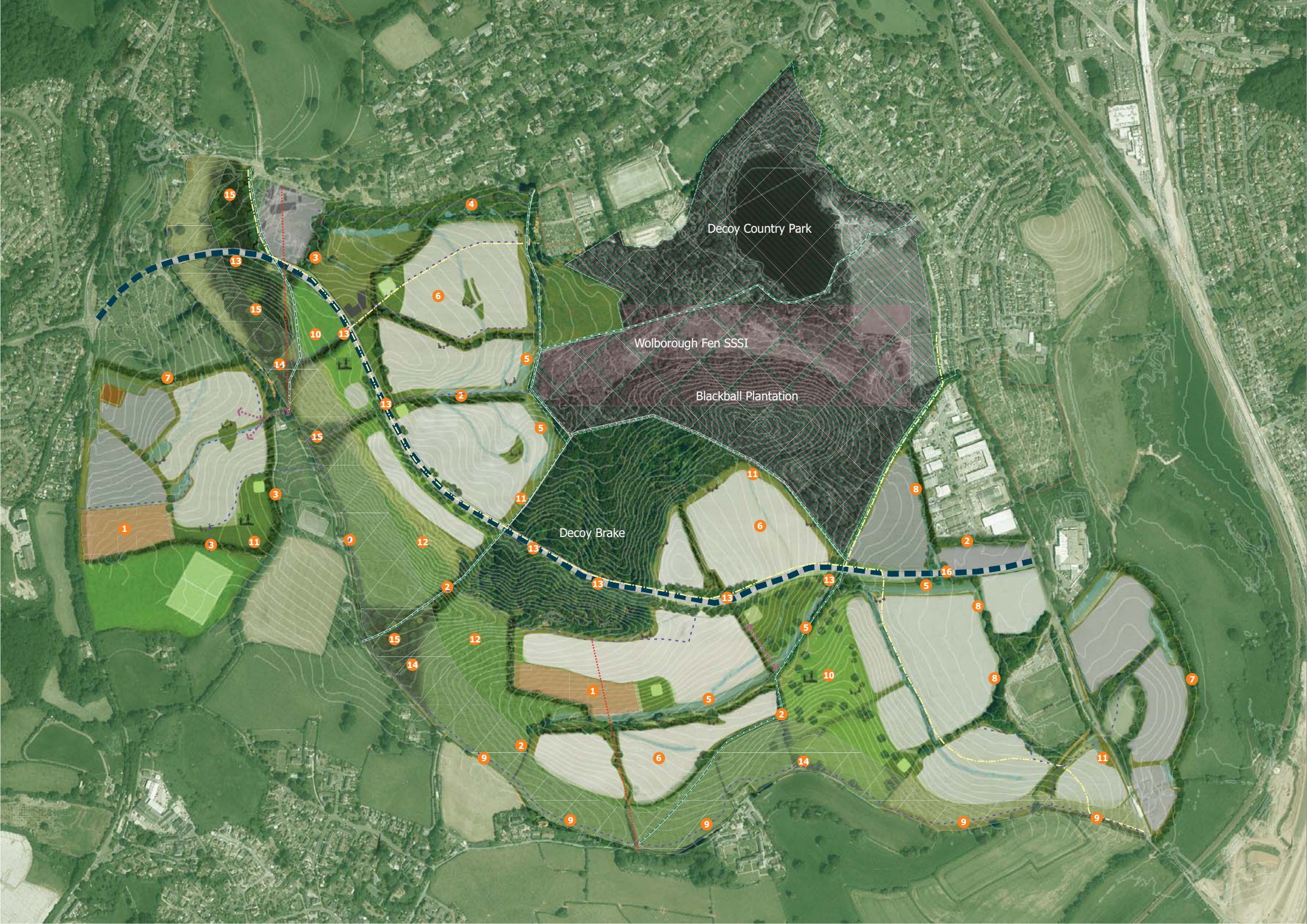
Parcel	Area (m2)	Area (ha)
M1	15,585	1.56
M2	10,699	1.07
Total	26,284	2.63

OPEN SPACE

Type of space	Requirement		
	m2/dwelling	m2	ha
Formal/informal green space (Park space)	17	21,519	2.15
Active recreation (Outdoor sports pitches)	27	34,177	3.42
Children and young people's space	10	12,658	1.27
Natural green space	50	63,290	6.33
Allotments	6	7,595	0.76
Total			

SUMMARY

Parcel	Requirement	Provision	Provision
		Area (ha)	Units
Residential	1500 units	40.58	1306
Employment	10	7.14	
Education	5.0	4.96	
Mixed use		2.63	
Formal/informal green space (Park space)	2.15	3.31	
Active recreation (Outdoor sports pitches)	3.42	4.60	
Children and young people's space	1.27	0.98	
Natural green space	6.33	26 ha	
Allotments	0.76	1.46	
Land retained in agricultural use		16.88	
Highway		4.55	
Attenuation		5.80	
Electricity sub-station		0.12	



Landscape (green infrastructure) strategy

Policy NA3 (f) (h) (i) (j) (l) (m) and (n)










3.22 At a strategic scale, the landscape will, in the main, perform the following roles.

- Integrate the development into the existing wider landscape context:
 - retain (where appropriate) the pattern of existing hedges, trees and woodlands;
 - reflect the pattern of the surrounding landscape; and
 - add to the existing landscape structure.
- Provide a setting and structure for the new development that:
 - mitigates /ameliorates development by minimising the scale of change to the landscape and minimises the erosion of visual amenity;
 - produce a contained, green and rural setting for the Church of St Mary and enhances views of the church as well as views out from the church;
 - build on the landscape heritage of Newton Abbot's 19th century Italianate architecture and landscape; and
 - create separation between development areas that allows the creation of distinct character areas that relate to the character of neighbouring development areas / build on vernacular architecture of the context;
- Provide green, wildlife links that:
 - conserve existing vegetation for wildlife and, in particular, flyways and foraging areas for greater horseshoe bats;
 - strengthen the existing vegetation; and
 - extend upon the existing vegetation to enhance and increase wildlife habitat, in particular habitat for Greater Horseshoe Bats.
- Conserve, where appropriate, the existing landscape fabric of hedges and trees to provide time depth, existing screening/ amelioration, conserve wildlife.
- Provide a framework for open recreation space that includes:
 - open hill top experience with far reaching views;
 - areas of open space where there is freedom to roam; and
 - a network of circuitous routes of varying length and offering a range of countryside experiences.

- Provide the opportunity for foraging and contact with the countryside.
- Work to assist with water attenuation.

3.23 At a more localised scale, the landscape will also perform the following roles.

- Incorporate formal pockets of areas to provide opportunities for play for young people and children.
- Produce an attractive and decorative structure that provides a transition between a domestic urban character and more rural structural framework and wider landscape context.
- Elegantly and economically resolve awkward level changes the result of developing on steep slopes - in particular, the integration of the main street, making use of dropped hedgebanks.

-  Allotments/Community growing space
-  Proposed wide dark corridor/double hedgerow to provide additional foraging routes for bats
-  Proposed hedgerow/hedge infill for reinforcement and to create additional green corridor links and to provide landscape enclosure
-  Proposed woodland buffer and natural foraging space.
-  Blue corridor, attenuation area (suDS) and to provide additional dark corridor.
-  Attenuation Swales with buffer planting to provide additional biodiversity value habitat
-  Proposed turf faced Devon hedgebank with trees
-  Rough Grassland and hedge corridor to provide connectivity for off site Great Crested Newt populations
-  Primary bat/wildlife corridor with existing hedges thickened and supported by patches of woodland and new hedgerow links
-  Amenity space
-  Buffer planting to increase biodiversity and provide transition space between different habitats
-  Retained managed pasture for Gird Bunting habitat
-  Suitable crossing point to be designed to allow safe and dark crossing of main route by bats
-  Potential location for purpose built Greater Horseshoe bat roost
-  Proposed woodland planting to enhance wildlife corridors
-  Proposed Newt and Bat crossing

Landscape character and density

3.24 The existing character of the site is defined by the farming pasture, adjacent woodland and field boundary vegetation. The development framework will alter this character; however, elements of the adjoining landscape character can be brought into the development by creating transitional spaces that link the development with the landscape and provide each area with a locally set character.

3.25 Neighbourhood Area 2 will include the school and community hub as well as housing, although this will entail a distinct increase in activity of this area, it is paramount that this area maintains a more rural edge character. This will include lower density property development and greater integration of vegetation across the area. Inclusion of woodland buffers around the northern plots will provide elements of screening but will also form strategic planting to emulate the character of the Wolborough Hill Conservation area and will maintain some of the setting to this area and St Mary's Church.

3.26 Neighbourhood 1 which sits closer to the A380 and existing industrial development will be of a higher-level density and as a result will include less strategic planting through the site, however, southern edges of the area will have a lower density to enable transition to the adjoining landscape and strategic green corridor and agricultural edge.

3.27 Neighbourhood areas 3 and 4 will be formed from a mixture of densities and will retain a more formalised urban development character on its eastern edge and parkland edge to the south and west. Where density is proposed to be higher is where the development will adjoin the formalised community open space thereby softening the edge of the development whilst providing natural policing by being well overlooked by the surrounding community. To the edges of these plots density will be reduced where it meets the rural edge and existing woodland. Community growing space and retention of existing hedgerows and defined green links through the development parcels will ensure that there is transition and connectivity between the development areas and the adjoining landscape.

3.28 Neighbourhood area 1 will also share a mix of densities and usage, with higher density focused in the to the north west and lower density where the site lies closer to Firestone Lane on the eastern side. This area is already relatively self contained within the existing vegetated boundaries and this will be retained with hedgerow corridors maintained and strengthened to ensure green links remain connected. Open space and community allotment areas are aligned at the edge of the parcels which softens the development edge.

Green spaces

3.29 A series of landscape spaces are to be created as part of the green infrastructure on the site. These will perform a range of functions, including informal recreation, play, sustainable drainage and contributing to the overall ecology provision. A series of neighbourhood green spaces and courtyards are also to be created providing attractive spaces for use by surrounding residents.

Planting

3.30 The landscape strategy proposes to add additional woodland habitat to the north of the site to create screening elements to views from the Wolborough Conservation Area and St Mary's Church, the additional linear woodland will be dispersed with species to create a natural foraging space for the community and also as a potential learning resource for the school. Further small pockets of woodland will support the existing bat/wildlife corridors along the western edge of the site, with existing hedgerows thickened to further reinforce wildlife routes.

3.31 Dark corridors are introduced across the site to provide further flight/foraging areas for the Greater Horseshoe Bat, these also serve as corridor routes for other wildlife. Crossing points across the main route are introduced to provide safe and dark crossings for bats (see page 31).

3.32 Additional trees should be provided across the site to provide additional green infrastructure at height and to enable the integration of the development within the site, and to create distinction between the different development areas.

Children and young people's play space

3.33 Public open space should be provided as part of a network of interconnected green and blue spaces providing highly accessible recreation and play opportunities alongside new and improved wildlife habitats. Based on a site capacity of around 1,300 homes, two combined NEAPS and LEAPS should be provided, each with an activity area of at least 3,000m². These have been located either side of Decoy Brake so that residents in the east and west of the site will all be within a 480m distance of a strategic play space.

- Formal and informal greenspace
- Active recreation space
- Children and young people's space
- Natural greenspace
- Allotments.

Wildlife links and connections

3.34 The landscape strategy shows the retention of hedgerows within the proposed development. Existing hedgerows and linear tree groups would be largely retained within the site and would be supplemented by additional planting across the development to provide further structure to the existing green network providing new elements to create new links.

The adjoining extents of the Blackball Plantation and Decoy Brake woodland would be a major green infrastructure asset of the site due to the central location that it takes within the development space. The development of the site would allow the woodland to become an amenity resource and an integral part of the site mitigation. A management strategy would consider the maintenance and management of existing and proposed woodland and hedgerows to maximise amenity and biodiversity value.

3.35 Existing retained vegetation will maintain the green infrastructure across the site forming links and creating more integration of the development into the surrounding landscape. It is proposed to retain and manage boundary and internal hedgerows and woodland to maximise the degree of screening provided from adjacent dwellings and public roads around the development. This will also maintain habitat connectivity around and within via the network of retained vegetation.

Great Crested Newts - Avoid, mitigate and compensate for impacts of greater crested newts in the eastern parts of NA3, include: installing newt underpasses and direction landscaping; maintaining newt access routes between ponds to the east of Kingskerswell Road and woodland adjacent to NA3; and provision of enhancement via new ponds and hibernacula;

Cirl Buntings - Avoid and mitigate for impacts on cirl buntings in the south of the site, including ongoing provision of spring barley/winter stubbles and rough grassland. If the current number of breeding birds cannot be maintained on site, a compensation contribution must be made.

Diverse Grassland - Protect areas of diverse grassland on-site and close by off-site, including the Stray Park Meadow County Wildlife Site, and any remaining diverse grassland in the northwest-most (GI) field of NA3, which historically supported unimproved calcareous species on raised earthworks

Barn Owl – protect the barn owl roost site in Hennaborough Barn

Nesting Swallows – retain the existing level and location of nesting swallows and other birds in the series of openings in the eaves of the historic barn at Wolborough Barton;

Existing woodlands – not only protect, and protect root zones, but also to enhance Decoy Woods, Decoy Brake and Blackhall Plantation. A key factor will be cessation of grazing within the woodland;

Biodiversity Offsetting – follow South Devon biodiversity off setting guidance to ensure a net gain in biodiversity is achieved

Urban area biodiversity enhancement measures – these should include hedgehog holes in every wall/fence and integral bat roost and bird nest boxes at a rate of 1 of each per dwelling (but positioned in groups in suitable areas).



Greater Horseshoe Bat design framework

Policy NA3 (i) (n)

3.36 The greater horseshoe bat is one of Britain's largest and rarest bats, with a total UK population of about 5500 individuals. As with all bat species, the greater horseshoe (and its' roosts) is protected under the Conservation of Habitats and Species Regulations 2017. Due to its rarity, the greater horseshoe is also listed on Annex II of the EU Habitats Directive. This makes it a qualifying feature for the designation of Special Areas of Conservation (SAC), such as the South Hams SAC which supports approximately 30% of the UK population including a significant network of hibernation and maternity roosts.

3.37 Greater horseshoe bats forage predominately within and adjacent to grazed pasture, woodland and hedgerows. Commuting follows a network of traditional flyways such as hedgerows between roosts and foraging areas. These are susceptible to breaks or interruption. Although the site does not lie within a core sustenance zone (within 4km of the SAC) the southern portion does lie within a strategic flyway, identified as a likely key link through the wider landscape for bats within the SAC area. As such the development of the site should support the conservation objectives of the South Hams SAC, in particular to maintain or restore:

- The extent and distribution of habitats used by greater horseshoe bats;
- The structure and function of such habitats;
- The population of the species; and
- Its distribution within the SAC.

3.38 A draft Appropriate Assessment has been prepared and is published alongside this DFP. This recommends a series of design principles in order to avoid or mitigate any adverse effects and support the conservation objectives. These measures have been incorporated into the masterplan for the site.

3.39 Design Principles

Protect and optimise existing (and provide new) bat commuting and foraging habitat through the site to achieve overall connectivity. In particular the landscape linkages to Conitor Copse, the River Lemon, the strategic Flyway and towards Kingskerswell.

Minimise potential interruption of bat corridors by the proposed road network, in particular within Decoy Brake and the north-western extent near Ogwell Cross cemetery.

Achieve no net loss of key grassland foraging habitat and mitigate, where appropriate, for any unavoidable loss of grazed pasture.

Achieve no overall net loss of hedgerows and trees within the site.

Avoid light spill in bat corridors and foraging areas, i.e. achieve light levels of less than 0.5 lux.

Ensure that any public footpath/cycleways through bat corridors are unlit, or if necessary, lit through a carefully designed scheme to minimise light spill whilst providing safe and adequate lighting for pedestrians and cyclists.

Ensure that the provision of areas of public open space in or near the bat corridors are designed and maintained to provide habitat for foraging and commuting bats.

Produce a bespoke Greater Horseshoe Bat Mitigation Plan with any application to detail the design and implementation of these measures, supported and informed by up to date survey information.

3.40 Avoidance, Mitigation and Enhancement

Primary corridors, such as the southern boundary within the strategic flyway, will be approximately 50m wide with existing hedgerows and tree lines thickened with infill planting and parallel hedge banks planted to provide alternative commuting routes. Secondary corridors will be 10-20m in width and will also comprise of double hedge banks (with new hedges planted where necessary).

Any road crossings through bat corridors will require detailed mitigation, potentially including green bridges or underpasses, earthworks, sensitive lighting design, landscaping and vehicle speed restrictions and calming measures.

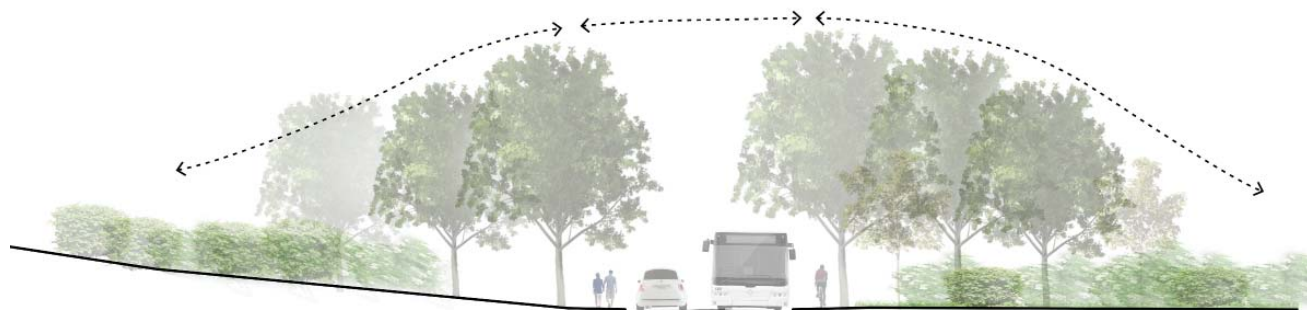
Undertake tree planting to provide new areas of woodland habitat for foraging bats.

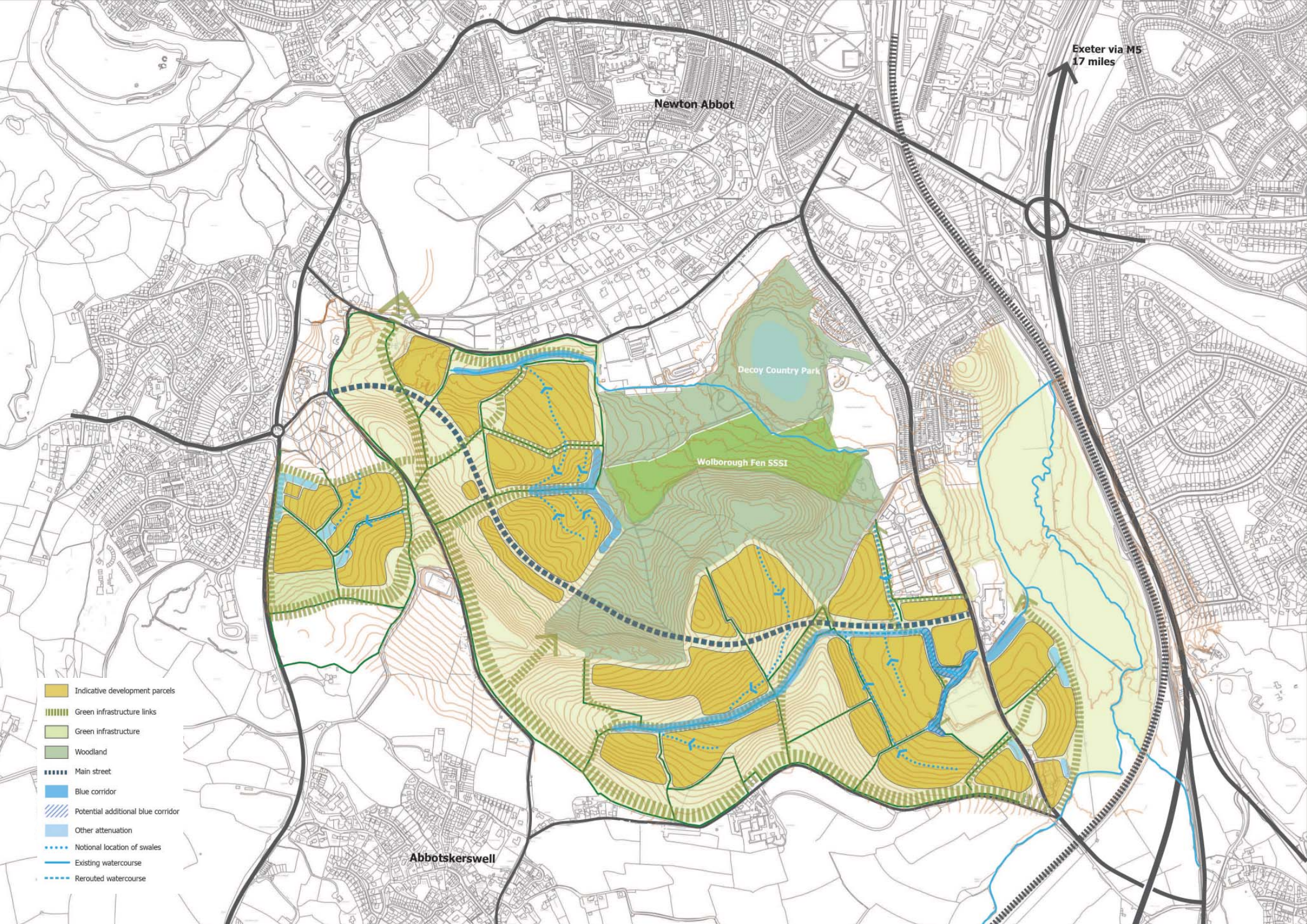
Create at least two new purpose built bat roosts to improve the number of satellite roosts within the strategic flyway network.

Provide long-term habitat management for each development parcel through a Landscape and Ecological Management Plan, secured through planning condition and/or obligations.

Implement development through the means of a prior-approved Construction Environmental Management Plan (CEMP), secured through a planning condition.

Undertake appropriate and proportionate ecological monitoring of the LEMP to establish the effectiveness of proposed mitigation measures and to provide early warning of any necessary remedial actions required.





Newton Abbot

Decoy Country Park

Wolborough Fen SSSI

Abbotskerswell

Exeter via M5
17 miles

- Indicative development parcels
- Green infrastructure links
- Green infrastructure
- Woodland
- Main street
- Blue corridor
- Potential additional blue corridor
- Other attenuation
- Notional location of swales
- Existing watercourse
- Rerouted watercourse

Drainage Strategy

Policy NA3 (f) (i) (h)

3.41 It is a requirement of the National Planning Policy Framework (NPPF) that new development should not increase flood risk to adjacent areas and where possible should reduce existing risks. Urbanisation will increase flood risk because the introduction of hard surfaces onto greenfield land without mitigation will increase the maximum rates of discharge, the speed of run off, the overall volume of run off over a defined period of time (round 1 year) and cause an overall deterioration in the water quality of the run off. Mitigation is therefore required and should be provided as part of good urban design. For testing the impact of the development proposals on receiving watercourses the 'design flood' will be taken as being the 1 in 100 year flow plus the appropriate climate change allowance applicable at the time of the determination of any application.

3.42 In this locality compliance with any additional requirements of the Devon County Council (DCC) Sustainable Drainage Systems Guidance is required. More specific technical details should be as set out in CIRIA C753 'The SuDS Manual' (2015). Where elements of the surface water drainage system are to be adopted by South West Water (SWW) compliance will be required with the version of Sewers for Adoption current at the time of individual reserved matters applications. Similarly any highways only surface water systems from adoptable surfaces should be compliant with the requirements of DCC as highway authority. Exemplar SuDS will provide the mitigation required to protect the water environment. An exemplar SuDS scheme should also consider amenity and biodiversity.

3.43 Over and beyond the above, in the catchment of the Site of Special Scientific Interest (SSSI), it will be necessary to ensure that the quality, quantity and reliability of the groundwater feed into the SSSI is not adversely impacted by the proposed development within the SSSI catchment;

3.44 As a general principle it is better to control water within a new development at 'source' rather than try and provide the control and mitigation through a larger downstream facility serving a wide area; this approach is supported by the DCC Sustainable Drainage Systems Guidance; to address water quality requirements, surface water (other than clean water from roof areas alone) is to be provided with 'two levels' of treatment prior to its discharge into the wider water

environment (i.e prior to discharge to a watercourse or by infiltration) unless agreed otherwise with the Lead Local Flood Authority (LLFA). Specifically, surface water should be treated to Water Quality Standards 1 and 2 as defined in the SuDS Manual 2015 paras 4.3.1 and 4.3.2 and Table 4.3, using a SuDS Management Train including at least two SuDS components, unless agreed otherwise with the LLFA.

3.45 As a general principle it is always advantageous to respect the existing topography and allow water to continue to discharge to existing outfalls (natural watercourses, areas of concentrated infiltration etc) unless there are compelling reasons to do otherwise; The plan on page 34 highlights the main catchments in the area and the sub catchments within the site. The identified catchments will form the key for future SuDS schemes for the development that address the requirements of the NPPF and DCCSDSG.

3.46 It is proposed that existing watercourses (and 'dry' valleys where higher infiltration rates will occur) are retained as blue/green corridors as far as this is reasonably possible. To ensure that the blue/green corridors are of sufficient width to accommodate any existing areas occasionally flood water may flow, it may be necessary to model the existing watercourses using a methodology agreed with DCC. The likely extent of blue/green corridors is captured on the plan on page 34, which takes account of the hydrological context and the proposed SuDS strategy;

Working from 'source' downstream

3.47 Appropriate SuDS are identified below along with some catchment specific requirements (as per the attached plan A105075/Hydrology/Rev 1) that are set out separately at item 8 below:

- (i) Although green roofs are not preferred by most developers opportunities to use green roofs should be explored especially for community buildings;
- (ii) Water butts are an easy and sensible provision and are to be provided throughout;
- (iii) In locations where it is demonstrated that infiltration is viable, infiltration is to be used for individual properties. However, given the steeply sloping nature of significant parts of the allocation, this solution is likely to be limited to the flatter areas and only where ground conditions are proven to be suitable by insitu tests; in the catchment of the SSSI, groundwater monitoring is required to establish in more detail the movement of groundwater and seasonal variations.

- (iv) All property finished floor levels (FFLs) are to be set to avoid vulnerability to flooding from exceedance flows (i.e flows across the surface in very wet weather upslope either off undeveloped areas or due to drainage system exceedance); exceedance flood routing is to be demonstrated in detail design submissions making use of the identified blue-green as the collection point for overland flows to be controlled prior to exit from site;
- (v) Permeable surfaces are to be provided for gently sloping surfaces around properties (i.e gradients of less than 1 in 20 (See CIRIA C753 Para 20.5.1.(b)));;
- (vi) Given the steeply sloping nature of the site swales are to be provided at the sides of roads routed along the contours. These will capture flows and mitigate rapid run off from the urbanisation of such steeply sloping land. If as many roads within the development can be routed along contours with relative slack gradients, permeable surfaces could be introduced in appropriate areas, subject to adoptability considerations; the basic concept of some primary swales is picked up on the attached drainage strategy masterplan. The swales, which will in effect provide some linear attenuation are to be provided with exceedance controls; to maximise attenuation and treatment potential and minimise velocities and potential erosion risk, check dams may be required in the swales following appropriate best practice.
- (vii) Strategic attenuation areas or interlinked feature are to be provided to restrict outgoing flows from individual areas to greenfield run off rates.

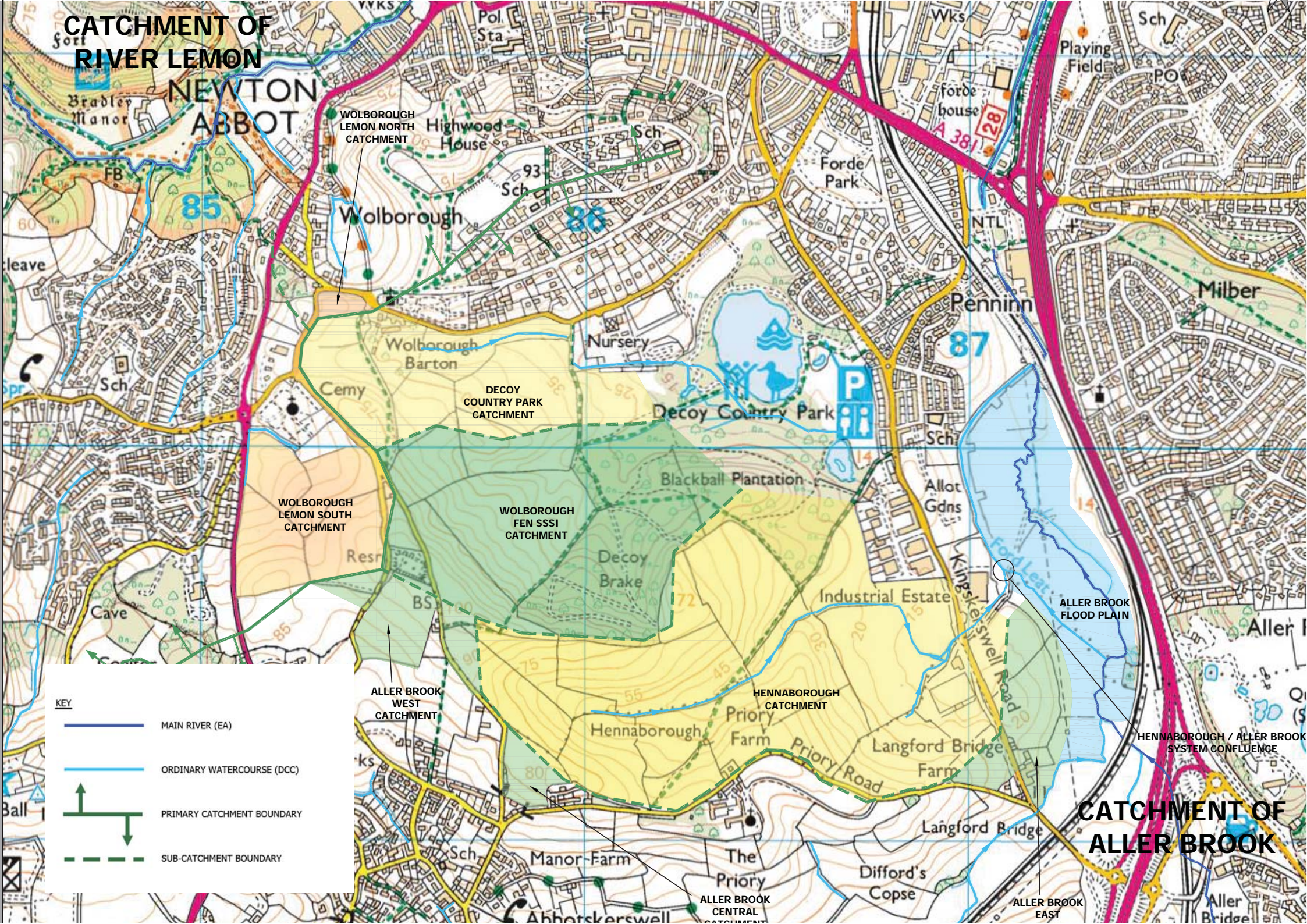
Appropriate long-term maintenance

3.48 Appropriate long-term maintenance plans for SuDS is vital to ensure performance of systems in perpetuity. It is envisaged that the following bodies will be responsible for the various elements:

- (i) Green roofs, water butts, individual property soakaways and surface water drains including SuDS (e.g permeable surfaces): individual property owners;
- (ii) Adoptable highway drains: DCC as Highway Authority;
- (iii) Adoptable surface water sewers: SWW as water utility;
- (iv) Swales: management company or SWW (depending on future approaches to SuDS adoption to be provided in SFA 8th and local policies in relation to SFA 8th);
- (v) Attenuation (including infiltration basins): management company;
- (vi) Retained watercourses including any on-line attenuation: riparian owner and/or management company.

CATCHMENT OF RIVER LEMON

NEWTON ABBOT



KEY

- MAIN RIVER (EA)
- ORDINARY WATERCOURSE (DCC)
- PRIMARY CATCHMENT BOUNDARY
- SUB-CATCHMENT BOUNDARY

CATCHMENT OF ALLER BROOK

Catchment Specific Proposals

3.49 Hennaborough Catchment:

- (a) Given the largely self-contained nature of the 'Hennaborough Catchment' (i.e it is more or less entirely within the NA3 Masterplan area) it is proposed that attenuation is provided 'on line' along the watercourse within a blue green corridor along the valley at the downstream end of each development parcel. It is far easier to provide the attenuation in a valley as the natural land form allows storage areas to be provided cost effectively with an aesthetically improved outcome and close ties into the biodiversity objectives of a blue green corridor. (Providing attenuation on steep slopes is likely to be difficult to achieve and will not be aesthetically attractive).

It is recognised that this approach requires the consent of DCC as LLFA and may require ecological investigation in due course to ensure that the blue/green corridor provides the required ecological enhancements relative to the current baseline.

It will be necessary to develop a holistic model of the development surface water drainage system and the retained watercourse in order to demonstrate (a) that outflows from the Hennaborough Catchment (downstream of the application boundary) do not exceed the present baseline at all flow states up to the 'design flood'; (b) that any retained or improved sections of watercourse can convey flows and that exceedance water is contained within the extent of the blue/green corridor at all flow states up to the 'design flood'; and (c) that any new bridges structures can convey the 'design flood' with a freeboard as agreed with DCC.

This specific catchment provides an opportunity for an exemplar blue/green corridor.

- (b) Given contamination at the southern end of the industrial estate adjacent to Kingkerswell Road, infiltration will not be an option here. Lined attenuation could be provided either on the watercourse 'on line' (as described in item (a) above) OR 'off line' in this area.

3.50 Wolborough Fen SSSI Catchment

- (a) As there are no watercourses in this catchment, although there are 2 'dry' valleys (adjoining the wood in the south and along the east west fence line in the north), it seems likely that groundwater (and surface flows in very wet weather) will run down slope into the valleys where it will normally infiltrate into the ground. It is proposed that along with SuDS as per 7 above that attenuation (designed to discharge largely by infiltration) be provided in the valleys- the attenuation ponds are to be designed to normally act as 'infiltration basins'. As a fail-safe for extreme event exceedance flows (see item (d) below), it may be necessary to provide an emergency overflow from the infiltration basins/attenuation ponds that routes water either towards the watercourse that drains the 'Decoy Country Park catchment' or, subject to agreement by Natural England (NE) into the SSSI (as would occur in the current baseline situation). Any overflow proposal requires the agreement of Devon CC as Lead Local Flood Authority. All proposals in this area will be subject to the outcome of monitoring proposals (see Appendix A). The impacts of any overflow proposal on the receiving watercourse during the 'design flood' must be assessed by a methodology acceptable to DCC, and in the case of a discharge into the SSSI, DCC and Natural England.
- (b) As it is likely that most infiltration in this catchment will take place in the valleys and a lesser amount on some of the other flatter areas, the infiltration basins/attenuation will be provided in the valleys that will be retained as blue corridors. The extent of expected infiltration will need to be established by the monitoring;

- (c) The flatter land surfaces which are not in the valleys are most suitable for residential development and the extent that infiltration based SuDS can be used in these areas will also need to be established via the monitoring, with any measures adopting the type of principles deemed acceptable as if this were a formally identified groundwater source protection area. (see EA, Groundwater Protection: Principles and Practice (GP3) -Policy G13). Compliance with GP3 Policy G13 generally requires the use of two or more SuDS treatment steps except in the case of clean surface water from roof areas alone. However, as part of the 'over-arching' strategy compliance with the requirements of Water Quality Standards 1 and 2 as defined in the SuDS Manual 2015 paras 4.3.1 and 4.3.2 and Table 4.3 is necessary which would normally also secure compliance with GP3 policy G13.
- (d) Preliminary information indicates that relatively high groundwater levels may occur in this area. However, as it is necessary to maximise infiltration of clean-water it is likely to be necessary to relax the normal requirements for a 1m differential between the base of infiltration features and top groundwater levels which would be justified in non-sensitive locations given the extensive proposed groundwater monitoring; such a relaxation will not be permitted in the case of traditional soakaways serving individual properties. Where such relaxation is permitted, it will be necessary for it to be demonstrated that a sensible and pragmatic design approach has been adopted and any resultant 'exceedance water' can be safely stored on site or discharged via an emergency outfall as described at item (a) above.
- (e) Preliminary conclusions are that the proposals, will, if anything, increase the amount of water that can be fed by infiltration into the groundwater to drain into the SSSI.
- (f) However, there is a risk that groundwater quality would be compromised if any deviation from the policies set out in GP 3 were to be permitted.
- (g) Earthworks to accommodate the development in this location should be minimised due to the potential for such works to disrupt the baseline groundwater regime.



3.51 Decoy Country Park Catchment:

- (a) the watercourse will receive discharges from the land to the north.

If it is proposed to locate attenuation on or in close proximity to the existing watercourse it will be necessary to develop a holistic model of the development surface water drainage system and the retained watercourse in order to demonstrate (a) that outflows from the Decoy Country Park Catchment (downstream of the application boundary) do not exceed the present baseline at all flow states up to the 'design flood'; (b) that any retained or improved sections of watercourse can convey flows and that exceedance water does not generate a flow path outwith the extent of the blue/green corridor at all flow states up to the 'design flood'; and (c) that any new bridges structures can convey the 'design flood' with a freeboard as agreed with DCC and (d) an interception watercourse will be required to pick up flows entering the site from the north and route the associated 'design flood' to a point downstream of the last attenuation feature.

Alternatively, it would be acceptable to provide attenuation on the south side of the watercourse.

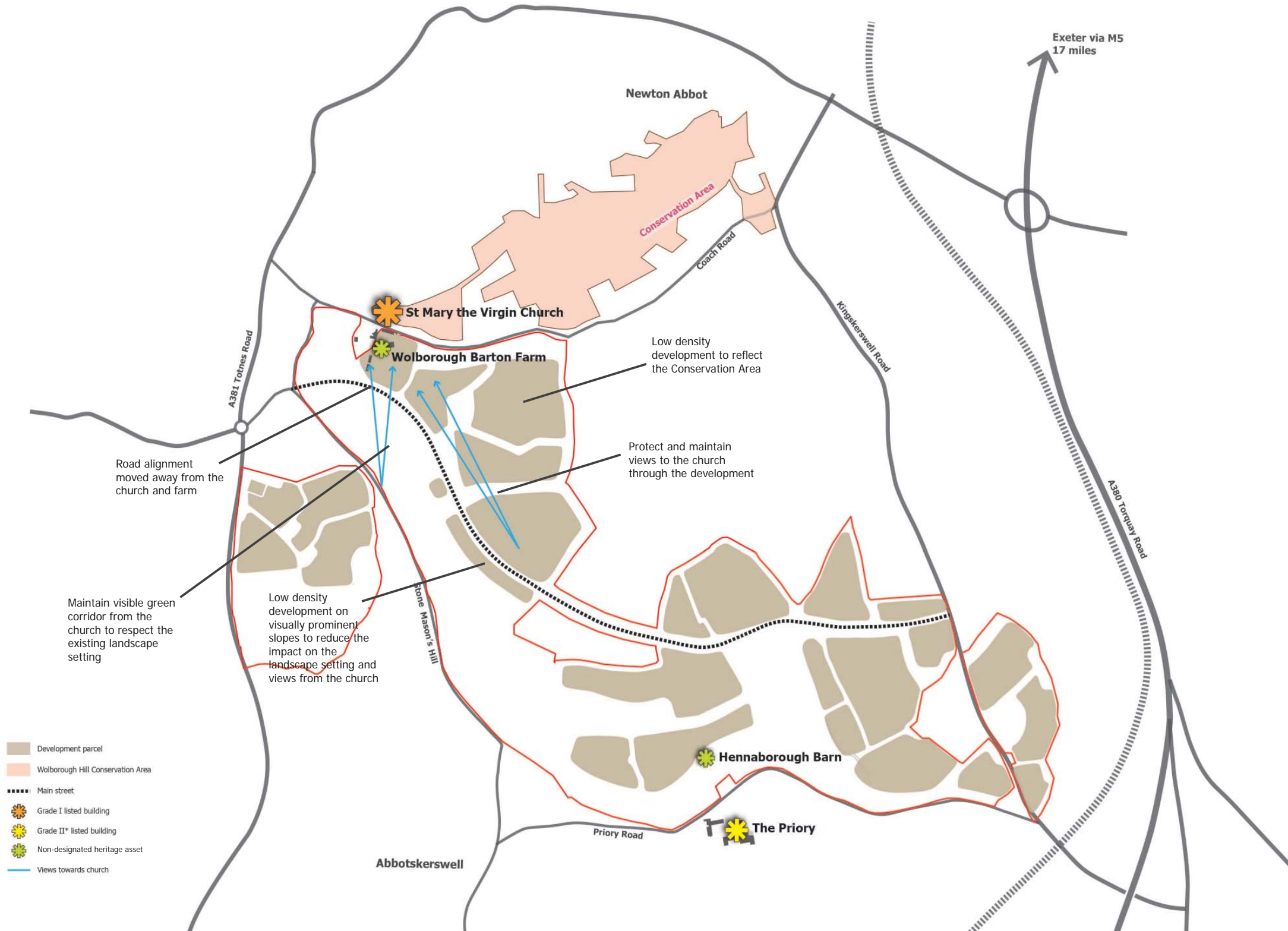
The valley is identified as a blue corridor on the attached drainage strategy masterplan;

- (b) Otherwise SuDS as per 7 above;

3.52 Wolborough (Lemon Catchment) (South): This area naturally drains into a culverted ordinary watercourse that runs through the existing urban area of Wolborough and then northwards to the River Lemon. Any future detailed application will need to investigate the capacity of the downstream system to ensure that the betterment provided by any proposed development is sufficient to address any local capacity constraints immediately adjacent to the proposals.

3.53 Aller Brook East: On site attenuation to outfall into Aller Brook

3.54 Aller Brook Flood Plain: there may be opportunities to improve the functionality of the flood plain to improve water quality, aesthetics and biodiversity.



Heritage strategy

Policy NA3 (g)

3.55 This strategy considers both the impact of the proposed development on the significance of each of the heritage assets, and the potential for maximising enhancement and/or minimising harm of the development of the site.

Church of St Mary the Virgin

3.56 The site in its current state makes a minor positive contribution to the significance of the Church of St Mary the Virgin, through the provision of rural context. Development of the site will remove a portion of the wider rural setting of the Church, and owing to direct views available to and from the asset, it is considered that this change within the wider setting will be experienced in relation to the asset. Development will remove a degree of the historic illustrative value of the setting, through eroding some of the sense of rural isolation within which the asset is experienced, although this aspect of the Church's character is largely experienced in immediate and intermediate views, with longer views placing the asset visually within the settlement of Wolborough. The views affected relate solely to those available to the south, and not the historically established views northward identified within the Conservation Area. The proposed works to the barns at Wolborough Barton (as detailed in the full application element of the hybrid application -) constitute a small degree of enhancement to the immediate setting of the Church. Development to the land south of Wolborough Barton Farm represents a significant departure from the historic footprint of the farmstead, and through this change within the wider setting of St Mary the Virgin it has the potential to cause, if unmitigated, moderate harm to the significance of the Church.

Wolborough Conservation Area

3.57 The site makes a minor positive contribution to the significance of the asset through the contribution it makes to the area's character and appearance as part of the rural setting. The presence of Decoy County Park to the south of the Conservation Area provides a substantial element of its wider setting and occludes much of the southern regions of the Site from direct intervisibility with the Conservation Area. The open field parcels to the south-west of the Conservation Area, in the vicinity of Wolborough Barton are experienced in relation to the Conservation Area and fall within its setting. Development upon them would remove their open rural character with a consequent impact on views south from College Road,

although in these views the fields are already viewed alongside residential development between College Road and Church Road. Views of the site are also available from Coach Road, within the vicinity of the Wolborough Barton Farm and the Church, and also from further east, and the erosion of the rural setting would be evident from these locations. Development upon the field parcels proximate to the Conservation Area's southern edge would have the potential to cause moderate harm to the significance of the Wolborough Conservation Area, if unmitigated.

Wolborough Barton Farm

3.58 As identified above the site in its present state makes a strong positive contribution to the significance of the asset. Conversion of the barns into a hotel will see the retention, renovation and re-purposing of the historic fabric which, whilst causing a degree of loss in relation to the historic function of the non-designated asset, serves to retain a substantial degree of historic fabric, within a sympathetic scheme of renovation, retaining the visual character of the historic buildings as far as possible. Further development to the south of the hotel, enclosing it within a proposed new village centre would see a change in the historic rural context of the farm complex. On balance, it is considered that the proposals represent a moderate level of harm to the non-designated heritage asset.

Hennaborough Barn

3.59 The site presently makes a positive contribution to the significance of the non-designated heritage asset, and development of the site will cause loss of historic context, as the character of the setting will be considerably altered from the present rural isolated location. The retention of as much historic fabric as practicable in renovation and re-purposing, and that the asset would be buffered from neighbouring development by an area of open space, then it is likely that the level of harm visited on the non-designated asset would be of a moderate level.

Mitigation measures

3.60 Unmitigated, the proposals have the potential to bring about moderate levels of harm to the significance of designated and non-designated heritage assets on, and in the immediate vicinity of, the site.

3.61 The apparent rural isolation of the Church of St Mary the Virgin is the element of its setting which must be safeguarded to ensure that its significance is conserved by the development. The conversion of the barns at Wolborough Barton Farm,

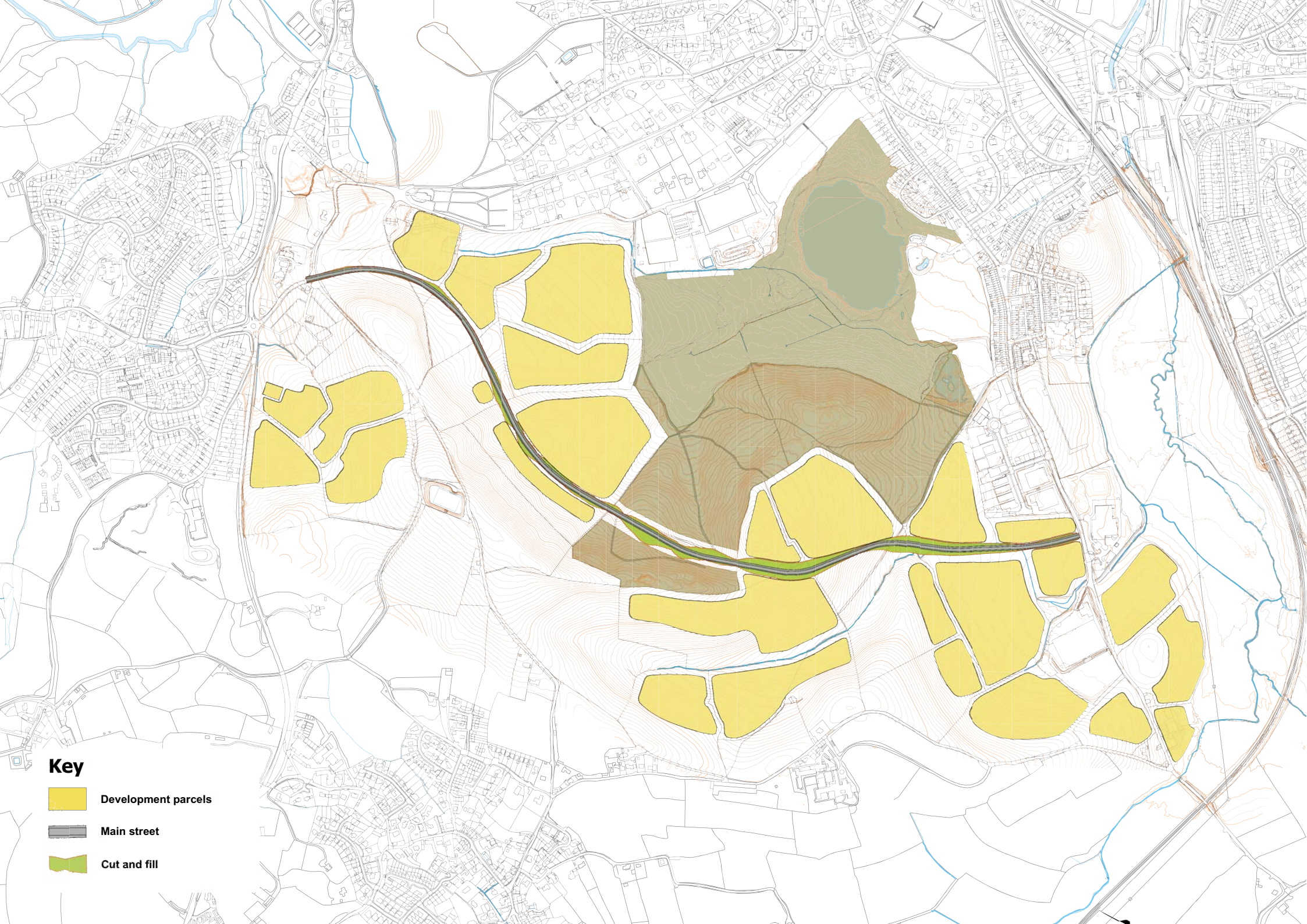
through their high level of design and minimum intervention in the built fabric, serve to neutralise harm from this element of development to the significance of the neighbouring Church, by largely retaining the character of the building group.

3.62 The development envelope (aside from the barns) should be drawn back from the vicinity of the Church, and a buffer be provided. The location of the school playing fields to the southern flank of Church Road can assist in furthering the perception of open green space and rurality to this edge of the development allocation. Careful consideration needs to be given to the boundary treatment to the playing fields as the choice of inappropriate materials could considerably alter the character of the streetscape, with consequent negative effect on the setting of the Church.

3.63 The impact of the neighbourhood hub should be considered and how the scale and massing of the buildings are designed in this context to reduce harm. Wolborough Hill CA is characterised by large detached villas in spacious, heavily planted garden plots, and a reflection of this character within the north-eastern field parcel of the site would help to integrate the development proposals into the asset's setting. Residential development in this area should be of perceivably lower density. The use of apartments within villa-type blocks could be an approach employed to achieve the required density, but a terraced approach to the layout should be avoided. The use of tree-planting to soften urban character is advised, and avoidance on over-reliance on linear grid street planning is recommended. Further work is being commissioned to determine the significance of the heritage assets.

Archaeology

3.64 NA3 lies in an area of archaeological potential with regard to known prehistoric and Romano-British activity in the wider landscape. To the north-west lies Berry's Wood Iron Age hillfort and to the south-east Milber Camp, a prehistoric hillfort, both protected as Scheduled Monuments. At the north-western tip of the site is a possible medieval manorial enclosure. Within NA3 military structures, a powder-house and rifle range are recorded in the Historic Environment Record, as are industrial sites, such as quarries and a limekiln, in addition there are the sites of now abandoned farmsteads and the Kingskerswell Road within the area may have early origins as a trackway leading up to the prehistoric and Roman settlement at Aller Cross to the south. Evidence of associated field systems were found in the landscape around the Aller Cross Roman settlement and NA3 has the potential to contain evidence of earlier field systems and settlement associated with this early settlement in the vicinity.



Key

-  Development parcels
-  Main street
-  Cut and fill

Main Street Design

Policy NA3 (e)

3.65 The site is located south of Newton Abbot between Ogwell and Totnes Road (A381) to the west and the Kingskerswell road to the east. The topography of the proposed development is very challenging and typically has gradients in excess of 10% (1in10). Other constraints are centred around the main street running through Decoy Brake and the ability to provide a multi-use main street for all users while considering traffic speeds and the overall masterplan.

The design parameters for the main street are based on the following technical guidance documents:

- Manual for Streets 1, Manual for Streets 2
- Highways in Residential and Commercial Estate – Design Guide, produced by Devon CC
- DMRB

A number of alternative road options for the main street alignment have been investigated and discussed with DCC and the landowner groups. The design proposals for the preferred alignment are based on the technical guidance documents above and provide a robust indicative design solution which takes into account an agreed design from Infradesign. A horizontal, vertical alignment and cross sections illustrate a typical design option for the main street that can be delivered.

3.66 Indicative alignment

The key factors which need to be considered in the indicative option (shown opposite) are listed below:

All horizontal geometry complies with MFS1, MFS2 and 'Highways in Residential and Commercial Estate – Design Guide' of Devon County Council.

The horizontal alignment has been designed to the parameters set out in MfS2. This design is based on a minimum horizontal radius of 150m.

Vertical geometry complies with MfS1 & MfS2 providing a maximum gradient of 1 in 12.5 (8%). Any steeper gradients proposed during detailed design will require a Departure from Standard and will require a formal proposal to DCC for approval.

The vertical maximum alignment of 8% (1:12.5), may not be ideal for mobility users. Further design will be required for a shared footway cycleway provision, see Table 4.3.5 Gradients and Crossfalls, (Highways in Residential and Commercial Estate – Design Guide). The design guide states the following; - the gradient of cycleways may be increased to 5% for lengths up to 100m, or 7% for lengths up to 30m. [4.6.3]

The minimum vertical curve length is based on Figure 7.3.7 Vertical Curves as shown in the Highways in Residential and Commercial Estate – Design Guide.

The alignment pulls the main street back from the heritage assets in the eastern parcel.

The carriageway width is set at 6.5m, with a 3.5m shared footway cycleway on the northern side, and a 2m footway where required for development parcels on the southern side. Where no development parcels are adjacent to the link road a 2m verge has been provided. The carriageway is design at 2.5% chamber.

It is recommended that a refuge island to be included on the carriageway to ensure pedestrian safety, when crossing the road to gain access to shop and bus stops.

Embankment maximum gradient at 1:2 (50%), further earth retaining design maybe required to increase the maximum gradient along the road where it passes through the Fen.

Consideration for construction management of earthworks will be required due to the considerable extent of engineering works for the proposed main street.

Traffic calming and interface with land parcel will need further investigation. The indicative design has been based on ensuring suitable connections to the existing highway are maintained and efficient gradients to standards are used. It is anticipated that considerable earthmoving will be required in some parcels to provide acceptable internal road connections with the link road. Further investigation will be required once internal development parcels are developed.

Due regard for highway drainage and discharge will be necessary with suitable detailing.

Filter drainage, to be considered at the foot of the embankment to protect the steep slope and carriageway foundations.

Detailed designs will need to be put forward to DCC to establish compliance and approval.



- Development parcel
- Green spine
- Neighbourhood hub
- Park edge
- Green link
- Main street
- Connecting street

Part 3: Design code

Design elements

Policy NA3 criteria (a) to (n)

4.1 The following suggestive design code provides one concept for the development at Wolborough. It is not intended to be a fixed template for future development, more a starting point for subsequent design proposals. It suggests a basic framework of 4 distinct neighbourhoods - each with their own character and access to a local hub, linked by a pedestrian friendly Main Street, all set within a comprehensive green network providing opportunities for recreation and wildlife whilst helping to set the urban areas into the landscape and adjacent areas of the town.

4.2 The Main Street and green network are common features across the neighbourhoods and are summarised as follows:

Main street

The main street forms the central spine road through the development and provides access to Neighbourhoods 2, 3 and 4. It links through these neighbourhoods and provides an important gateway for the NA3 site, and a strategic route to improve connectivity between Ogwell and Kingskerswell. The Main Street provides a direct route for pedestrians, cyclists, cars and buses to cross the site. It will have a formal frontage and crossing points to enable pedestrians and cyclists to connect through the site to the wider area (see page 44).

Connecting streets

Connecting streets comprise the network of internal streets that provide access from the Main Street to serve the individual development parcels within each neighbourhood. These streets will include primary, secondary and tertiary streets, the character of which will vary to address topography and built form (see page 46).

Green Edges

The green edges include any frontage onto the woodland or park areas. Dwellings should have a positive relationship with these areas, fronting on to them wherever possible. It is anticipated that in these locations, development will be lower density apart from the central park area, where higher density development with a more formal frontage will be encouraged (see page 48).

Green links

The green links are linear green corridors within the masterplan overlooked by development to create physical and visual links between the new development and historical assets, habitats, Decoy Country Park, wider countryside and settlements of Newton Abbot and Kingskerswell. The green links are structured around key landscape assets and provide informal recreation as well as a network of cycle and footpaths. They are important elements within the new development in terms of wayfinding and legibility. Safe routes are provided along their length, providing attractive and sustainable connections through the neighbourhoods to the wider area (see page 50).

Green spine

The green spine and corridors form part of the strategic landscape framework providing an important informal green space and dark corridors to buffer the development from the nearby settlements and countryside to the south. This space will connect with the formal green links, parks and areas of play space within and adjacent to the development. Part of this area will be retained as agricultural land for grazing cattle and wildlife habitats. Public rights of way and informal footpaths will be retained through these areas and connect to the wider movement network. This is an important area for Greater Horseshoe bats and as such, dark corridors and flyways will be maintained (see page 52).

Neighbourhood hub

The neighbourhood hub is a mixed use pedestrian priority area that should be located within Neighbourhood 2 as part of the area around Wolborough Barton Farm. The form and character of the neighbourhood hub should sensitively respond to its context and look to provide a range of new community, employment, education and shopping facilities (see page 54).

Detailed guidance is provided for each character element in this section and has been carefully constructed as short, concise and accessible toolkits that are easy to use when assessing future planning applications.

Main street

Policy NA3 criteria (e)

Character

The central spine road through the development provides access to Neighbourhood Areas 2, 3 and 4. A key public transport corridor and point of arrival for residents and workers, linking through each neighbourhood and providing an important new gateway for the NA3 site. A strategic route to improve connectivity between Oghwell and Kingskerswell. The street will have a formal frontage and crossing points to enable pedestrians and cyclists to connect through the site to the wider area. It will take the form of a generous tree lined residential street in places, and in other parts a neighbourhood hub providing the focus for retail, business and community uses serving the surrounding residential areas.



Street section illustrating one of the main streets in framework master plan - the main street will feature transport links.

Design Principles

- Formal and consistent design approach;
- Dominant forms: detached and semi-detached;
- Generally 2 - 2.5 storey. Some 3+ storey units on corners;
- Housing generally set behind generous front gardens envisaged up to 5-10 m from back of footway in some areas;
- Formal frontage with vertical rhythm and symmetry associated with the local area;
- Pronounced bay, dormer windows and balconies to add variety;
- Regular building setback to provide formality;
- Buildings separated from the carriageway by grass verge (inc. tree planting), footpath and front gardens;
- On-plot parking spaces with driveways or garages behind the building frontage;
- Connections onto Old Totnes Road and Kingkerswell Road;
- Connection to the neighbourhood hub;
- Connection between the western and eastern parcels of development through Decoy Brake;
- Access to any other uses which require a Main Street to support their functions;
- No adverse impact on hydrological flows to the Wolborough Fen SSSI
- Suitable crossings over the South West Water trunk water pipe
- Sufficient bat crossings and one newt crossing should be provided.
- Cut and fill to be minimised.

Design requirements

Layout

- The Main Street will be a single carriageway road (30mph limit) designed to safely accommodate vehicles, pedestrians, cyclists and buses.
- It will have a shared footpath and cycleway running on one side with a single footpath on the other.
- The design of the public realm will mitigate the impact of vehicular traffic along the route.
- The design of the main street should carefully integrate with the neighbourhood hub and other surrounding land uses to make sure they are well connected and to provide a transition in character between the two elements.
- The design of the street should consider the street sections and illustrative layout provided.

Frontage and Access

- Vehicular access will be provided off the Main street to the adjoining residential areas, with shared drives and amenity spaces running parallel to the route to allow access to individual dwellings and the creation of positive frontage.
- Mitigate the impact of public transport movement along the route.
- In some areas the residential land parcels focus development to avoid direct access onto the link road n challenging parts of the site.

Crossings

- Traffic measures such as signalled junctions and controlled crossing points will be incorporated to reduce speed and the impact of traffic flows.
- The impact of potential east-west traffic flows will be mitigated along the route to slow traffic down and reduce the overall impact within the area.
- Sufficient bat crossings and one newt crossing to be provided.

Landscape

- The landscape treatment and public realm will provide continuity and integration between this part of the site and new development.
- Formal street trees and planting will be included on either side of the road.
- The materials, furniture and lighting should reflect the street's use and should be of a quality sympathetic to the location.

Connecting Streets

Policy NA3 criteria (e)

Character

A primary means of circulation that works with the topography of the site and minimises impacts on the site's ecological features. These streets consider all modes of transport but, in particular walking and cycling so that car travel is minimised for short trips. The streets should function as quality spaces to move through and to provide access to residential properties. The design of the streets create a safe pattern of movement according to the principles of Manual for Streets. Designed to provide natural traffic calming, a variety of street-edge treatments will be used to create different street characters. The streets should respond to the existing topography where possible and provide new viewpoints to the church and countryside.

A full hierarchy of streets is described in more detail on page 19.



Street section showing an example of a connecting street in the framework plan which incorporates sustainable drainage through the use of swales

Design Principles

- Generally 2 storey. Occasional 2.5 storey to provide variation, or to pick out focal buildings;
- Houses to have varied set backs from the carriageway to reflect the neighbourhood character;
- Streets to be fronted by a variety of different house types with terraces more common along the primary streets and more semi-detached and detached houses to be found along secondary and tertiary streets. Some cottage style terraces within the shared surface areas;
- Architecturally buildings should present a simpler aesthetic than those found on the principle frontages (eg. Main Street, Green Links or Green edge);
- On plot parking spaces and garages set back behind the building frontage. Integral garages and frontage parking where appropriate;
- Variety of façade treatments and detailing acceptable;
- Provide active street frontages where buildings directly overlook streets
- Punctuated street with architectural features and buildings of interest to encourage easy navigation;
- Shared surfaces/ mews streets should be used to provide fine grained links between the main road and secondary streets to enable a walkable block structure;
- Speeds to be limited to 20mph through careful design and detailing;
- Mews streets should be designed as attractive and safe streets to live on for access to properties
- Parking should be well overlooked from properties;
- Secondary, tertiary and mews streets should be designed for cycling within the carriageway.

Design Response

Layout

- Accommodate a single carriageway road (typically 4.5 - 5.5m wide and 20mph) with footways (typically 2m) to either side of the carriageway.
- Streets should, where possible, create framed views and keep lengths of straight carriageway to a minimum, creating a safe and welcoming environment.
- Continuous footway across side turnings to act as traffic calming and pedestrian priority feature
- Designs should reflect the function as quiet residential streets and will incorporate traffic calming measures and provide opportunities for residents to stop, rest and interact.
- Mews lanes and shared surfaces should be used to access ancillary buildings and garages and give pedestrian priority.

Frontage and Access

- Streets provide access to individual dwellings. Parking will be located primarily on plot, within driveways or garages.
- On street parking to be kept to a minimum, and typically for visitors only.
- Buildings should address the street to create an appropriate level of enclosure with a neighbourly feel.
- A range of building set backs provide variety to the street scene, front gardens ranging in size from small privacy strips to 1.2-6m incorporating frontage parking and landscaped front gardens.

Density

- A variety of detached, semi-detached and terraced properties, densities to vary according to individual neighbourhoods.

Landscape

- Informal tree planting to be provided within the street and front gardens.
- Boundary treatments to vary to reflect the character of Wolborough, including the use of hedges, and low brick walls.
- Boundary treatment should provide continuity and integration between the streets and connection neighbourhood areas.
- Swales and open drainage channels should be incorporated in appropriate places.
- Materials, furniture and lighting should be selected to reflect the streets use and status



Street section showing a tertiary street

Green edge

Policy NA3 criteria (h) and (f)

Character

Development fronts along single sided streets to woodland, parkland and amenity spaces. Development in these locations will be lower density, apart from the central park area, where higher density development formal frontage should be encouraged. Special public realm treatment including a distinctive restricted lighting strategy to emphasise their role in creating a green edge to the development and inviting access to and from landscape areas.



Street section shows the relationship between the residential and woodland areas on one of the streets on the green edge of the framework plan

Design Principles

- Generally 2 storey with occasional 2.5 storey to provide variation in the roof form;
- Housing set back envisaged around 5m from the street edge including landscaped front gardens to aid transition into the countryside;
- Detached houses in a cottage style.
- Utilise dormers, bays and projecting gables to break up the roofline.
- Vary their dimensions and materials;
- Large houses to have horizontal emphasis to façade;
- Variety in massing/scale to promote informality;
- Subtle variation in ridge and eaves heights;
- On plot parking spaces and garages set behind the building frontage

Design Response

Layout

- Single sided shared surface streets or private drives provide access to dwellings orientated to overlook the woodland and park edge, providing natural surveillance and ensuring a safe and attractive open space for users.
- A 15 metre buffer should be provided along the woodland edge.
- The transition between the proposed development and landscaped areas should be reflected in the design and surface treatment of Green Edge streets.
- The design of the street should reflect the street sections and layouts provided.

Frontage and Access

- Parking to be provided on plot, either in driveways to the side of building or garages.
- On street parking and parking to the front of dwellings to be minimised where possible, to ensure that the street is not visually dominated by car parking.
- Widths of footways and parking provision will respond to the location of steps, ramps and paths from adjacent landscapes.

Density

- Dwelling types to be typically larger detached units on large plots, to create a lower density rural edge.
- Taller buildings may be suitable in certain locations along the park edges.

Landscape

- Shared surface streets and a network of footpaths to provide access to and from the Country Park and landscape areas.
- Proposed planting to the edge of the development should be positioned to facilitate views across the site and into the Country Park from the development edge.
- Boundary treatments to include predominantly soft landscape such as trees and hedges.
- The materials, furniture and lighting should reflect the streets use and status.

Green Links

Policy NA3 criteria (f) (g) (h) (i) (m) and (n)

Character

Linear green corridors overlooked by development create physical and visual links between the new development and historical assets, habitats, the Decoy Country Park, wider countryside and settlements of Newton Abbot and Kingskerswell. Key structured landscape elements, aligned to historic views and routes and provide informal recreation as well as network of safe routes and footpaths. Attractive and sustainable connections through the neighbourhoods to the country park, town centre and wider countryside.



Street section showing a green link providing a space for neighbours to enjoy the community space around them and to allow biodiversity to thrive. It features cycleways and a wider area for activities which makes it safe for users, away from traffic.

Design Principles

- Generally 2 storey with very occasional 2.5 storey to provide variation in the roof form;
- Detached and semi detached houses in a cottage style. Utilise dormers, bays and projecting gables to break up the roofline.
- Vary their dimensions and materials;
- Central green link providing formal and informal pedestrian and cycle access routes;
- Large houses to have horizontal emphasis to façade;
- Variety in massing/scale to promote informality;
- Subtle variation in ridge and eaves heights;
- On plot parking spaces and garages set behind the building frontage;
- Safe legible routes to be provided along their length.

Design Response

Layout

- A linear central green space, varying widths, to be fronted by dwellings on both sides, accessed via a combination of shared surface street, and private drives.
- Dwellings to be orientated to overlook the central green space, providing natural surveillance and ensuring the space is safe and welcoming.

Frontage and Access

- Parking to be provided on plot, either in driveways to the side of building or garages to the rear.
- On street parking and parking to the front of dwellings to be minimised where possible, to ensure that the street is not visually dominated by car parking.
- Vehicular crossings of pedestrian routes are to be kept at a minimum, and where they do occur, large shared surface crossings will ensure the prioritisation of pedestrian movement.
- Front garden sizes to vary depending on location.
- If lighting is necessary, it must meet the bat parameter of light levels remaining below 0.5 lux.

Density

- A range of dwelling typologies including terraces, semi detached and detached properties to be provided, with emphasis on terraced and semi detached properties to provide adequate enclosure to define the space.
- The density of residential elements to reflect their central location within the wider development.

Landscape

- The Green Links will provide areas of play, improved recreational routes, SUDs features and informal planting.
- Informal tree planting and wildflower meadow planting will enhance biodiversity and provide key habitat links through the new development.
- Boundary treatments to vary to reflect the character of Wolborough, including the use of hedges, and low brick walls.
- Very important function of Green Links as dark corridors for bats

Management

- Areas grazed using cattle
- Occasional topping to avoid excessive weed growth
- Some areas managed using machinery (in combination with grazing) to produce areas more suited to recreation
- Providing arable (growing spring barley specifically) for ciril buntings. If this is not too be provided, a ciril bunting financial contribution will be needed

Green Spine

Policy NA3 criteria (f) (i) (m) and (n)

Character

Forms part of the strategic landscape framework for the development providing an important informal green space and dark corridors to buffer the development from the nearby settlements and countryside to the south. This space will connect with the formal green links, parks and areas of play space within and adjacent to the development and provide a continuous area of open space, encouraging places to gather, rest, meet and play. Public rights of way and informal footpaths run through this area and connect to the connecting streets and spaces. An important area for Greater Horseshoe Bats with flyways and dark corridors. Part of this area will be retained as agricultural land for grazing cattle.



Design Principles

- To principally provide an open 'hill top' experience with extensive views out and framed views to key landscape features such as the Church of St Mary.
- Limited or no vehicular access.
- Minimal regrading will be required in certain locations to create ramped or sloped terrace access.
- Informal play areas and seating can be accommodated with the topography.
- Provide a strong physical and visual link to the neighbourhood hub.
- Exploit links to nearby neighbouring landscape areas.
- Provide a variety of design features fostering play, performance space and healthy living.
- Connecting corridors to be retained as dark routes as bat flyways and wildlife routes.
- To generate prey and provide foraging areas for the bats through grazed pasture and new woodland.

Design Response

Layout

- Predominantly natural or semi-natural landscape, e.g. woodland, grassland, or parkland.
- Information boards and signage will show visitors where they can go within the Green spine.

Frontage and Access

- An informal car park will be provided with access from the new development
- A footpath and cycle path network will connect to the existing footpaths and cycle path network.
- The green spine will be inclusive and accessible for all.
- Provide both direct and DDA compliant routes for pedestrians through gradual changes in the level changes

Landscape

- The Green Spine will provide areas of informal play, improved recreational routes, and informal planting.
- Informal tree planting and wildflower meadow planting will enhance biodiversity and provide key habitat links through the new development.
- Boundary treatments will reflect the local character of the area utilising hedgerows simple fences or stone walling or 'estate' style metal bar fencing.
- As well as wildflower meadow planting there will be areas of grassland suitable for recreational activities and informal sports and games.

Neighbourhood hub

Policy NA3 criteria (d)

Character

A mixed use pedestrian priority centre at the west of the site. Through re-purposing the existing farm buildings and complementing these with additional new development a range of community facilities will be provided to serve new and existing communities. Located in close proximity to a new primary school, public open space and a strategic play space. Development will preserve and enhance the setting of the Grade I Listed St Mary's Church and the existing Wolborough Barton farm buildings.



An illustration showing a section through the neighbourhood hub and the main street. The hub will be an area for community events, shopping and socialising.

Design Principles

The following development and design principles apply:

- The architectural aesthetic must be sensitive to the Grade 1 listed parish church of St Mary the Virgin and its setting;
- Contain sensitively designed, predominantly single storey feature buildings and community space to become a landmark of the development;
- Integrate a mix of compatible uses to create a sustainable hub of community activity;
- Include attractive rural character supported by good pedestrian and cycle access (including safe and convenient crossing points), parking and public transport;
- Provide a distributed vertical and horizontal mix of uses including flexible commercial, retail and residential space;
- Be easily accessible and visible from the main street through NA3;
- Include high quality materials of construction in public realm areas including surfaces, landscaping and for buildings.
- Ensure retail and commercial units can be appropriately serviced;
- Local facilities will be also supported on land adjacent to Kingskerswell Road



Illustrative design ideas include:

1. Potential farm shop as a focal building
2. Opportunities for a small shared surface square should be explored adjacent to the farm shop to emphasise the buildings role as a local destination.
3. Any employment buildings or workshops should have a residential scale.
4. The layout should accommodate a suitable area for loading and parking commercial vehicles.
5. Conversion of the existing farm buildings to a hotel.
6. Views towards the church respected.

Neighbourhoods

Policy NA3 criteria (a) to (n)





Neighbourhood 4

One vision, four neighbourhoods

A thorough understanding of the site's context and landscape character has led to its division into four neighbourhood areas. It is intended that these neighbourhoods, despite having their own distinct identity will benefit from a comprehensive and highly coordinated approach to design. This presents a unique place making opportunity that will...

...Create healthy and vibrant new communities

- Through including well-designed, high-quality amenity spaces in close proximity to the places where residents live, the plans seek to provide plentiful opportunities for interaction with nature and for healthy and active lifestyles. Strategically placed formal play areas consisting of LAPS, LEAPS, NEAPS and sports pitches will create a wealth of recreation opportunities.
- The development will help to support existing local services and contribute to the local economy through job creation.
- A neighbourhood hub will be provided focused on the area around Wolborough Barton Farm to provide a central hub for the four communities, bringing people together and providing opportunities to shop locally in a high quality setting.

...Establish direct connections to encourage sustainable travel

- The design will incorporate a new bus route through the site, with the majority of the development being within a short walk of a bus stop.
- A series of green links, cycle ways and footpaths will provide direct and attractive connections between the new and existing communities including direct routes to Newton Abbot and the railway station.

...Preserve and enhance the site's existing ecological assets

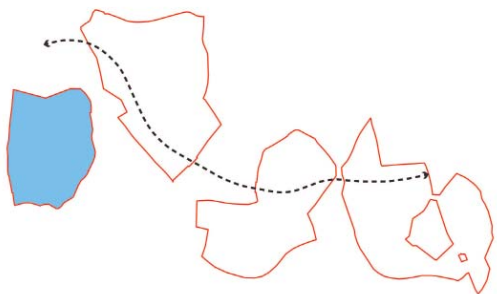
- The design will retain hedgerows, trees, watercourses and important habitats and plant new native species to create a rich ecological asset.
- The proposals will provide new and enhanced green links and areas of open space that connect natural habitats and safeguard habitats for wildlife, including the flight paths and foraging routes of greater horse shoe bats.

...Raise the bar for design quality

- The design will be sensitive to local landscape character and heritage assets by using a scale and distribution of development that minimises its visual impact when viewed from surrounding areas.
- Sustainable construction techniques will be used to minimise heat loss, increase the longevity of buildings and reduce environmental impact over their lifetime.

The following pages provide an overview of the essential design requirements for each neighbourhood as well as a foundation design code to help guide their design and appearance.

Neighbourhood 1



Neighbourhood 1: Land off Totnes Road Design objectives

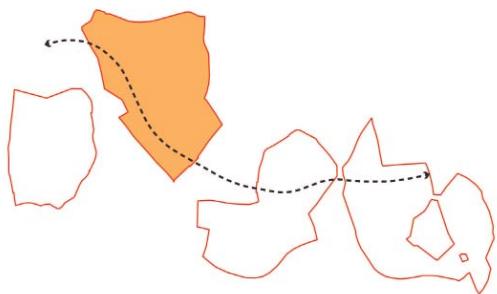
- Two access points off Totnes Road and Priory Lane
- A direct pedestrian and cycle link between this area and the neighbourhood hub at Wolborough Barton Farm.
- Community Facilities & Playing Pitches to include MUGA, LEAP and playing pitches.
- Community allotments located next to the playing pitches and play space - The allotments should be designed in accordance with the ' National Allotment Society - NAS Policy Document
- Potential for shared parking and toilet facilities between the allotments, sports pitches, and play space.
- Buffer planting, comprising native trees and hedge varieties should be provided along the site boundary
- Native hedgerows, comprising a mix of species, should be provided on the allotment site boundary.
- Employment uses will be provided to the west off Totnes Road. Employment uses will be compatible with surrounding residential properties and will primarily consist of class B1 uses.
- Industrial units should not front onto the bat corridor along Totnes Road. They should back onto this boundary, so a dark corridor can be achieved. A buffer zone should be left between the units and hedge/trees to give enough width for bat access (10m). There should be no glazing or external lighting on this side (although PIR motion activated security lighting may be permissible).



Design parameter	Neighbourhood 1: Land off Totnes Road
Design foundation/ethos	Design and layout will carefully integrate residential and employment land uses. Residential development will have strong physical and visual connections with the neighbourhood hub at Wolborough Barton Farm. Residential development to have a leafy rural character with lower densities to be found fronting on to the hill top park.
Uses	Residential predominantly located towards the east of the neighbourhood closer to Wolborough Barton Farm. Employment uses sensitive located to the west, accessed from Totnes Road. Potential for inclusion of an assisted living/extra care facility. Allotments and land for use as sports pitched located to the south of this neighbourhood. Location of an energy centre reserve site.
House sizes	1, 2, 3, and 4 bedroom units.
Pattern	Larger building plots on land fronting on to primary areas of public open space. Irregular perimeter blocks that respond to the topography of the site, maximise natural surveillance and create a clear delineation between public and private space.
Density	The density of development will vary, with higher density development (approximately 35 dph) focused around the main access roads and lower density development (approximately 25 dph) fronting on to areas of public open space.
Scale	Buildings will be predominantly 2 storeys in height with a limited number of 2.5 storey homes in locations of townscape significance.
Type/style	Detached, semi-detached and short terraces. Potential for the inclusion of an extra care/nursing home for the elderly.
Juxtaposition of buildings with each other	Form of development to become increasingly irregular on more steeply sloping parts of the site to reflect topography. More formal arrangement of development to be located along the key routes and for development facing onto key public spaces. Houses will tend to back on to employment uses to screen them from the public realm where possible.
Orientation / juxtaposition to the highway	Buildings will be orientated outwards to front on to landscape edges or inwards on to streets, public spaces or areas of parking to ensure high levels of natural surveillance. Corner buildings will avoid presenting blank frontages to the street by including doors and windows within gable ends. Buildings of increased townscape significance will mark the entrance to the neighbourhood, close long views along streets, add variety and interest to the appearance of the development and help people find their way around the site.
Relationship to / distance from the highway	Development towards the edges of the neighbourhood will commonly incorporate generous front gardens helping development transition into its parkland setting. Along primary access routes, some buildings will be located to have a close relationship with the highway set behind modest areas of semi-private space.

Design parameter	Neighbourhood 1: Land off Totnes Road
Open space character	Linear green corridors to pass through the site following existing landscape assets to provide pedestrian and cycle green links and also to serve as bat flyways. More fragmented frontages and front gardens will be introduced towards the edges to help create a parkland setting that incorporates existing landscape features. Landform and natural features will provide resources to create imaginative natural play spaces for children.
Boundary characteristics	Boundaries between public and semi-private space will predominantly be marked by iron railings, low stone or brick built walls and hedgerows.
Drainage	A SUDs system will be incorporated that respects existing drainage patterns, works with the contours of the land and provides improved opportunities for local wildlife. Ponds located between the employment and residential land uses connected to swales that follow the contours of the site.
House building materials	High-quality and durable materials and construction methods will be used. Variety will be provided in the material palette through the use of materials found in the area's vernacular buildings to include render, stone, brick and slate.
Landscape materials	Paved streets will be encouraged wherever possible to deliver a high-quality and distinctive public realm.
Street furniture	Street names and street lighting should be fixed directly to buildings wherever possible, and road markings and street furniture should be minimised to avoid clutter in the street.
Parking	Car and cycle parking will be provided in line with the DCC parking standards. Mix of parking types including some on-street parking for visitors and on-plot parking to the sides and fronts of houses. Frontage parking will more commonly be used on the edges of the site. Integral garages may be incorporated in key areas of the site. Cars and parking areas should not have a negative impact or be a visually dominant component of the street scene.
Changes in level	Abrupt level changes and retaining walls to be avoided. Changes in levels to be allowed for in back gardens wherever possible. Retaining structures will be softened wherever possible by additional planting to screen these elements.
Refuse	Suitably sized and easily accessed refuse storage areas to be provided on-plot.
Lighting	Wherever possible, lighting will be kept to a minimum and will be of a low lux level of 0.5 lux or less where lighting lies at the edge of development or close to hedgerows. Wildlife corridors will remain dark. Where these cross the road lighting will be reduced to ensure that darkness is maintained over the crossing point. Lighting elsewhere across the development should be limited to maintain a more rural character to the development

Neighbourhood 2



Neighbourhood 2: Land south of Coach Road Design objectives

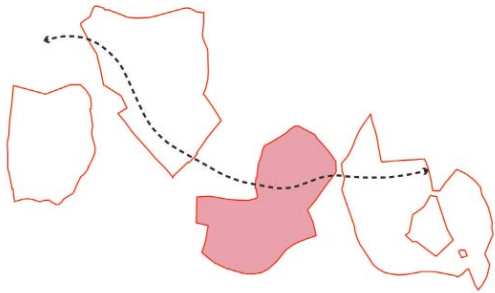
- Development will respect the setting of the Grade 1 listed church of St Mary's church and Wolborough Hill Conservation area through the use of sensitively designed lower density development on elevated slopes and areas of the neighbourhood closer to Coach Road.
- A series of green links structured around existing landscape assets will assist in creating neighbourhood that is well connected to a strategic network of footpaths and cycleways.
- A neighbourhood hub will provide a varied community resource that will be well connected to the surrounding area for the benefit of new and existing residents.
- A strategic children and young person's play space should be provided in close proximity to the primary school and local centre and should benefit from high levels of natural surveillance from surrounding residential properties.
- Development will provide a minimum of 15m buffer to existing woodland to allow for accessible natural greenspace, attenuations areas and improved wildlife habitats.
- Development will be carefully designed and positioned on the elevated and more visually-prominent areas, especially for those building fronting on to the main street.
- A series of green links structured around existing landscape assets will assist in creating neighbourhood that is well connected to a strategic network of footpaths and cycleways.
- Development will retain a rural corridor to its southern and western edges which will comprise of retained farmland pasture and open fields for habitat creation. This buffer area to the development will be punctuated throughout with retained and improved hedgerows and new woodland habitat.



Design parameter	Neighbourhood 2: Land off Coach Road
Design foundation/ethos	Development responsive to the adjacent conservation area and setting of St Mary's church. Lower densities, to be found nearer to the conservation area and on more steeply sloping land. The neighbourhood will be the location of the site's mixed-use neighbourhood hub and primary school building along with strategic play space to serve new and existing residents.
Uses	Residential, primary school, retail, community uses and other appropriate uses to complement the neighbourhood hub.
House sizes	1, 2, 3, 4 and 5 bedroom units.
Pattern	Larger building plots on land closer to Coach Road and on more elevated parts of the site to reflect the adjacent Conservation Area. Some use of split level housing on more steeply sloping parts of the site. Irregular perimeter blocks that respond to the topography of the site, maximise natural surveillance and create a clear delineation between public and private space.
Density	The density of development will vary, with higher density development (approximately 32 dph) focused around the main access roads and lower density development (approximately 20 dph) at the periphery – particularly on more elevated parts of the site and on the park edges.
Scale	Buildings will be predominantly 2 storeys in height with a limited number of 2.5 and 3 storey homes in locations of townscape significance.
Type/style	Detached, semi-detached and short terraces. Potential for the inclusion of an extra care/nursing home for the elderly, and apartments along the main street.
Juxtaposition of buildings with each other	Form of development to become more irregular on more steeply sloping parts of the site to reflect topography. More formal arrangement of development to be located along the main street and for development facing onto key public spaces.
Orientation / juxtaposition to the highway	Buildings will be orientated outwards to front on to landscape edges or inwards on to streets, public spaces or areas of parking to ensure high levels of natural surveillance. Corner buildings will avoid presenting blank frontages to the street by including doors and windows within gable ends. Buildings of increased townscape significance will mark the entrance to the neighbourhood, close long views along streets, add variety and interest to the appearance of the development and help people find their way around the site.
Relationship to / distance from the highway	Varied. Development towards the edges of the site will commonly incorporate generous front gardens helping development transition into its parkland setting. Along primary routes, some buildings will be located to have a close relationship with the highway set behind modest areas of semi-private space or in some instances, fronting directly on to the edge of the pavement.

Design parameter	Neighbourhood 2: Land off Coach Road
Open space character	Linear green corridors to pass through the site following existing landscape assets and valleys to create physical and visual links to Decoy Brake and also to serve as bay flyways. More fragmented frontages and front gardens will be introduced towards the edges to help create a parkland setting that incorporates existing landscape features. Landform and natural features will provide resources to create imaginative natural play spaces for children.
Boundary characteristics	Boundaries between public and semi-private space will predominantly be marked by iron railings, low stone and hard surfaces strips. The use of hedges for boundaries will be more commonly used through and towards the edges of the site.
Drainage	A SUDs system will be incorporated that respects existing drainage patterns, works with the contours of the land and provides improved opportunities for local wildlife. Ponds located within low lying valleys and on the edges of Decoy Brake.
House building materials	High-quality and durable materials and construction methods will be used. Variety will be provided in the material palette through the use of materials found in the area's vernacular buildings to include render, stone, brick and slate.
Landscape materials	Paved streets will be encouraged wherever possible to deliver a high-quality and distinctive public realm.
Street furniture	Street names and street lighting should be fixed directly to buildings wherever possible, and road markings and street furniture should be minimised to avoid clutter in the street.
Parking	Car and cycle parking will be provided in line with DCC parking standards. Mix of parking types including some on-street parking for visitors and on-plot parking to the sides and fronts of houses. Frontage parking will more commonly used on the edges of the site. Integral garages may be incorporated on more steeply sloping areas of the site where split level houses are used. Drop-off arrangements will be incorporated into the site to minimise the potential for ad hoc waiting during pupil pick up / drop off. Site parking for staff will be provided on the school site as required. Cars and parking areas should not have a negative impact or be a visually dominant component of the street scene.
Changes in level	Abrupt level changes and retaining walls to be avoided. Changes in levels to be allowed for in back gardens wherever possible. Use of split level housing may be required to step down slopes. Retaining structures will be softened wherever possible by additional planting to screen these elements.
Refuse	Suitably sized and easily accessed refuse storage areas to be provided on-plot. Apartments to be given secured storage areas.
Lighting	Wherever possible, lighting will be kept to a minimum and will be of a low lux level of 0.5 lux or less where lighting lies at the edge of development or close to hedgerows. Wildlife corridors will remain dark. Where these cross the road lighting will be reduced to ensure that darkness is maintained over the crossing point. Lighting elsewhere across the development should be limited to maintain a more rural character to the development

Neighbourhood 3



Neighbourhood 3: Land east of Decoy Brake Design objectives

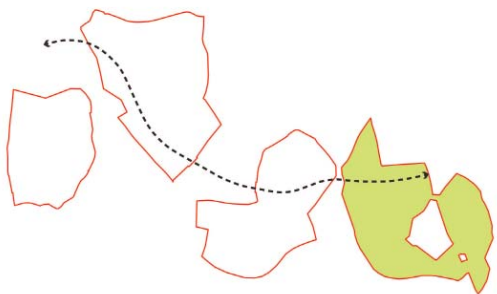
- Development should be structured to avoid the most steeply sloping areas of land and set back from the southern boundary to provide a generous landscape corridor.
- An existing watercourse passing in an east-west direction through this neighbourhood will be retained and enhanced to provide an attractive green link.
- Development will provide a minimum of 15m buffer to existing woodland to allow for accessible natural greenspace, attenuation areas and improved wildlife habitats.
- A SUDs system will be incorporated that respects existing drainage patterns, works with the contours of the land and provides improved opportunities for local wildlife.
- A series of connecting streets will closely follow the site's contours to minimise cut and fill and provide a clear 'sense of place'.
- A strong definition of public and private space will be achieved by ensuring development fronts on to areas of open space, footpath links and highways, helping to increase natural surveillance and aid crime prevention.
- Development will retain a rural corridor to its southern edge which will comprise of retained farmland pasture and open fields for habitat creation. This buffer area to the development will be punctuated throughout with retained and improved hedgerows and new woodland habitat.



Design parameter	Neighbourhood 3: Land east of Decoy Brake
Design foundation/ethos	The character of neighbourhood will be defined by its relationship with Decoy Brake and also the small river corridor that passes through it in an east-west direction. Development will have a positive relationship with its woodland and parkland setting fronting on to its green edges.
Uses	Residential. Location of a combined NEAP and LEAP to wards it's western edge.
House sizes	2, 3, 4 and 5 bedroom units.
Pattern	Some use of split level housing on more steeply sloping parts of the site. Irregular perimeter blocks that respond to the topography of the site, maximise natural surveillance and create a clear delineation between public and private space.
Density	The density of development will vary, with higher density development (approximately 35 dph) focused around the main access roads and lower density development (approximately 20 dph) at the periphery – particularly on more steeply sloping parts of the site and on the park edges.
Scale	Buildings will be predominantly 2 storeys in height with a limited number of 2.5 homes in locations of townscape significance.
Type/style	Detached, semi-detached and short terraces. Small apartments may be appropriate along the main street.
Juxtaposition of buildings with each other	Form of development to become more irregular on more steeply sloping parts of the site to reflect topography. More formal arrangement of development to be located along the main street and for development facing onto key public spaces.
Orientation / juxtaposition to the highway	Development will front onto the main street wherever possible. Buildings will be orientated outwards to front on to landscape edges or inwards on to streets, public spaces or areas of parking to ensure high levels of natural surveillance. Corner buildings will avoid presenting blank frontages to the street by including doors and windows within gable ends. Buildings of increased townscape significance will mark the entrance to the neighbourhood, close long views along streets, add variety and interest to the appearance of the development and help people find their way around the site.
Relationship to / distance from the highway	Development towards the edges of the site will commonly incorporate generous front gardens helping development transition into its landscape setting. Along primary access routes, some buildings will be located to have a close relationship with the highway set behind modest areas of semi-private space or in some instances, fronting directly on to the edge of the pavement.

Design parameter	Neighbourhood 3: Land east of Decoy Brake
Open space character	Linear green corridors to pass though the site following existing landscape assets and valleys to create physical and visual links to Decoy Brake and also to serve as bat flyways. More fragmented frontages and front gardens will be introduced towards the edges to help create a parkland setting that incorporates existing landscape features. Landform and natural features will provide resources to create imaginative natural play spaces for children.
Boundary characteristics	Boundaries between public and semi-private space will predominantly be marked by iron railings, low stone and hard surfaces strips. The use of hedges for boundaries will be more commonly used towards the edges of the site.
Drainage	An existing stream will be used as an important part of the drainage strategy for this neighbourhood to create a multifunctional blue corridor.
House building materials	High-quality and durable materials and construction methods will be used. Variety will be provided in the material palette through the use of materials found in the area's vernacular buildings to include render, stone, brick and slate.
Landscape materials	Paved streets will be encouraged wherever possible to deliver a high-quality and distinctive public realm.
Street furniture	Street names and street lighting should be fixed directly to buildings wherever possible, and road markings and street furniture should be minimised to avoid clutter in the street.
Parking	Car and cycle parking will be provided in line with the DCC parking standards. Mix of parking types including some on-street parking for visitors and on-plot parking to the sides and fronts of houses. Frontage parking will more commonly used on the edges of the site. Integral garages may be incorporated on more steeply sloping areas of the site where split level houses are used. Cars and parking areas should not have a negative impact or be a visually dominant component of the street scene.
Changes in level	Abrupt level changes and retaining walls to be avoided. Changes in levels to be allowed for in back gardens wherever possible. Use of split level housing may be Frontages to step down slopes. Retaining structures will be softened wherever possible by additional planting to screen these elements.
Refuse	Suitably sized and easily accessed refuse storage areas to be provided on-plot. Apartments to be given secured storage areas.
Lighting	Wherever possible, lighting will be kept to a minimum and will be of a low lux level of 0.5 lux or less where lighting lies at the edge of development or close to hedgerows. Wildlife corridors will remain dark. Where these cross the road lighting will be reduced to ensure that darkness is maintained over the crossing point. Lighting elsewhere across the development should be limited to maintain a more rural character to the development

Neighbourhood 4



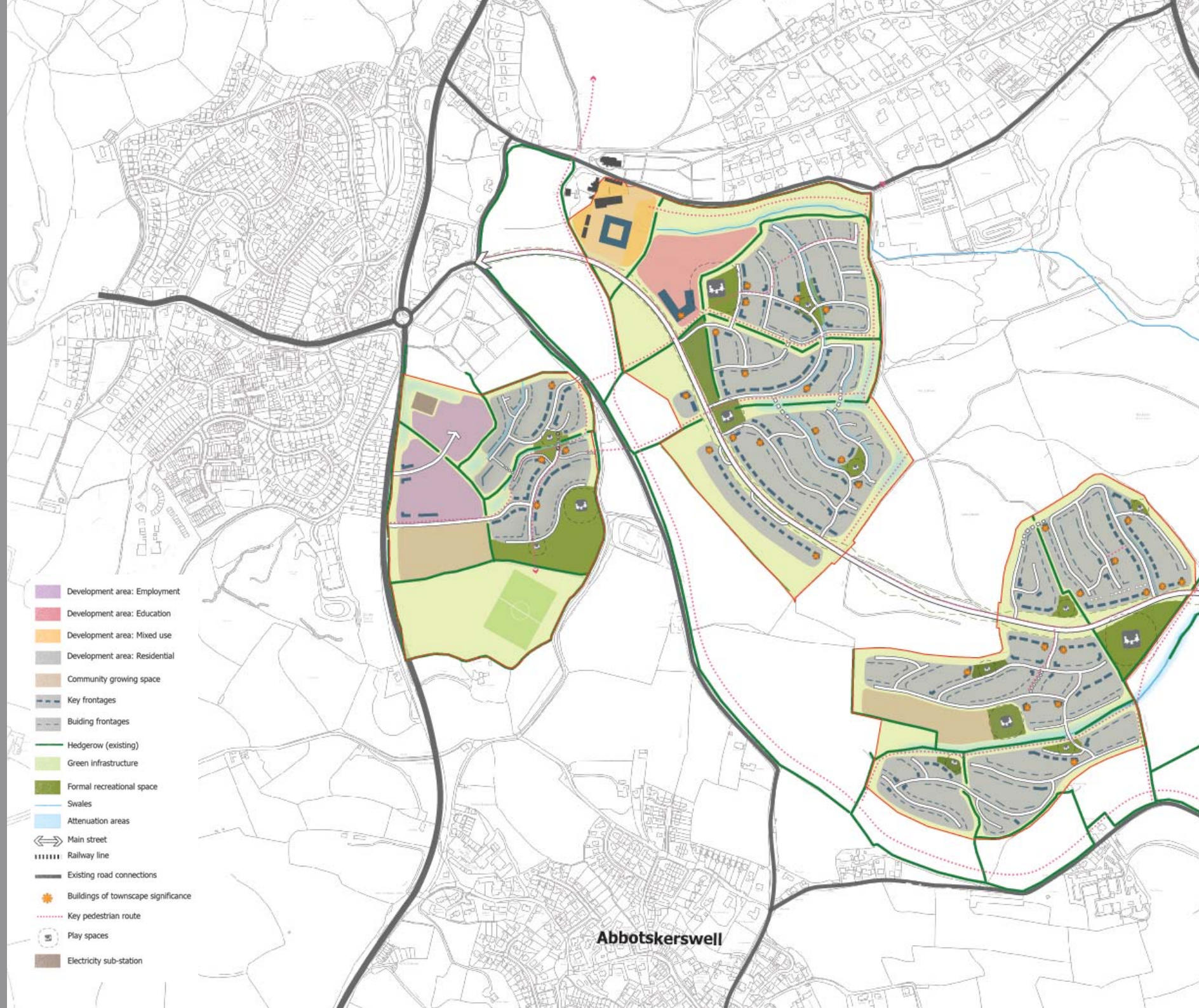
Neighbourhood 4: Land off Kingskerswell Road Design objectives

- Employment land will be provided to the east of Kingskerswell Road. These employment sites will include an appropriate mix of classes B1, B2 and B8 uses.
- A neighbourhood acility will provide close to Kingskerswell Road to serve the east of the site as well as those passing the site and based on nearby employment sites.
- A series of green links structured around existing landscape assets will assist in creating neighbourhood that is well connected to a strategic network of footpaths and cycleways.
- A SUDs system will be incorporated that respects existing drainage patterns, works with the contours of the land and provides improved opportunities for local wildlife.
- A series of connecting streets will closely follow the site's contours to minimise cut and fill and provide a clear 'sense of place'.
- A strong definition of public and private space will be achieved by ensuring development fronts on to areas of open space, footpath links and highways, helping to increase natural surveillance and aid crime prevention.
- Development will retain a rural corridor to its southern edge which will comprise of retained farmland pasture and open fields for habitat creation. This buffer area to the development will be punctuated throughout with retained and improved hedgerows and new woodland habitat.



Design parameter	Neighbourhood 4: Land off Kingskerswell Road
Design foundation/ethos	Development responsive to the adjacent Kingskerswell Road and Priory Lane. Lower densities, to be found nearer to Priory Lane and on more steeply sloping land. The neighbourhood will be located on both sides of Kingskerswell Road to serve new and existing residents and workers.
Uses	Residential, secondary school, retail and employment uses
House sizes	1, 2, 3 and 4 bedroom units.
Pattern	Larger building plots on land fronting on to the green spine and parkland areas. Some use of split level housing on more steeply sloping parts of the site. Irregular perimeter blocks that respond to the topography of the site, maximise natural surveillance and create a clear delineation between public and private space.
Density	The density of development will vary, with higher density development (approximately 38 dph) focused around the main access roads and lower density development (approximately 20 dph) at the periphery – particularly on more elevated parts of the site and on the park edges.
Scale	Buildings will be predominantly 2 storeys in height with a limited number of 2.5 and 3 storey homes in locations of townscape significance.
Type/style	Detached, semi-detached and short terraces. Potential for the inclusion of an extra care/nursing home for the elderly and apartments along the main street and green edges.
Juxtaposition of buildings with each other	Form of development to become more irregular on more steeply sloping parts of the site to reflect topography. More formal arrangement of development to be located along the main street and for development facing onto key public spaces.
Orientation / juxtaposition to the highway	Buildings will be orientated outwards to front on to landscape edges or inwards on to streets, public spaces or areas of parking to ensure high levels of natural surveillance. Corner buildings will avoid presenting blank frontages to the street by including doors and windows within gable ends. Buildings of increased townscape significance will mark the entrance to the neighbourhood, close long views along streets, add variety and interest to the appearance of the development and help people find their way around the site.
Relationship to / distance from the highway	Varied. Development towards the edges of the site will commonly incorporate generous front gardens helping development transition into its parkland setting. Along primary access routes, some buildings will be located to have a close relationship with the highway set behind modest areas of semi-private space or in some instances, fronting directly on to the edge of the pavement.

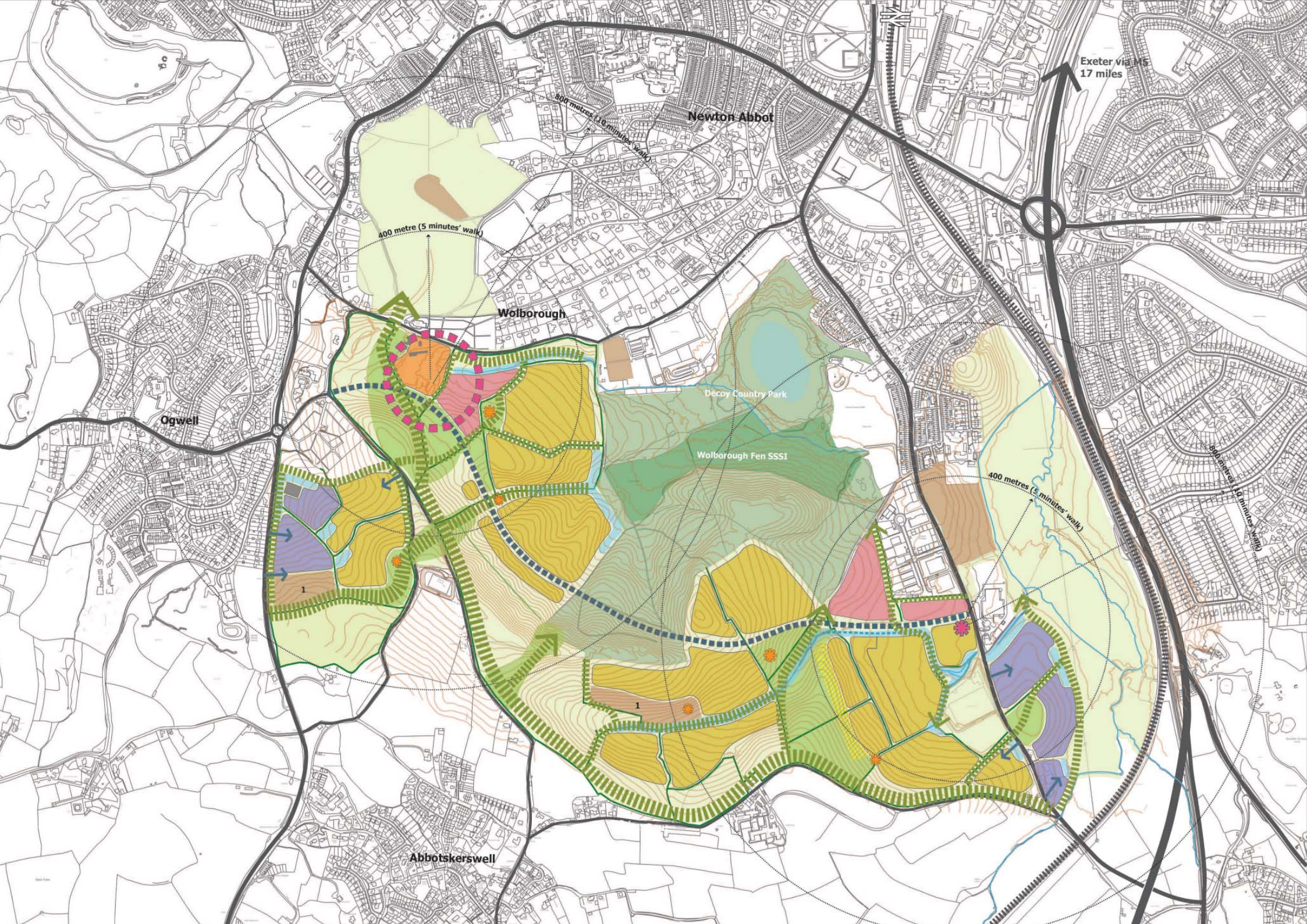
Design parameter	Neighbourhood 4: Land off Kingskerswell Road
Open space character	Linear green corridors to pass through the site following existing landscape assets and valleys to create physical and visual links to Decoy Brake and also to serve as bat flyways. More fragmented frontages and front gardens will be introduced towards the edges to help create a parkland setting that incorporates existing landscape features. Landform and natural features will provide resources to create imaginative natural play spaces for children.
Boundary characteristics	Boundaries between public and semi-private space will predominantly be marked by iron railings, low stone or brick built walls and hard surfaces strips. The use of hedges for boundaries will be more commonly used towards the edges of the site.
Drainage	Ponds located within low lying valleys and along existing water course.
House building materials	High-quality and durable materials and construction methods will be used. Variety will be provided in the material palette through the use of materials found in the area's vernacular buildings to include render, stone, brick and slate.
Landscape materials	Paved streets will be encouraged wherever possible to deliver a high-quality and distinctive public realm.
Street furniture	Street names and street lighting should be fixed directly to buildings wherever possible, and road markings and street furniture should be minimised to avoid clutter in the street.
Parking	Car and cycle parking will be provided in line with the DCC parking standards. Mix of parking types including some on-street parking for visitors and on-plot parking to the sides and fronts of houses. Frontage parking will more commonly used on the edges of the site. Integral garages may be incorporated on more steeply sloping areas of the site where split level houses are used. Drop-off arrangements will be incorporated into the school site to minimise the potential for ad hoc waiting during pupil pick up / drop off. Site parking for staff will be provided on the school site as required. Cars and parking areas should not have a negative impact or be a visually dominant component of the street scene.
Changes in level	Abrupt level changes and retaining walls to be avoided. Changes in levels to be allowed for in back gardens wherever possible. Use of split level housing may be Frontages to step down slopes. Retaining structures will be softened wherever possible by additional planting to screen these elements.
Refuse	Suitably sized and easily accessed refuse storage areas to be provided on-plot. Apartments to be given secured storage areas.
Lighting	Wherever possible, lighting will be kept to a minimum and will be of a low lux level of 0.5 lux or less where lighting lies at the edge of development or close to hedgerows. Wildlife corridors will remain dark. Where these cross the road lighting will be reduced to ensure that darkness is maintained over the crossing point. Lighting elsewhere across the development should be limited to maintain a more rural character to the development



- Development area: Employment
- Development area: Education
- Development area: Mixed use
- Development area: Residential
- Community growing space
- Key frontages
- Building frontages
- Hedgerow (existing)
- Green infrastructure
- Formal recreational space
- Swales
- Attenuation areas
- Main street
- Railway line
- Existing road connections
- Buildings of townscape significance
- Key pedestrian route
- Play spaces
- Electricity sub-station

Abbotskerswell





Part 4: The way forward

5.1 NA3 is a strategic site which is required to deliver key infrastructure and a mix of uses to ensure the development of a sustainable and healthy community. It is therefore important that the area is planned as a whole. It is acknowledged that developments may be brought forward in smaller parcels. However, it is essential that key infrastructure for roads, wildlife and community facilities are properly planned in a comprehensive manner.

5.2 The DFP and supporting information identifies the design principles and requirements for the site to bring forward an appropriate and flexible design solution for Wolborough. It is recognised that implementing the development proposals will be challenging, respecting the landscape biodiversity and heritage assets and meeting the range of policy requirements, but that the DFP and supporting design guidance identify how it can be delivered.

5.3 This section sets out the minimum expectations relating to the delivery of infrastructure, utilities and facilities across the site over the following pages. Any triggers relating to numbers of dwellings refer to the whole site unless otherwise stated by reference to the neighbourhood areas.

Need	Description	When	Mechanism	Lead Delivery Organisation
Masterplan	A comprehensive landscape and design led masterplan for the strategic allocation	Required prior to the determination of any application for development as part of the allocation.	N/A	TDC DCC Developer
Housing				
Affordable Housing	20% of dwellings provided as Affordable Dwellings 75% as Affordable Rented and 25% as Intermediate Affordable Housing	50% of Affordable Housing transferred at 50% occupation of dwellings per development phase. 100% of Affordable Housing transferred at 75% occupation per development phase.	S106	
Self-build/Custom Build	Minimum of 5% of total number of dwellings as Custom and Self Build plots Locations to be identified on a Phase Plan showing approximate area and access points	Proportionate number of Self Build and Custom Build plots serviced and marketed upon completion of 25% of dwellings within Reserved Matters development phase.	S106	
Through Route				
	Road link through the development connecting the A380 (South Devon Highway) with the A381 (Old Totnes Road) and with community facilities, including prioritised segregated foot and cycle way	Connection to the A381 prior to the occupation of any dwellings on the western part of NA3. Connection onto the Kingskerswell Road prior to the occupation of any dwellings on the eastern part of NA3. Road across neighbourhood areas 2 and 3 to be completed prior to the completion of 200 homes in neighbourhoods 1 - 3. Road completed to boundaries of neighbourhood area 4 prior to the completion of 50 dwellings in neighbourhood area 4. Remaining highway capacity to the east of the allocation (450 dwellings, or what is remaining when both areas are under development) to be shared between neighbourhood areas 3 and 4 on a pro-rata developable area basis. A proportionate land area based contribution towards the construction of the section of road through the woodland.	Developer / S106	Developer
Open Space				
Neighbourhood Equipped Areas of Play (NEAPs)	2 NEAPs	In phase with development	S106	Developer
Locally Equipped Areas of Play (LEAPs)	8 LEAPs at 375sqm each.	On completion of dwellings within adjoining parcels of land	S106	Developer
Multi Use Games Area (MUGA)	1 on site MUGA at 2,300sqm	To be delivered on completion of 500 dwellings	S106	Developer
Playing Pitches	Provision for 4ha of playing pitches and/or enhancements to capacity existing facilities	On completion of 700 dwellings	S106	Developer
Allotments	2.7 ha to be provided collectively.	On completion of 500 dwellings	S106	Developer

Need	Description	When	Mechanism	Lead Delivery Organisation
Employment				
Old Totnes Road	B1 Employment units totalling a minimum of 0.5 hectares employment land and associated parking.	Site serviced and commencement of marketing prior to the occupation of 25% of dwellings in this development phase. If there is no uptake before the expiration of the marketing period (3 years) the land is to be offered to the Council before being returned to the landowner.	Developer	Developer
Employment South of CLS Laundry, Kingskerswell Road	B1, B2 and B8 employment uses totalling a minimum of 3ha employment land and associated parking.	Site serviced and commencement of marketing prior to the occupation of 100 dwellings in Neighbourhood Area 4 of the allocation. If there is no uptake before the expiration of the marketing period (3 years) the land is to be offered to the Council before being returned to the landowner.	Developer	Developer
Neighbourhood Hub, Community Building and Retail				
Neighbourhood Hub (adjacent to Coach Road)	Mix uses comprising of use classes A1/A3/A4/A5/B1/D1/C3 totalling a minimum of 1.6 hectares.	Site serviced, building 'shells' to be provided and commencement of marketing prior to the occupation of 500 dwellings on Neighbourhood Area 1-3 of the allocation. If there is no uptake before the expiration of the marketing period (3 years) the land is to be offered to the Council before being returned to the landowner.	Developer	Developer
Class A Floorspace	Class A uses totalling a maximum of 1250m2 floorspace (no more than 100m2 to be used for hot takeaway (A5) uses) within the local centre. This provision will be subject to retail impact assessment	Building shells to be constructed and marketed prior to the occupation of 400 dwellings in Neighbourhood Area 1-3. If no purchase is made before the expiration of the marketing period (3 years) units are to be offered to the Council before being returned to the landowner. Units should be designed in such a way that allows for their conversion to residential dwellings should no Class A use be forthcoming.	Developer	Developer
Community Building	D1 or D2 uses totalling approximately 1250m2 within a building provided as part of the neighbourhood hub.	Serviced land and finished building "shell" to be provided and transferred to responsible body on completion of 300 dwellings in Neighbourhood Area 1-3.	S106	Developer and responsible body (e.g. community trust, the Town Council or other appropriate legal body for ownership and/or management.
Education				
Primary School	1.8 hectares of land within Neighbourhood Area 2 adjacent to the local centre for the provision of a new 210 to 420 place Primary School including early years provision (26 places).	Freehold interest and construction access secured upon completion of 100 dwellings Site to be accessed and serviced upon completion of 250 dwellings.	CIL	DCC
Secondary Provision	3.2 hectares of land within Neighbourhood Area 4 Secondary education provision on a site of 3.2ha	Freehold interest and construction accessed secured upon completion of 100 dwellings. Accessed and service upon completion of 250 dwellings.	CIL	DCC

Need	Description	When	Mechanism	Lead Delivery Organisation
Safe pedestrian links	Safe pedestrian connections to Newton Abbot town centre and railway station	In line with development	Developer	Developer
Internal walking and cycling routes	A network of walking and cycling routes at 3m width with machine laid tarmac or other suitable surface	In line with development	S106	Developer
Sustainable Transport provision	Bus shelters Electric Car points Bike Stands	In line with development		Developer
Travel Plan Contribution	A financial contribution per dwelling towards the cost of the County Council delivering the Travel Plan	Upon completion of each Neighbourhood Area of development	S106	Developer
Care Home Land				
Care Home	Land to provide a Care Home in Neighbourhood Area 1 to a total of no less than 0.63 hectares to accommodate a building of up to 5,500m2 floorspace.	Site serviced and commencement of marketing prior to the occupation of 60% of dwellings in western development parcel. If no purchase is made before the expiration of the marketing period (3 years) the land is to be offered to the Council before being returned to the landowner. The land may form part of the employment provision and can be used for other employment uses if not as a care home.	Developer	Developer
Biodiversity				
Biodiversity mitigation and compensation	<ul style="list-style-type: none"> Planting of new orchards, areas of woodland, shrubs and wildflowers Reinforcement of tree lines and hedgerows Bat roosts Long term ecological monitoring 	In line with development	S106	Developer
Greater Horseshoe Bat Mitigation	Bespoke Greater Horseshoe Bat Mitigation Plan reflecting content set out by the HRA Screening Report	In line with development	Developer	Developer
Curlew Bunting habitat	Avoid and mitigate for impacts on Curlew Buntings on the site. If the current number of breeding birds cannot be maintained a compensation contribution must be made.	In line with development	Developer/S106	Developer/TDC
Wolborough Fen monitoring	Ongoing of programme of Fen monitoring as set out in Framework	Prior to construction; throughout development within the Fen catchment; and post construction	Developer	Developer / TDC / NE / DWT
Other contributions				
Coach Road Calming Works	Financial contribution towards the cost of the County Council carrying out traffic calming works along Coach Road	Upon completion of Main Street	Developer	Developer

Need	Description	When	Mechanism	Lead Delivery Organisation
Servicing and Utilities				
Gas Supply	On site provision of new pipe work connections to local gas supply	In line with development	Developer Commercial	Wales and West Utilities/Developer
Electric Supply	On site provision of new cables to local electricity supply	In line with development	Developer Commercial	Western Power Distribution/Developer
Broadband	Installation of fibre optic ducting and cables to premises which are capable of providing open access telecommunications infrastructure. This will support a choice of telecommunications service providers in the market	In line with development	Developer Commercial	Developer Telecommunications Operations
Waste and portable water service provision	Pipe laying and connections to main water supply and sewage treatment works.	In line with development	Developer Commercial	Developer South West Water
Community recycling facilities	Space for on-site recycling facilities	In line with development	Developer	Developer

Appendix:

Wolborough Fen Monitoring Strategy



Appendix A Wolborough Fen SSSI Catchment: Draft Groundwater Monitoring Strategy

The groundwater monitoring strategy (GWMS) for the Wolborough Fen SSSI Catchment is a specific strategy that forms part of the wider SuDS Strategy that has been developed to support the proposed development of the Wolborough Allocation (NA3) as a whole. Therefore, this GWMS should be read in conjunction with the wider NA3 SuDS Strategy.

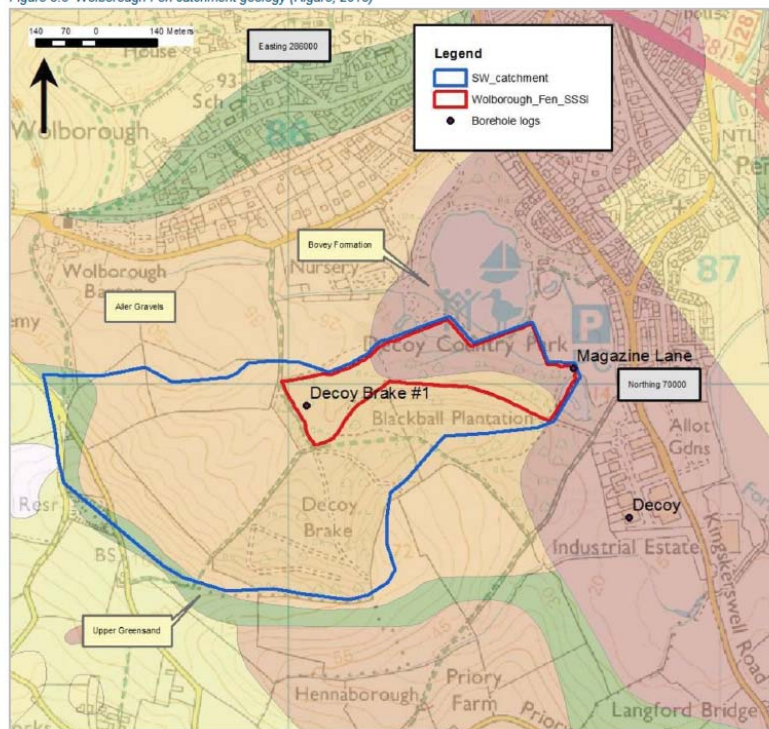
The GWS builds on and takes account of earlier work summarised in the following documents:

- (i) 'Wolborough (NA3)- Potential Impacts on Wolborough Fen SSSI: Review of Hydro-ecological studies' (Royal HaskoningDHV for Teignbridge District Council (TDC)) (Ref WAT/PB4806/R001/FO1) (Dec 2016). The Review of Hydro-ecological studies report is referred to under the acronym 'HESR' in this document;
- (ii) 'Wolborough (NA3)- Potential Impacts on Wolborough Fen SSSI: Development Framework Plan Advice' (Royal HaskoningDHV for Teignbridge District Council (TDC)) (Ref WAT/PB4806/R002/D00) (Dec 2016). The Development Framework Advice is referred to under the acronym 'DFA' in this document. Section 3 of the DFA sets out the requirements of the 'Pre-Construction Ground Investigation and Monitoring Strategy' and is provided as Appendix A to this GWMS.

The catchment of the Wolborough Fen SSSI, which is the area to which this GWMS applies, has been previously established (Rigare 2015) and agreed (See HESR Fig 3.3) which is reproduced below.



Figure 3.3 Wolborough Fen catchment geology (Rigare, 2015)



Groundwater emerges from the Aller Gravel within the wet woodland area at the western end of the SSSI.

Groundwater also emerges from springs where the peat covers the Aller Gravel in the central area of the SSSI, where the peat is thin enough.

Within the eastern area of the SSSI, springs are unlikely to be present above the Bovey formation due to its relatively low permeability.

The generation and accumulation of peat at the site may have occurred due to the presence of a spring line which formed along the geological boundary between the Aller Gravel Formation and Bovey Formation, as a result of their contrasting permeabilities.

The Flood Risk Assessment (FRA) and Drainage Strategy (DS) prepared by InfraDesign (October 2017) in support of a planning application on NA3 provides the results of infiltration tests within the Wolborough Fen GWMS area. These show that infiltration rates are typically in the range $1 - 5 \times 10^{-6}$ m/s. These are low rates and reflect the fact that the Aller Gravels include bands of silts and clays which will have much lower infiltration rates than the beds of gravel and coarse sand.

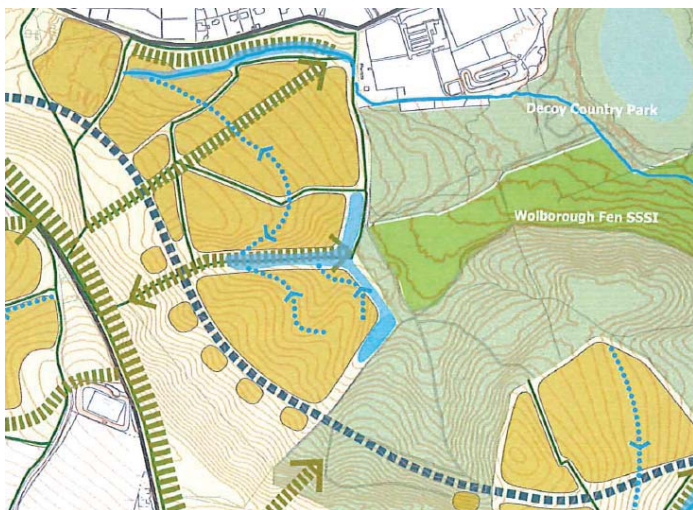
The SuDS Strategy requires 'that existing watercourses (and 'dry' valleys where higher infiltration rates will occur) are retained as blue/green corridors as far as this is reasonably possible'. It also proposes the use of swales running parallel to contours to intercept and slow down flows thereby promoting infiltration where this is viable. An excerpt of the surface water drainage strategy is provided below focussing on the Wolborough SSSI Catchment.

The HESR also includes a simple outline 'Conceptual Site Model' (CSM) which is described as follows in section 3.1.2.6:

Groundwater is present within the Aller Gravel and Upper Greensand, which are moderately permeable and allow groundwater flow.

Groundwater is present within the peat and the sandy horizons of the Bovey Formation; both units have a relatively low permeability, which prevents or inhibits groundwater flow.

Groundwater flow is driven by recharge derived from the infiltration of precipitation falling on the catchment slopes.



The Wolborough Catchment Specific SuDS Strategy

The development masterplan has been guided by the SuDS Strategy and specific details are provided for the Wolborough Fen SSSI Catchment. The SuDS strategy in this catchment is to be informed in the light of a Groundwater Monitoring Strategy (GWMS) as set out below.

Draft proposed GWMS

A Pre-construction Ground Investigation and Monitoring Strategy should be submitted with any planning applications in the Wolborough SSSI Catchment, detailing the proposed scope of monitoring and explaining the rationale behind specific proposals bearing in mind the proposed development layout and the extent of any associated earthworks which will disturb the existing ground surface. Data collection should focus on the requirements of the identified technical assessments. These would require (as a minimum) the following datasets.

- (i) A coordinated programme of groundwater level monitoring within the planning application red line boundary.
- (ii) A sufficient number of deep boreholes should be provided to prove the depth of the Upper Greensand across the application boundary to inform the CSM and to allow monitoring of water levels in the Upper Greensand;

- (iii) Specifically, groundwater monitoring points should be provided at spacings of no more than 50m along the blue corridors identified within the NA3 SuDS Strategy within the red line planning application boundary;
- (iv) Groundwater monitoring in the general location of property soakaways to confirm that groundwater does not rise to within 1m of their base levels.
- (v) Groundwater monitoring in the general location of other infiltration devices to ascertain the extent that reliance on infiltration will need to be complemented by alternate means of surface water drainage during periods of high groundwater levels;
- (vi) Groundwater monitoring at all locations shall be undertaken on a monthly basis for a minimum duration of 18 months before written sign off of the proposed development surface water and SuDS strategy. In the event that rainfall deviates significantly from seasonal averages (see below) the monitoring period will be extended accordingly;
- (vii) Surface water and groundwater quality sampling from the downstream edge of the application boundary, to include nutrients (phosphate and nitrate) and potential contaminants that could be discharged either during construction or post-construction.
- (viii) Rainfall measurement at or close to the catchment. In the event that rainfall totals deviate by more than 25% from the seasonal average (i.e Winter, Spring, Summer and Autumn averages that each involve a period of 3 months) monitoring will be extended by a further 3 months.
- (ix) During construction the regulators should be advised of any breach of impact assessment criteria and the investigative or remedial measures undertaken in response to the breach. Following construction, a Construction Phase Interpretative Report should be submitted for regulatory approval.
- (x) Monitoring should continue for a minimum of 12 months post-construction, with Operational Phase Interpretative Reports being submitted annually until the regulators are satisfied that the any impact mitigation measures are working effectively.



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