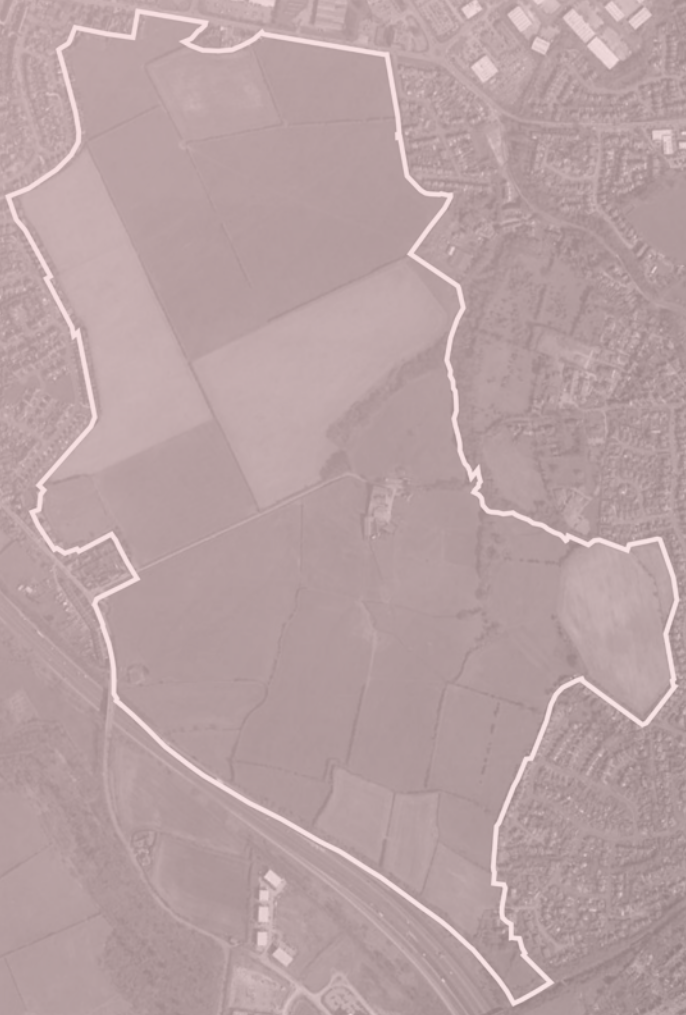

BOND BRYAN

BARNSLEY WEST, MASTERPLAN FRAMEWORK (MU1)

MASTERPLAN FRAMEWORK

15th November 2019

bondbryan.co.uk

0.0 CONTENTS

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BARNSLEY WEST, MASTERPLAN FRAMEWORK (MU1)

COMBINED MASTERPLAN FRAMEWORK

Fig 0.1

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JDG	15/11/2019	TR	15/11/2019	P01	Barnsley West, Combined Masterplan Framework	14/11/2019

1 INTRODUCTION

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BARNSLEY WEST, MASTERPLAN FRAMEWORK (MU1)

THE VISION FOR BARNSLEY WEST

Fig 1.1

1 INTRODUCTION

The Barnsley West Masterplan Framework has been prepared by Bond Bryan, Gillespies and Pegasus on behalf of Strata Homes and Sterling Capitol Plc working in collaboration with Barnsley Council. Strata Homes and Sterling Capitol Plc have the largest land interests within the Masterplan Framework. Landowners and developers who have smaller land interests have also been consulted.

The objective for this development is to create a "Healthscape". A healthscape is green and blue infrastructure designed to improve health and wellbeing. The healthscape acts as a setting for the new place, community and workplace that is currently known as Barnsley West. As the largest site within the Local Plan, this vision document is the result of a collaborative process with the council to create a highly sustainable community that sets a benchmark for 21st century development across Barnsley.

1.1 What is the Masterplan Framework?

The council's Local Plan was adopted in January 2019. This Masterplan Framework is a requirement of the Local Plan policy MU1 in order to guide the development and make sure that policy objectives are met in the plan period and the site can be developed in a comprehensive manner, taking into account all of the infrastructure requirements. The Masterplan Framework will guide the development of the site to achieve its full potential and secure sustainable and inclusive growth, helping to achieve the council's priorities of achieving a thriving and vibrant economy through creating more and better jobs, good business growth and more and better housing.

The Masterplan Framework is a strategic document that should be read in conjunction with the adopted Design Code and sits alongside Supplementary Planning Documents. The Masterplan Framework and Design Code are material considerations in the determination of planning applications on the site.

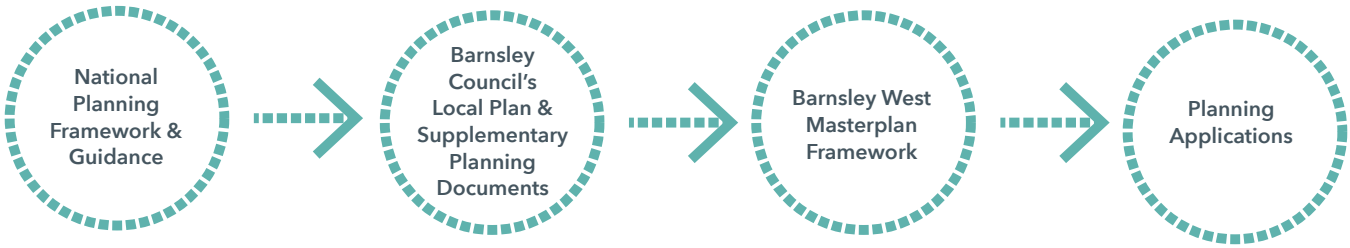

Fig 1.2

1.2 Site MU1, land South of Barugh Green Road

The site was allocated for mixed use development in Barnsley's Local Plan and will provide around 1,700 new homes and 43 hectares of employment land. The site will also provide:

- a new primary school;
- small scale convenience retail and community facilities;
- brand-new infrastructure, including an access link road;
- open green space with wildlife corridors, watercourses and key pedestrian footpaths and cycleways.

The Masterplan Framework explores and demonstrates the issues and opportunities relating to a wide range of matters such as planning, ownership and technical constraints and how they have informed the Masterplan Framework. It has been prepared in the context of the adopted Local Plan's vision, spatial strategy, objectives and policies, particularly those in relation to housing and employment.

The Local Plan site policy for MU1 requires the production of a Masterplan Framework to guide new development and make sure that the policy objectives are delivered. The Barnsley West (MU1) Masterplan Framework was adopted on 19 December 2019 and will be a material consideration in the determination of planning applications on the site.

The contents of this Masterplan Framework provides a clear set of assumptions to provide the certainty required to help make informed decisions about the scale and nature of future planning applications on the site. It is acknowledged that the Masterplan Framework is based on technical information available at the time of preparation and issues may emerge through further detailed technical work. Any deviation from the Masterplan Framework arising as a result of further technical assessment will need to be clearly justified and agreed with the council at planning application stage.

1.3 The Vision for Barnsley West

The vision for Barnsley West is to provide a new sustainable community, combining high-quality new homes with new jobs, facilities and open space, available to new and existing residents – to enjoy for living and working.

Barnsley West will play an essential role in realising the housing and employment requirement for Barnsley over the next 15 years. The site is strategically located for a high-quality, sustainable, mixed-use community and will act as an urban extension of Barnsley. Health and wellbeing is at the heart of the Masterplan Framework as a landscape-led development and will seek to create a more productive landscape for walking, cycling, growing food and biodiversity.

The primary theme that runs through the development of the site is the creation of a "Healthscape" in which to create a sustainable community in order to:

- make the best use of the land;
- secure high design standards;
- 10seek to deliver high-quality homes;
- create a modern place to work in a landscape-first approach that will enhance the wellbeing of residents and visitors to Barnsley West.

1.4 Design Code

This Masterplan Framework document needs to be read in conjunction with the adopted Design Code for the site. The purpose of the Design Code is to provide a benchmark for quality and make sure the vision for the site is translated through the delivery of its components.

1.5 Compliance with the Design Code

The process of gaining planning consent is partly down to demonstrating that proposals respond to the local context. Too often this is watered down to making a superficial reference to a small collection of local buildings, rather than undertaking a thorough assessment of the local and wider environment- its buildings, spaces and landscape, and looking at how proposals can respond and interact with them. The importance for Barnsley West and the aspiration for quality demands this more considered approach. Successful placemaking involves much more than stylistic preference. It should start with a well-resolved Masterplan with principles that create a framework for character and identity. This character will grow out of a variety of interconnected issues including viability, form of construction and company specific design approach.

The compliance with the code has been set with this in mind; a balancing act that creates a long-term

framework for quality that sits within a commercial and planning context.

The most suitable way of demonstrating compliance will be the Detailed Planning Stage. All planning applications will be the subject of a Design Review Panel as part of the process to demonstrate compliance. Furthermore, all applications should include a Design Code Compliance Statement as an appendix in any design and access statement. The Design Code Compliance Statement should reflect a breadth of topics covered by the Design Code and should therefor address, as a minimum the following:

- the vision for the site;
- site context;
- quantum of development;
- aspects of the development relating to the public realm;
- aspects of the development relating to the Character Areas;
- does it adhere to the Health and Wellbeing Framework?;
- sustainability.

1.6 Process of Approvals

'The council will require a Design Code compliance statement for both outline and full applications, as an appendix to the design and access statement. Following outline planning approval any reserved matters application will require a separate compliance statement. For any planning conditions that involve more detailed work on the design or layout of the development a compliance statement will need to accompany the information submitted.

Fig 1.3

1.7 The Process of Preparing the Masterplan Framework

Preparation of this Masterplan Framework has involved a number of key stages of work. This includes:

- a baseline review of the site and its surrounding context;
- a baseline review of existing studies and technical background material to create an evidence-based approach to the Masterplan layout;
- ongoing dialogue with Barnsley Council;
- three workshop presentations to the Design Review Panel, consisting of experts in the field of urban design, architecture, public art and economic regeneration from across South Yorkshire; and
- public and stakeholder consultation.

The Masterplan Framework explores and demonstrates the issues and opportunities relating to a wide range of matters such as planning, ownership and technical constraints and how they have informed the Masterplan Framework.

1.8 The Professional Team

- Lead developers for the site: Strata Sterling Barnsley West
- Masterplanning Architect: Bond Bryan
- Landscape Architect: Gillespies
- Employment Area Architect: The Harris Partnership
- Planning Consultant: Pegasus Group
- Highways Consultant: Fore Consulting
- Civil Engineering Consultant: JPG Group
- Drainage and Flood Risk: JPG Group
- Utilities Consultant: Hydrock MRB Consultant Engineers
- Air Quality Consultant: Wardell Armstrong
- Ecological Consultant: White Young Green
- Noise Consultant: ENS Acoustics
- Tree Consultant: White Young Green
- Heritage Consultant: Prospect Archaeology

1.9 Public Consultation

A requirement of the Masterplan Framework was for local residents and key stakeholders to be provided with an opportunity to feed back on the draft plans and the main themes. The Masterplan Framework has been advanced following meaningful engagement with a wide section of the community to make sure that the proposal reflects the vision and priorities of present and future communities. The approach adopted and the feedback received is set out within the Statement of Community Involvement (SCI) report which is appended to this document.

2 SITE LOCATION AND DESCRIPTION

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BARNSLEY WEST, MASTERPLAN FRAMEWORK (MU1)

THE VISION FOR BARNSLEY WEST

Fig 2.1

2 SITE LOCATION AND DESCRIPTION

The site is located 2km west of Barnsley town centre, on land between the communities of Gawber, Higham, Pogmoor, Redbrook and Barugh Green and lies directly to the east of the M1 motorway, just north of junction 37.

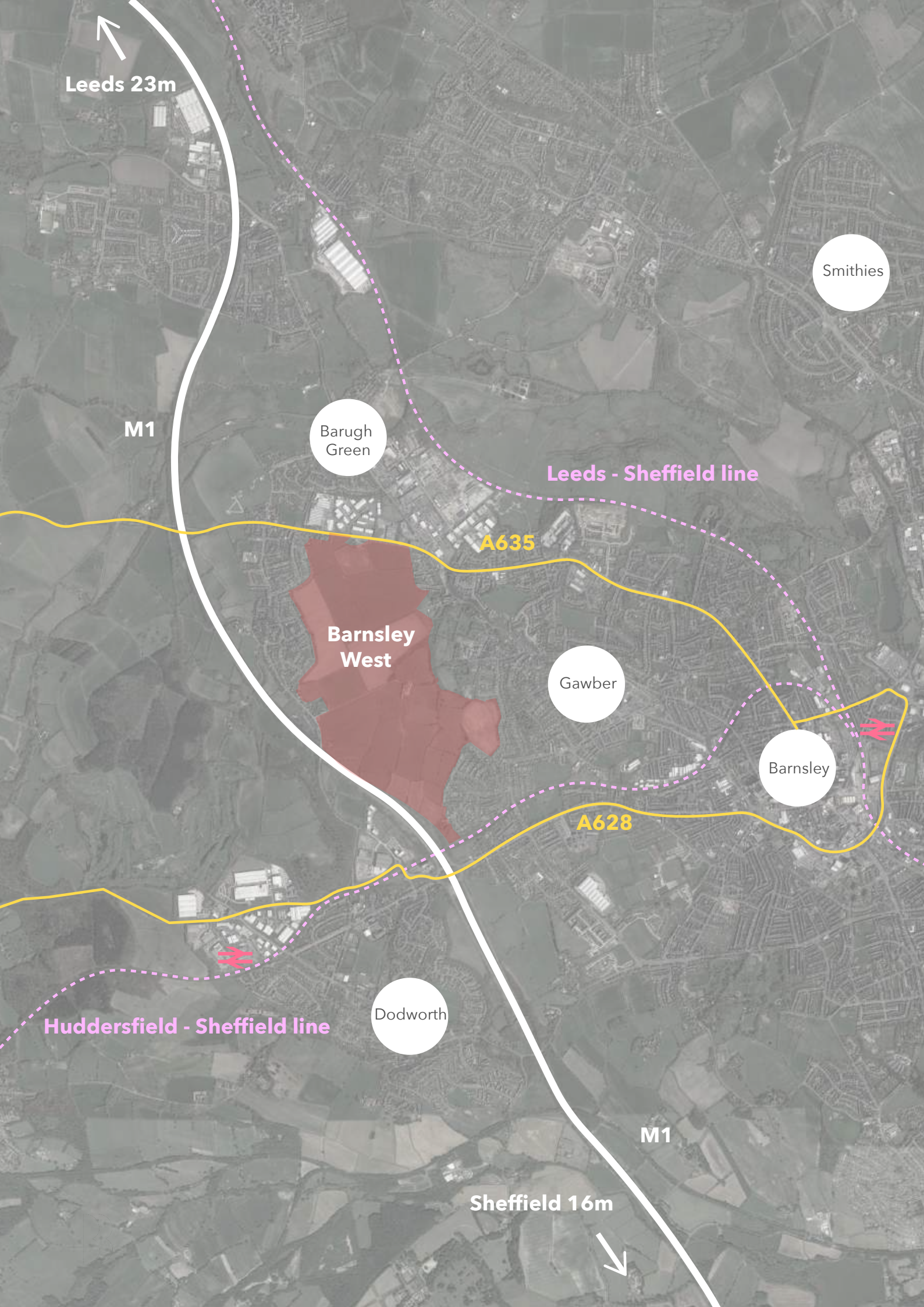
Leeds 23m
M1
Barugh Green
Smithies
Leeds - Sheffield line
A635
Barnsley West
Gawber
Barnsley
A628
Huddersfield - Sheffield line
Dodworth
M1
Sheffield 16m

Fig 2.2

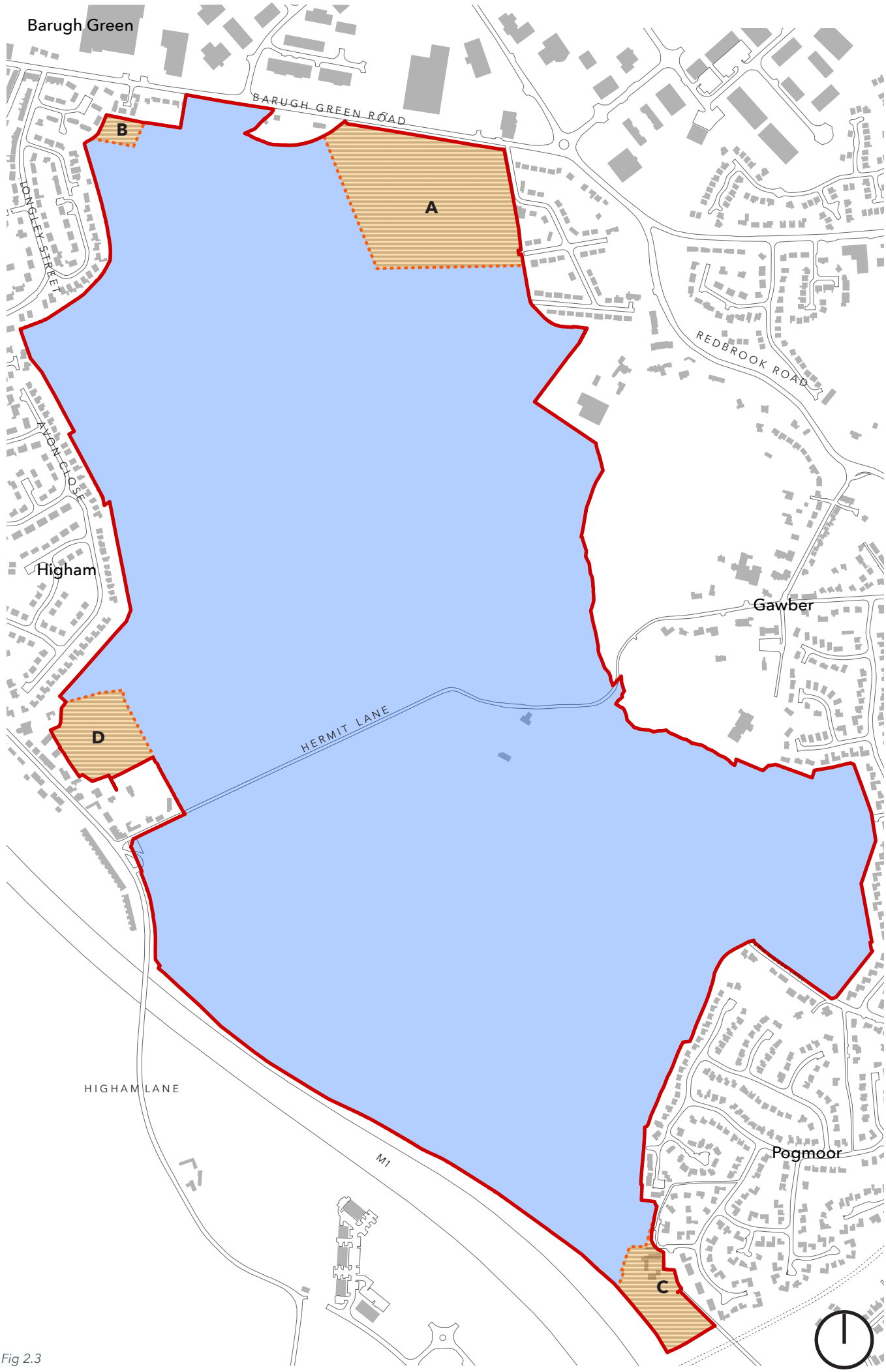
Barugh Green
BARUGH GREEN ROAD
B
A
IONGLEY STREET
AVON CLOSE
REDBROOK ROAD
Higham
Gawber
D
HERMIT LANE
HIGHAM LANE
M1
Pogmoor
C

Fig 2.3

2.1 Land Ownership

The site is in various ownerships, with a large proportion under contractual control of Strata Sterling Barnsley West Ltd. The rest of the site is within private ownership.

Strata Sterling Barnsley West Ltd control

Other ownership

A *Fig 2.4*

B *Fig 2.5*

C *Fig 2.6*

D *Fig 2.7*


Barugh Green
Higham
Capitol Park

Fig 2.8

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3 PLANNING POLICY CONTEXT

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BARNSLEY WEST, MASTERPLAN FRAMEWORK (MU1)

THE VISION FOR BARNSLEY WEST

Fig 3.1

3 PLANNING POLICY CONTEXT

Barnsley's statutory development plan consists of the Local Plan, the Joint Waste Plan , Penistone Neighbourhood development Plan and Oxspring Neighbourhood development plan.

The adopted Local Plan and policies map sets out how the council will manage physical development of the borough on behalf of residents and businesses. This includes providing sufficient land in the right places to attract more businesses into the borough and to allow existing businesses to grow. The aim of this is to create more and better jobs to improve earnings and increase opportunities for local residents. It also aims to provide improved housing to meet existing need and the needs of future generations whilst at the same time protecting what is special about the borough.

Following the adoption of the Local Plan, new and updated Supplementary Planning Documents have been adopted which contain advice for people applying for planning permission. The council use these to help make decisions on planning applications alongside the Local Plan.

Barnsley West is identified as MU1 - Land south of Barugh Green Road within the adopted Local Plan.

3.1 Site MU1 Land South of Barugh Green Road

The site is proposed for mixed use predominantly for housing and employment. The indicative number of dwellings proposed on this site is 1700. These are included in the housing numbers for urban Barnsley in the housing chapter.

43 ha of employment land is proposed on the site and is included in the employment land figures in the urban Barnsley section of the economy chapter.

The development will be subject to the production and approval of a Masterplan Framework covering the entire site which seeks to ensure that the employment land is developed within the plan period, that community facilities come forward before completion of the housing and that development is brought forward in a comprehensive manner.

The development will be expected to:

- Provide a primary school on the site;
- Ensure that ground stability and contamination investigations are undertaken prior to development commencing and necessary remedial works completed in accordance with the phasing plan;
- Provide on and off site highway infrastructure works, including a link road (Claycliffe Link) and improvements at Junction 37 as necessary;
- Provide small scale convenience retail and community facilities in compliance with Local Plan policy TC5: Small local shops;
- Retain, buffer and manage the watercourse, grassland and woodland north-east of Hermit Lane;
- Retain, buffer and manage the species-rich hedgerows and boundary features. Where this is not possible transplant hedgerows including root balls and associated soils. A method statement for this should be provided and agreed prior to works commencing;
- Create/retain wildlife corridors through/across the site;
- Provide accessible public open space;
- Ensure that any sustainable drainage system incorporating above-ground habitats is designed from the outset to serve the whole site;
- Give consideration to the drain/culvert that runs through the site; and
- Include measures for the protection and retention of the listed milepost on Barugh Green Road 500m west of the junction with Claycliffe Road and its immediate setting;
- Protect the routes of the public rights of way that cross the site, and make provision for these as part of any proposal.

Archaeological remains may be present on this site therefore proposals must be accompanied by an appropriate archaeological assessment (including a field evaluation if necessary) that must include the following:

- Information identifying the likely location and extent of the remains, and the nature of the remains;
- An assessment of the significance of the remains; and
- Consideration of how the remains would be affected by the proposed development

BARNSLEY WEST, MASTERPLAN FRAMEWORK (MU1)

THE VISION FOR BARNSLEY WEST

LOCAL PLAN EXTRACT

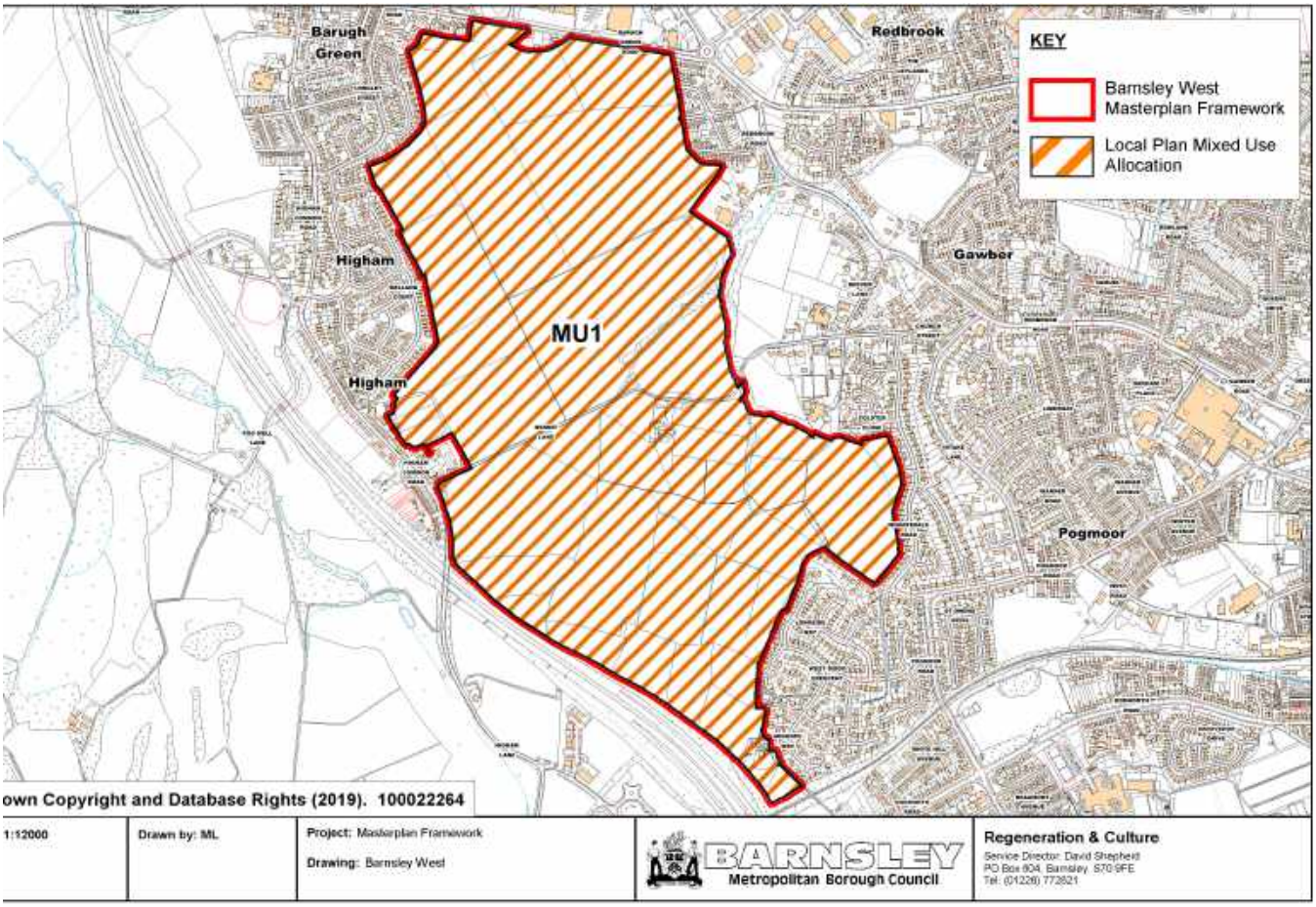

Fig 3.2

3.2 Local Plan Policies

The table below provides a summary of the Local Plan policies that are relevant to the site and to which the Masterplan Framework should take full account.

Policy SD1 – Presumption in favour of sustainable development	Sets out a presumption in favour of sustainable development contained in the national Planning Policy Framework. Will work proactively with applicants jointly to find solutions so that proposals can be approved wherever possible.
Policy GD1 – General development	Shows support for proposals for development which comply with the criteria of this policy.
Policy LG1 – City Regions	Policy supports the economic growth agenda of the Sheffield, Leeds and Manchester City Regions, maximising the opportunities and benefits of Barnsley's favourable location in the region.
Policy LG2 – The location of growth	Sets out that priority will be given to development in Urban Barnsley, then in the Principal Towns of Cudworth, Wombwell, Hoyland, Goldthorpe, Penistone and Royston and villages. Urban Barnsley will be expected to accommodate significantly more growth than the Principal Towns or villages.
Policy E1 – Providing strategic employment locations	Identifies that 297ha of land in sustainable locations is allocated to meet the development needs of existing and future industry and business up to 2033.
Policy E2 – The distribution of new employment sites	This policy sets out within a table the approximate distribution of employment land within settlements during the plan period.
Policy E3 – Uses on employment land	Supports research and development and light industry, general industrial, or storage or distribution on allocated employment sites or land currently or last used for employment purposes.
Policy H1 – The number of new homes to be built	Sets out the requirement of at least 21,546 net additional homes during 2014 to 2033.
Policy H2 – The distribution of new homes	Sets out the approximate distribution of new homes within settlements.
Policy H3 – Uses on allocated housing sites	Requires sites shown as housing sites on the Policies Map to be developed for residential purposes.
Policy H6 – Housing mix and efficient use of land	Expects housing proposals to include a broad mix of house size, type and tenure to help create mixed and balanced communities. Expects a density of 40 dwellings per hectare net in Urban Barnsley and Principal Towns and 30 dwellings per hectare net in villages.
Policy H7 – Affordable housing	Housing developments of 15 or more dwellings will be expected to provide affordable housing in accordance with percentages set out within the policy. These percentages will be sought unless it can be demonstrated through a viability assessment that the required figure would render the scheme unviable.

Policy T1 – Accessibility priorities	Transport Strategy programmes focused on development-transport corridors will aim to improve sustainable transport and circulation, implement transport network improvements, facilitate sustainable transport links, promote high quality public transport, improve direct public transport and freight links to core cities and international interchanges.
Policy T3 – New development and sustainable travel	Sets out expectations for new development to be located and designed to reduce the need to travel, provide at least the minimum levels of parking for cycles, motorbikes, scooters, mopeds and disabled people, provide a transport statement or assessment, provide a travel plan statement or travel plan. Where levels of accessibility are below required levels developers will be expected to take action or make financial contributions.
Policy T4 – New development and transport safety	New development will be expected to be designed and built to provide all transport users within and surrounding the development with safe, secure and convenient access and movement. Developers will be expected to take mitigating action or to make a financial contribution to ensure necessary highways improvements where required are implemented.
Policy T5 – Reducing the impact of road travel	Aims to reduce the impact of road travel.
Policy D1 – High quality design and place making	Development is expected to be of high quality design and will be expected to respect, take advantage of and reinforce the distinctive, local character and features of Barnsley.
Policy LC1 – Landscape character	Development will be expected to retain and enhance the character and distinctiveness of the individual landscape character area in which it is located.
Policy HE1 – The historic environment	Positively encourage developments which will help in the management, conservation, understanding and enjoyment of Barnsley's historic environment, especially for those assets which are at risk.
Policy HE6 – Archaeology	Applications for development on sites where archaeological remains may be present must be accompanied by an appropriate archaeological assessment (including a field evaluation if necessary).
Policy TC1 – Town Centres	Supports the vitality and viability of defined centres and requires a sequential approach for new retail and town centre development outside of existing centres.
Policy TC5 – Small local shops	Outside existing centres, small shops that meet the daily shopping needs of a local community will be permitted where the shops are of a type and place that would meet daily shopping needs and this need is not already met by existing shops, and the shops are located and designed to encourage trips by pedestrians and cyclists rather than cars.
Policy GI1 – Green infrastructure	An integrated network of connected and multifunctional green infrastructure assets will be protected, maintained, enhanced and created.
Policy GS1 – Green space	Development that would result in the loss of green space would not normally be allowed. New residential development will be required to provide or contribute towards green space in line with the Green Space Strategy.

Policy GS2 – Green ways and public rights of way	Green ways and public rights of ways will be protected from development that may affect their character or function.
Policy BIO1 – Biodiversity and geodiversity	Development will be expected to conserve and enhance the biodiversity and geological features of the borough.
Policy CC1 – Climate change	Policy seeks to reduce the causes of and adapt to the future impacts of climate change by giving preference to development of previously developed land in sustainable locations, promoting the reduction of greenhouse gas emissions through sustainable design and construction techniques, locating and designing development to reduce the risk of flooding, promoting the use of SUDS, promoting and supporting the delivery of renewable and low carbon energy, and promoting investment in green infrastructure to promote and encourage biodiversity gain.
Policy CC2 – Sustainable design and construction	Expects development to minimise resource and energy consumption through the inclusion of sustainable design and construction features where this is technically feasible and viable. Non-residential development will be expected to achieve a minimum standard of BREEAM 'Very Good'.
Policy CC3 – Flood Risk	Ensures that the extent and impact of flooding is reduced.
Policy CC4 – Sustainable drainage systems (SUDS)	All major development will be expected to use SUDS to manage surface water drainage.
Policy CC5 – Water resource management	Shows support for proposals which conserve and enhance the boroughs water resources.
Policy RE1 – Low carbon and renewable energy	All developments will be expected to seek to incorporate initially appropriate design measures, and thereafter decentralised, renewable or low carbon energy sources in order to reduce carbon dioxide emissions and should at least achieve appropriate carbon compliance targets.
Policy CL1 - Contaminated and unstable land	Where the future users or occupiers of a development would be affected by contamination or stability issues, or where contamination may present a risk to the water environment, proposals must be accompanied by a report which shows that investigations have been carried out to work out the nature and extent of contamination or stability issues and the possible effect it may have on the development and its future users, the natural and historic environment, and sets out detailed measures to allow the development to go ahead safely.
Policy Poll1 – Pollution Control and Protection	Development will be expected to demonstrate that it is not likely to result, directly or indirectly, in an increase in air, surface water and groundwater, noise, smell, dust, vibration, light or other pollution which would unacceptably affect or cause a nuisance to the natural and built environment or to people.
Policy AQ1 – Development in Air Quality Management Areas	Development which impacts on areas sensitive to air pollution in air quality management areas will be expected to demonstrate that it will not have a harmful effect on the health or living conditions of any future users of the development in terms of air quality, taking into account any suitable and proportionate mitigation required for the development.

Policy UT2 – Utilities Safeguarding	Existing services and utilities including major pipelines, transmission lines, distribution mains, sewerage and sewage treatments works, land drainage systems and water resources, together with associated equipment, installations and operational land, will be protected from development that will detrimentally affect them.
Policy I1 – Infrastructure and Planning Obligations	Ensure that development is supported by and where necessary contributes to the provision of appropriate infrastructure.
Policy I2 – Educational and Community Facilities	Supports the provision of schools, educational facilities and other community facilities.

3.3 Joint Waste Plan

Policy WCS7 - managing waste in all developments Ensures that development proposals seek to reduce the amount of waste produced during the construction and time of the project and re-use and recycle waste materials on site where possible. All development proposals (excluding minor planning applications) will be expected to produce a waste management plan as part of the planning application. For large-scale development proposals such as this site, waste minimisation issues should also be addressed through the Environmental Impact Assessment (EIA).

3.4 Supplementary Planning Documents

Supplementary Planning Documents provide further guidance relevant to Barnsley West:

- Financial Contributions for Schools
- Trees and Hedgerows
- Residential Amenity and the Siting of Buildings
- Design of Housing Development
- Open Space Provision on New Housing Developments
- Affordable Housing
- Heritage Impact Statements
- Biodiversity and Geodiversity
- Sustainable Travel
- Parking
- Section 278 Agreements
- Section 38 Agreements
- Development of Land Affected by Contamination
- Planning Obligations

Barnsley Council does not currently apply a Community Infrastructure Levy.

4 BASELINE CONTEXT AND ANALYSIS

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BARNSLEY WEST, MASTERPLAN FRAMEWORK (MU1)

THE VISION FOR BARNSLEY WEST

Fig 4.1

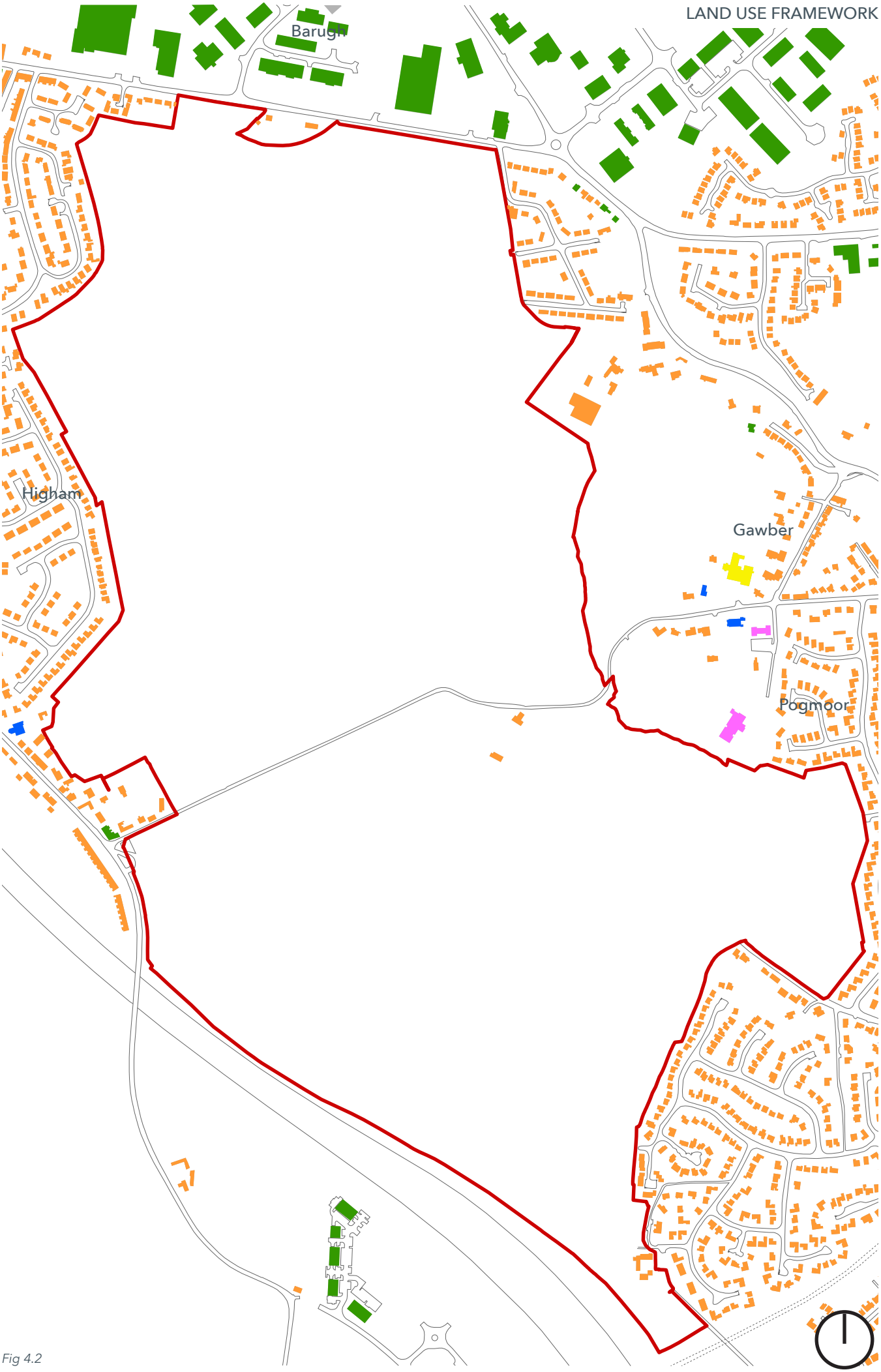

Fig 4.2

4 BASELINE CONTEXT AND ANALYSIS

In order to understand the existing evidence base for the site, a review of existing material and recent assessments have been undertaken. The review identifies where there may be implications for the Masterplan Framework and has informed the Constraints and Opportunities plans within this section.

4.1 Existing Land Use Framework

The dominant land use within the immediate vicinity of the site is residential. In addition, there are a number of community facilities, including a primary school, health centre and churches.

A large cluster of existing commercial properties are located to the north of the site within Claycliffe Business Park. Capitol Park is located to the south of the M1 and provides a further area of existing commercial uses.

Masterplan Framework Considerations:

The Existing Land Use Framework plan illustrates how Barnsley West can tie into the surrounding area, locating similar or complimentary uses alongside existing uses and strengthen each provision within the area.

Commercial buildings on Barugh Green Road Fig 4.3

Barnsley Hospice off Hermit Lane Fig 4.4

Local dwellings Fig 4.5

Fig 4.6

Photographic Survey of the Site

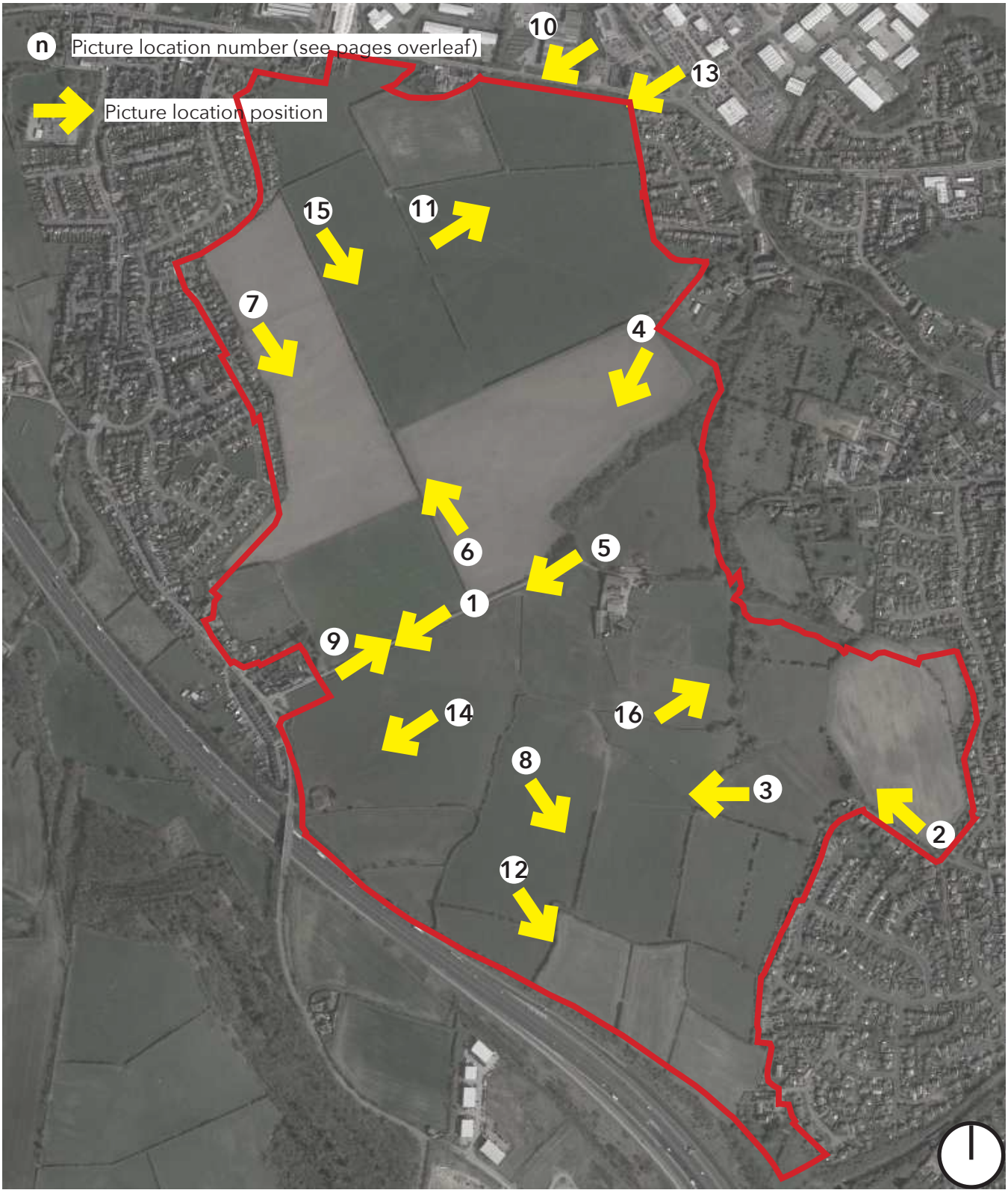

Fig 4.7

1

View from Hermit Lane looking west

2

View from within site facing north

Fig 4.8

Fig 4.9

3

View from within site facing west

4

View from within site facing south west

Fig 4.10

Fig 4.11

5

Fig 4.12

6

Fig 4.13

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Fig 4.14

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Fig 4.15

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Fig 4.16

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Fig 4.17

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Fig 4.18

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Fig 4.19

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Fig 4.20

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Fig 4.21

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Fig 4.22

16

Fig 4.23

4.2 Sustainability and Energy Usage

Promoting sustainable development and reducing the borough's impact on climate change are the over-arching principles of this Masterplan Framework in accordance with the Local Plan and the National Planning Policy Framework (NPPF). The use and development of the Masterplan Framework has been assessed against the objective of securing sustainable development within Barnsley to meet its environmental, economic and social needs. On this basis the proposal will look to deliver the following qualities of sustainability:

- A mixed-use scheme with a balance of residential, business and a range of public open spaces including recreational areas all connected by public footpaths / cycleways;
- A mix of housing that includes a range of house types, sizes and tenures encouraging community stability;
- Protection and / or enhancement of the quality of natural assets including water and biodiversity;
- High quality well-designed development taking into account local distinctiveness;
- Promote walking, cycling and public transport use in order to reduce car dependency; and
- Relatively high densities to promote efficient use of land.

The council has declared a climate emergency (September 2019), with a strategy for the borough achieving zero carbon by 2045 (Zero 45). As the council strive to achieve this goal, new developments will be asked to play their part and through further work, consideration should be given to the following measures:

- Creating energy efficient, well insulated buildings in order to reduce carbon emissions;
- Use renewable energy sources (e.g. solar, wind, biofuels) for all or part of their energy needs to reduce carbon emissions;
- Sustainability standards such as BREEAM and CEEQUAL when designing developments;
- Creating sustainable drainage systems to safely deal with surface water run-off and minimising the risk of flooding;
- Identifying opportunities to incorporate space within new dwellings to accommodate low carbon technology in the future, in order to make sure that new development is durable and adaptable;
- Minimising waste and use of materials throughout the lifetime of the development;
- Encourage recycling;
- Identifying opportunities for green roofs;
- Travel plans to encourage active and sustainable travel.

Consideration will be given to the latest Building Regulations for housing, BREEAM for employment and CEEQUAL for infrastructure, landscaping and public realm. This will include identification of suitable low carbon technologies, investigating renewable energy solutions and Combined Heat and Power (CHP). Subject to feasibility, this approach will make sure that the development is future proofed particularly given the anticipated build out rates over a 15 year period. An allowance has been made in the utility report for the provision of electric vehicle charging points for employment and residential development and alternative technologies given that domestic gas boiler installation in residential properties will be obsolete from 2025.

Future applicants should also note that the council's local validation checklist requires the submission of an Energy Statement for residential schemes over 10 plus dwellings and non-residential schemes of 1,000m² plus. The Energy Statement should clearly set out measures that will be included to deliver a carbon zero development. If zero carbon cannot be achieved, developers should demonstrate why this has not been possible and explain what steps have been taken in the provision of infrastructure and the design of individual properties to achieve zero carbon through retro fit at a future point.

4.3 Transport and Movement

Public Transport Accessibility

Public transport plays an essential role in reducing congestion in Barnsley borough and benefits public health by encouraging walking and cycling as part of door-to-door journeys.

There is a network of bus services (20,21,21a,

22,44,43,93,93a, 94a,96, 96a) which serve the existing residential and employment areas surrounding Barnsley West.

In addition there is the Dodworth to Barnsley section of the Penistone Line in close proximity to Barnsley West and M1 J37.

The hourly each way Sheffield to Huddersfield train services stop at both Dodworth and Barnsley stations.

The Barnsley Bus Partnership including its stakeholder SYPTE is available for consultation to advise on how a programme of both bus and rail service provision can be provided and progressively enhanced, consistent with the phased delivery of the development.

In order to ensure continued patronage of bus and rail services by residents and workers, it is necessary for the developer to negotiate provision of access to multi-modal discount annual and seasonal tickets for travel in South and West Yorkshire. The discounts required is 100% for year one, 75% for year 2 and 50% for year 3.

As any service improvement needs to be backed up by strong marketing to ensure people have access to up-to-date information (e.g. timetable changes) , the developer will make provision for a continuing programme of information provided on digital platforms and also by way of posters and campaigns in partnership with the local community and schools etc.

Active travel and public transport are to be the preferred mode of travel for accessing Barnsley West and the surrounding area. Financial contributions for public transport infrastructure will be agreed with the developer and public transport providers to the site, consistent with the Sustainable Travel Supplementary Planning Document.

Longer-term, the Barnsley Rail Vision seeks to secure a second train per hour on the Penistone line. Consistent with our recent climate emergency declaration, the council will explore opportunities to further improve the local role this line has. Developer contributions would play an important role in helping fund such enhancements.

Masterplan Framework Considerations:

- Active travel and public transport are to be the preferred mode of travel for accessing Barnsley West and the surrounding area
- Seek to retain and enhance existing public right of ways and consider opportunities for further footpaths, new bridleways and cycleways between the site and wider area to improve connectivity and promote health and wellbeing.
- In advance of submission of any planning application, a funded programme of bus service provision (including work bus provision for construction workers) and progressive enhancement (related to the phases of development) will be confirmed by the developer in consultation and as agreed with the Barnsley Bus Partnership stakeholders.

Highway Network

The site is situated to the north of Junction 37 of the M1 motorway. The M1 forms part of the Strategic Road Network, connecting London to Leeds, where it joins the A1(M) near Aberford. M1 Junction 37 is a four-armed traffic signal controlled roundabout with the motorway passing under the junction.

The A635 Barugh Green Road is a single-carriageway road and runs from Redbrook Road in the east (the road name changes to A635 Wilthorpe Road beyond this point) to the Barugh Green crossroads in the west. The road is partially fronted by residential properties, with a number of side roads providing access to light industrial and distribution centres.

The A637 Claycliffe Road leads north from a roundabout with the A635 Barugh Green Road towards the settlement of Darton. The A635 Wilthorpe Road is the eastern continuation of the A635 Barugh Green Road, leading towards Barnsley town centre from Redbrook Road. It is a single-carriageway road with residential development set back from the carriageway.

Redbrook Road is a single-carriageway road, running from the A635 Barugh Green Road to the northeast of the site towards Barnsley town centre, passing by Barnsley Hospital and almost entirely residential in character.

Higham Common Road / Higham Lane is a single-carriageway road linking Barugh Green crossroads in the north with Capitol Park and the A628 Whinby Road in the south, via the settlement of Higham and a bridge over the M1. Where the road runs alongside the south-western boundary of the site, there is a bus turning circle. Higham Common Road provides the primary access for heavy goods vehicles travelling from the M1 motorway to Claycliffe Business Park. Hermit Lane is a narrow lane which bisects the site and is used as a

means of avoiding traffic on other routes in the area.

A number of existing rights of way are located within and in close proximity to the site providing existing points of pedestrian access. There is a network of existing Public Rights of Way across the site which provide existing points of pedestrian access. These should be retained or enhanced as part of future development proposals and opportunities sought to connect to surrounding routes in the locality.

Masterplan Framework Considerations:

- Opportunity to re-route heavy goods vehicles away from Higham Common Lane, through the early delivery of a new link road.
- There is an opportunity to provide high-quality frequent and direct bus service connections to Barnsley town centre, and other main urban areas. Developers are expected to consider the potential to extend and/or divert bus services through the site.

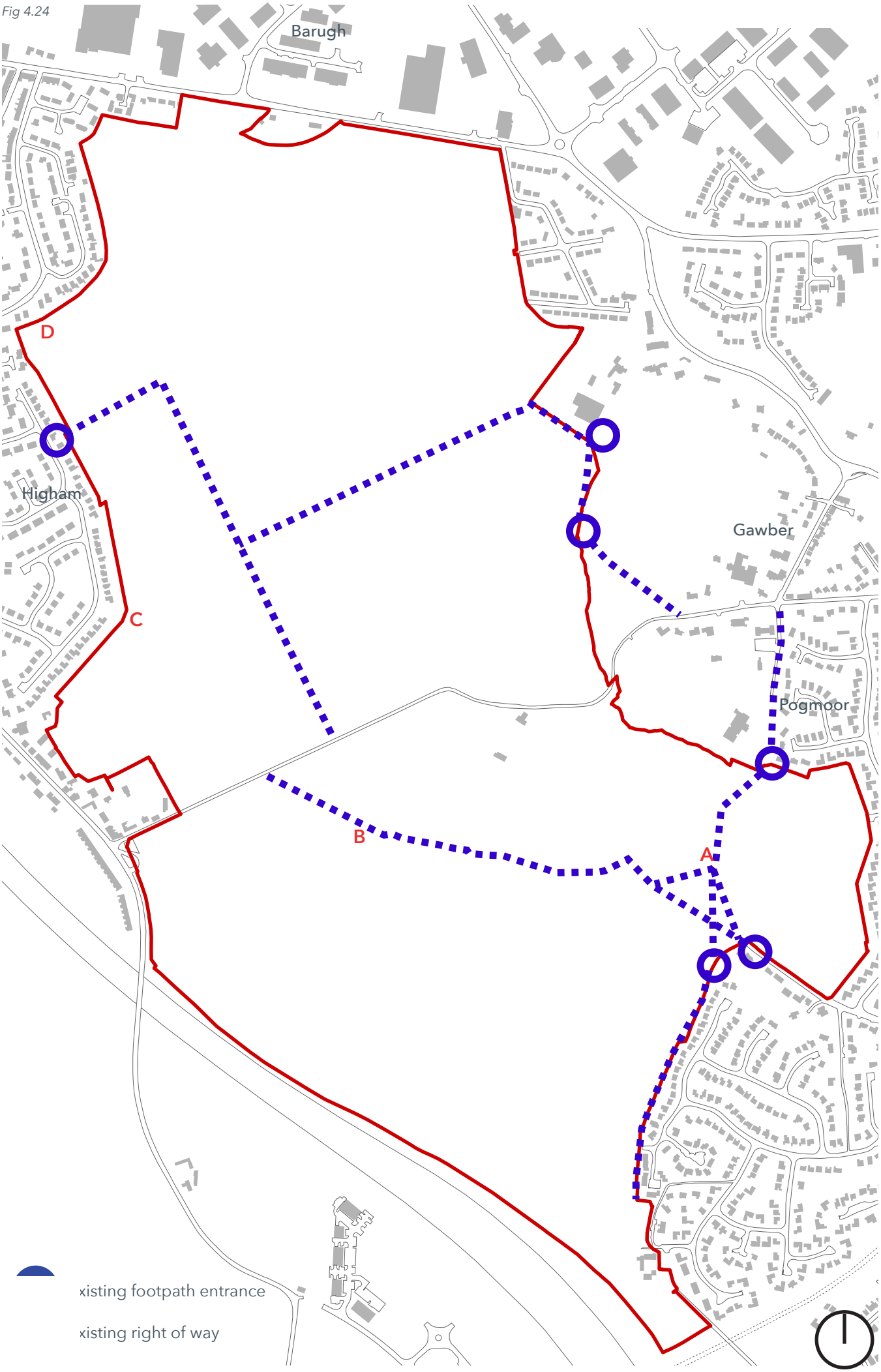
Right of way *Fig 4.25*

Right of way *Fig 4.26*

Existing site entrance *Fig 4.27*

Right of way *Fig 4.28*

Fig 4.24


Barugh
D
Higham
C
Gawber
Pogmoor
B
A
xisting footpath entrance
xisting right of way

BOND BRYAN

BARNSLEY WEST, MASTERPLAN FRAMEWORK (MU1)

THE VISION FOR BARNSLEY WEST

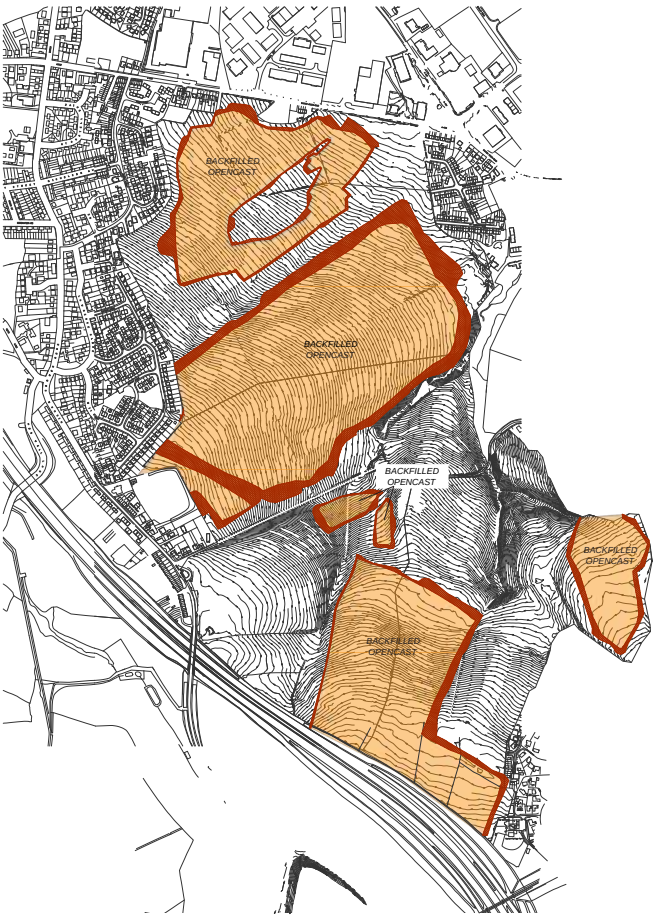
Fig 4.29

4.4 Ground Conditions

Site policy MU1 requires that the development will be expected to ensure that ground stability and contamination investigations are undertaken prior to development commencing and any necessary remedial works completed in accordance with the phasing plan.

An assessment of ground conditions has been undertaken by JPG (Leeds) Limited. The assessment has identified the presence of clay throughout the site. which may have an influence on the drainage strategy. The site is irregular in shape and occupies an area of approximately 120 hectares. Ground levels are approximately 150m AOD in the south generally falling to approximately 80m AOD in the north.

The site generally consists of sloping arable and grazing land, which is divided into fields by hedgerows, fences and small watercourses. Hermit Lane, aligned roughly east to west, bisects the site. A steeply sided valley extends from the south-western boundary to the north. A further steep valley with a drainage ditch at its base, trending northerly, is also present in the centre-east.



Site plan showing areas of historic opencast mining. *Fig 4.30*

Hermit Lane falls steeply from the western boundary down into the valley bottom before rising steeply again in the east. A drainage ditch at the base of the valley is culverted below Hermit Lane, forming a stream with a pond to the north of Hermit Lane; the stream is culverted in parts. The valley is heavily wooded and overgrown to the north of Hermit Lane.

Hermit House Farm is located to the south of Hermit Lane in the centre-east of the site. The farm complex includes two residential dwellings and several agricultural buildings, typically constructed from concrete blocks, timber and roofing of possible asbestos cement sheeting.

Redbrook Farm is located on the north-eastern boundary. Agricultural buildings,including a large dilapidated barn, several outbuildings and a large silo, are located within the site.

A raised plateau of grassland is present adjacent to the residential suburb of Pogmoor in the south east of the site. To the west of this plateau, the landform falls away steeply forming the valley in the centre-east.

Historical maps for the site were obtained from GroundSure. These have been reviewed in order to establish any former uses of the site and identify any potentially contaminative historical uses or potential geotechnical constraints to the proposed development. In summary, many parts of the site have undergone opencast coal extraction.

Starting in 1945, coal extraction commenced towards the south of the site as part of the 'Hunters Cottage' opencast operation. By the 1950's extraction had also advanced in the 'Hunters Cottage Extension' and 'Farm House Lane' pits, whilst also in the north

Example of an opencast mine in Leeds. *Fig 4.31*

as part of 'Craven I' and 'Craven II' operations. These former open-casts reached depths of up to 45m and were backfilled to present day levels, presenting a key geotechnical constraint for the development. With further investigation and modelling, these areas of backfill material will require technical remediation before development can be constructed.

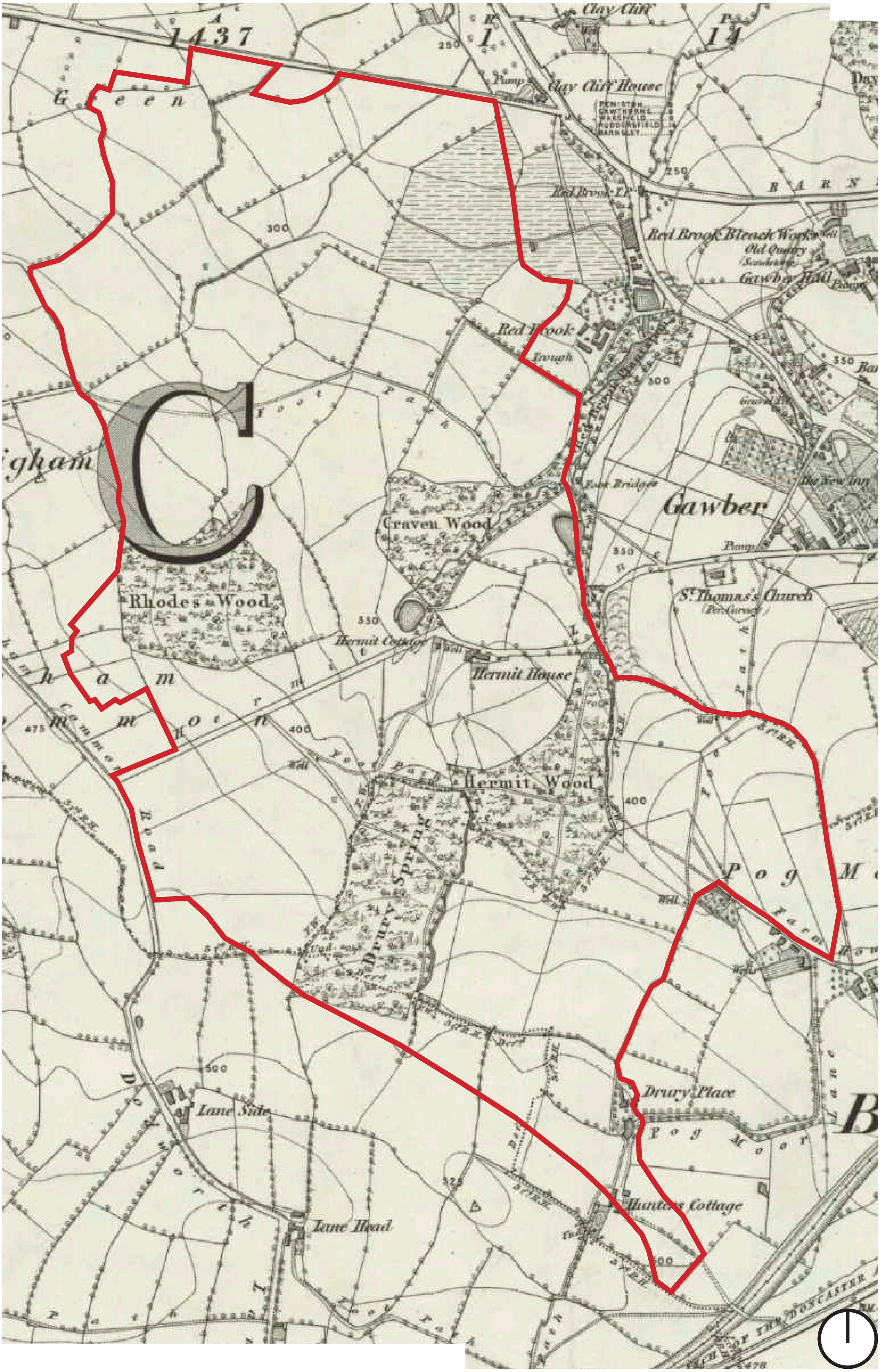
The outer boundaries of the former open-cast pits also present geotechnical challenges. The former highwalls represent zones where the depth of fill may range from 45m depth (at the bottom of the mine) to 0m (at the former mine surface); and as such earth works will be used to overcome these constraints.

The site was restored to agricultural use by the 1970s. The only built development on the site consists of Hermit House Farm and Cottage and also Redbrook farm which encroaches onto the north east; the farms dating from 19th century. The surrounding land has also been used predominantly for agricultural use with also a long legacy of coal mining activity. Historical contaminative industries near the site include a bleach works, located approximately 150m to the north east (downslope of the site).

No significant risks to human health have been identified and gas protection is not required. Large areas of the site are underlain by a significant thickness of non-engineered made ground, consisting of colliery discard associated with backfilled opencast coal sites. The underlying bedrock geology comprises Pennine Middle Coal Measures strata of mudstone, siltstone, sandstone and coal seams.

Masterplan Framework Considerations:

- This challenging topography has been modelled in detail to ensure cut and fill balance can be achieved so that material does not have to be transported off site.
- The layout currently provides optimum development platforms to achieve the yields in the Local Plan whilst incorporating the highwalls into the areas of public open space.
- Further work will be required at the planning application stage, informed by a detailed landscape and visual impact assessment, to determine whether this configuration sufficiently complements the surrounding landscape and minimises the impact on neighbouring areas. In the event that this further detailed work results in the site configuration within this Masterplan Framework been deemed unacceptable, further earthworks modelling will be required to inform alternative options.



1437
Clay Cliff
Clay Cliff House
Pump
Green
Red Brook T.P.
Red Brook Bleach Works
Old Quarry
Gawber Hall
Red Brook
Trough
Gawber
Craven Wood
Foot Path
Rhodes Wood
Hermit Cottage
Hermit House
Hermit Wood
St. Thomas's Church
Drury Spring
Pog Moor
Drury Place
Lane Side
Lane Head
Hunters Cottage
C

4.5 Heritage

The Local Plan site policy MU1 requires development to include measures for the protection and retention of the listed milepost on Barugh Green Road 500m west of the junction with Claycliffe Road and its immediate setting.

Prospect Archaeology have undertaken a desk-based heritage assessment to consider the archaeological and historical implications of developing the site. The desk-based assessment has been completed and has involved the consultation of the South Yorkshire Historic Environment Record, Barnsley Archives and Local Studies Centre Service and the Sheffield City Archives Service as well as secondary and online sources and a site walk over.

The assessment has been based on a 'study area' extending 1,000m from the boundary of the site, enabling the consideration of existing and potential archaeological features to be considered in their local, regional and national contexts.

There are five designated assets within the study area, all Grade II Listed structures. The closest of these is a milepost (NHL1151794), which sits on the Barugh Green Road (A635) in the location of the proposed roundabout and northern access to the site.

Another milepost is located 400m to the northeast (NHL1151764) on the A637 on the far side of the Claycliffe Business Park. A third milepost is located on the eastern edge of the study area (NHL1151771) on the Wilthorpe Road stretch of the A635 and a fourth (NHL 1191519) is located almost 600m southeast of the study area on the A628.

The final designated asset is a barn attached to the side of Royd Hill Farmhouse (NHL1151770) 400m to the east on the far side of Higham.

A further 14 undesignated assets have been identified in the study area from the South Yorkshire Historic Environment Record and although none of these are within the site they do raise the potential for remains of prehistoric and Roman date. Documentary research suggests the site may contain early medieval boundaries and possible later medieval farm buildings and agricultural activity. Post-medieval assets relate mainly to industrial activity. There were mine access shafts at various locations on the site and a stone kerbed track follows the Dodworth/Barnsley township boundary through the site.

Considerable areas of the site have been subject to opencast mining in the middle years of the 20th century. Any remains at Hermit House Farm have been damaged by modern buildings.

The milepost on the Barugh Green Road (NHL1151794) is located in the southern verge, 500m to the west of the junction with Claycliffe Road. It dates to the mid to late 19th century, made of cast-iron with raised letters reading: Barnsley and Shepley Lane Head Road Barugh, Barnsley 2 miles, Cawthorne 2 miles, Denby Dale 6½ miles Holmfirth 12 miles.

The setting of the milepost is its location on the Barugh Green Road, a former turnpike road (Shepley to Cawthorne Trust established in 1824) and its association with the series of other surviving mileposts along it (examples being NHL1151771 to the east and NHL1151787 to the west). There is no evidence that the asset has moved, though it does appear set in modern concrete.

The site is not located within or in close proximity to a conservation area.

The site allocation requires the development to provide a new link road through the site and connect into the existing highway network. Given the site's extents, constraints and proximity to existing roads, the new link road can provide a highway connection from Barugh Green Road to Higham Common Road. The point of connection into Barugh Green Road will require the relocation of the listed milepost (NHL1151794). The milepost will remain close to its original position providing more prominence in the highway; it is therefore likely to create negligible effects on the significance of the asset. Whilst the relocation of the milepost maybe considered acceptable in principle, suitable mitigation and the submission of an application for listed building consent will need to be approved by the council.

Masterplan Framework Considerations:

- Respond sensitively to boundaries with existing heritage assets
- Ensure that these heritage assets are accounted for when undertaking the landscape and visual impact assessment.

Approximate Local Plan boundary overlaid onto historic map

Fig 4.33

4.6 Archaeology

The site was identified as having little or no archaeological objections and uncertain archaeological objections by Wessex Archaeology as part of the Local Plan evidence base. Local Plan site policy MU1 requires that an appropriate archaeological assessment is undertaken as archaeological features may be present within the site. Areas of the site affected by open cast mining may be excluded from further archaeological assessment; however, this would need to be agreed with the local planning authority and South Yorkshire Archaeology Advisory Service.

An Archaeological Desk Based Assessment has been undertaken to assess the archaeological potential of the site. Areas of open cast mining have been identified within the site, although further work is required to refine these areas and inform the archaeological evaluation strategy for the site.

The potential for designated heritage assets of archaeological interest within the site is low. However, the site does have potential for hitherto unknown undesignated heritage assets. Therefore, in accordance with NPPF paragraph 189, further evaluation in the form of geophysical survey and trial trenching will be required pre-determination of any planning decisions being taken. This information will help to assess the potential and significance of any archaeological remains within the site and determine the level of harm. The results of the archaeological evaluation will then be used to identify a suitable mitigation strategy for the site.

Masterplan Framework Considerations:

- Potential for designated heritage assets of archaeological interest within the site is low due to former opencast activity.
- Further refinement of areas impacted by opencast mining required to determine areas of site that require further investigation.
- Geophysical survey and trial trenching to be undertaken to those identified areas in order to assess the potential for archaeological remains to be present within the site.

4.7 Flood Risk and Drainage

The Local Plan site policy MU1 requires the development to ensure that any sustainable drainage system incorporating above ground habitats is designed from the outset to serve the whole site and gives consideration to the drain/culvert that runs through the site.

The site is identified on the Environment Agency flood mapping within zone 1, where the risk of flooding low.

There are a number of watercourses and land drains crossing the site. These converge to the culverted watercourse under Redbrook Road and to the culverted watercourse under Barugh Green Road. The watercourses flow to the north and north-west to the River Dearne.

The principal watercourses crossing the site are the streams through Redbrook Plantation and Craven Wood through the central part of the site. There are drainage ditches within the south-eastern part of the site and along the north-eastern site boundary with Barugh Green Road. The nearest main river is the River Dearne, 1 km to the north.

Existing surface water disposal is to Redbrook watercourse and to the culverted watercourse under Barugh Green Road. Redbrook watercourse is culverted under Redbrook Road and Zenith Business Park. The route of the Barugh Green Road watercourse beyond Claycliffe Road is not known. There are Yorkshire Water surface water sewers and a combined sewer overflow discharging to these watercourses. Soakaways are unlikely to be viable on the site due to the presence of clay.

Masterplan Framework Considerations:

- Create an integrated blue and green infrastructure within the site
- Ensure the risk of flooding beyond the site boundaries is prevented through a positive drainage strategy.

4.8 Landscape

The Local Plan site policy MU1 requires that development will be expected to retain, buffer and manage the watercourses, grassland and woodland north-east of Hermit Lane.

A tree survey has been undertaken by WYG in accordance with BS5837:2012.

The largest part of the land comprises an extensive area of agricultural fields that are dissected by a rural road known as Hermit Lane. There is a substantial deciduous woodland feature that follows the course of a system of steep sided stream gullies that flow north-east through the eastern part of the survey area.

The survey of trees at the site assessed 170 individual trees, 23 groups of trees and 39 sections of field hedging. This included trees located on-site and those located on adjoining land that may be affected by development of the site.

Part of the deciduous woodland that is situated in the east of the survey area is protected by a woodland Tree Preservation Order. The land does not lie within a Conservation Area.

The vegetation across the site is sparse both in number of species and in number of trees recorded. The land is criss-crossed by a network of field hedges that while established, are almost exclusively hawthorn (Crataegus monogyna) of even age, and which in most areas have seen very little management. All are factors which suggest that the hedgerow system has been planted relatively recently (within the last 50 years).

Hedgerows on agricultural land are protected under the Hedgerow Regulations 1997. Hedgerows should not be removed without serving appropriate notice on the local planning authority, who can require the retention of hedgerows deemed 'important' under the Regulations.

The species that make up the small number of trees are ash (Fraxinus excelsior), sessile oak (Quercus petraea), English oak (Quercus robur), sycamore (Acer pseudoplatanus), holly (Quercus ilex Ilex aquifolium), and field maple (Acer campestre), along with one row of three mature beech (Fagus sylvatica) that are in poor condition and which are planted close to houses at the south-eastern edge of the land.

There is much better diversity and quality within the interconnected woodland features that occur towards the east of the survey area in its central part. By far the dominant species within the wooded areas is sessile oak, and it was noted that these were all relatively even-aged with the majority recorded as early-mature and a smaller number considered to be mature. No late-mature or ancient trees were recorded within the wooded areas, suggesting a period of significant plantation perhaps in the late 19th or first part of the 20th century.

Other tree species present within the woodland groups are ash, sycamore, silver birch (Betula pendula), wych elm (Ulmus glabra), hazel (Corylus avellana), field maple, hawthorn, crab apple (Malus sylvestris) and goat willow (Salix caprea). Common alder (Alnus glutinous) and crack willow (Salix fragilis) were also noted in the woodland groups and were more common within a leg to the west of the woodland groups where the water is slower to drain and a number of small ponds have formed. The presence of such a density of oak trees within the wooded areas provides an excellent opportunity to develop and manage this part of the land as a valuable asset both in terms of amenity and for its ecology.

A row of multi-stemmed whitebeam (Sorbus aria) interspersed with self-set wych elm is planted between Hermit Lane and a copse of high-quality trees towards the centre of the survey area. There is a semi-mature off-site motorway planting scheme on the embankment of the M1 where it meets the land to the south west and species recorded within are small leaved lime (Tilia cordata), ash, English oak, sycamore, bird cherry (Prunus padus), hawthorn and rowan (Sorbus acuparia).

Three further small semi-mature areas of roadside planting share a boundary with the land in its south western part and these were seen to contain ash, blackthorn (Prunus spinosa), crab apple, field maple, common alder, sycamore, hawthorn, wild cherry (Prunus avium) and rowan. It was noted that ash was the dominant species in both the motorway and roadside plantations and as such there is an inherent vulnerability of these groups to chalara dieback of ash (Hymenoscyphus fraxineus).

Semi and early-mature Lawson's cypress (Chamaecyparis lawsoniana), domestic apple (Malus domestica), and variegated holly were present within the gardens of Hermit House Farm. A walkover viewing of the many gardens that abut the survey area was undertaken in order to record any trees or hedges that might be affected by development of the land, these were only recorded within the survey where considered to be significant. Tree species that were

viewed within private gardens close to the survey area included cherry laurel (Prunus laurocerasus), Leyland cypress (Cuprocyparis leylandii), hawthorn, rowan, ash, goat willow, crack willow, silver birch, horse chestnut (Aesculus hippocastanum), European larch (Larix decidua) and cider gum (Eucalyptus gunnii). It was noted generally that the majority of the properties with gardens that adjoin the survey area are of a relatively modern construction and as such there were very few trees of any maturity present within.

Masterplan Framework Considerations:

- Trees on the site represent a constraint that must be taken into account when designing future development. All the trees and groups of high and moderate quality must be retained as part of the development unless it is clearly demonstrated and evidenced that this is not possible. Trees of low quality are also a constraint and must be fully considered as part of any proposal and retained where possible. Retained trees must be provided with sufficient space to protect their roots, as defined by the root protection area and the full extent of their crown spreads during any works, as well as sufficient space for future growth and development without causing a conflicts with any new features or structures on the sites.

4.9 Green Space and Recreation

Local Plan policy GS1, the Supplementary Planning Document Open Space Provision on New Housing Developments and Local Plan site policy MU1 requires that the development provides appropriate and accessible public open space to meet local need. In addition, the site policy for MU1 requires that the development will be expected to protect the routes of the public rights of way (PROW) that cross the site, and make provision for these as part of any proposals.

The council's Green Space Assessment (2019) for the site provides a summary of existing green space assets in the locality:

Overall Finding:

- MU1 and the immediate surroundings do not have the range of green spaces to meet local standards. A site of this size would be expected to provide the full range of open space for new residents, although a financial contribution for formal recreation provision may be appropriate or combination of on-and-off-site provision in accordance with the local needs assessment.

Parks and open spaces:

- MU1 and the immediate surroundings lack parks at district and borough level. These are available in adjoining areas but access is constrained by major roads and railway line

Child and youth facilities:

- Deficient in Equipped Play Areas, LEAP and NEAP facilities.
- Youth facilities are available.
- Most facilities are good quality and high value although some types of child and youth facilities need improving.

Outdoor sports facilities:

- There are limited outdoor sports facilities, no district or borough level facilities and a lack of opportunities for participation in wide range of sports.
- The quality of facilities that exist need improving.
- There is some availability in adjoining areas but with limited public access; and access to a range of sports is limited.

Green ways:

- There are no established Green Ways (also known as wildlife corridors) crossing in or around MU1 or the immediate surroundings although these are available in adjoining areas.

Natural areas:

- There is a single natural area in the immediate surroundings which is of good quality and high value.

Allotments:

- There is no access to allotments in MU1 and the immediate surroundings but there is access in adjoining areas where the quality of some needs improving.

Formal Recreation:

- Barnsley's Playing Pitch Strategy (2016-2019) provides an overview of existing formal recreation facilities in the locality.
- The demand for formal recreation will be impacted by the development. During 2020, the council will

revise elements of the Playing Pitch Strategy in order to enable a more accurate needs assessment for the site, wider growth and their associated requirements. The council are also in the process of identifying potential sites that will be affected as a result of development and what needs may arise to mitigate and impact.

- It is clear that proximity to the development is an important aspect to the formal pitch mitigation, however on site mitigation in entirety is unlikely to provide adequate improvements for the level of demand from the development. It is therefore likely that a combination of on-and-off-site formal recreation will be required. This will be dependent on facility type, management arrangements and in line with the needs appraisal at the time of the planning application.
- Based on this information, the guidance that features within the Open Space SPD and working together with the council, a green space strategy for the Masterplan Framework area is proposed. This strategy is explained within the Infrastructure Delivery in Chapter 6.

4.10 Noise

Environmental Noise Solutions have undertaken a noise survey for the site and a study area was defined to quantify the level of external noise affecting existing residential properties, neighbouring areas and the site (noise sensitive receptors). An initial site noise risk assessment has been performed using ProPG guidance.

The baseline noise climate in the vicinity of the site and local areas is predominantly due to distant road traffic on the M1 motorway, with localised contributions from local road traffic on Barugh Green Road and Higham Common Lane.

The additional noise contribution from the proposed site access / link road has also been considered along with recommendations for a noise mitigation strategy to protect existing residential properties and future residential properties at the site from this additional noise source using relevant criteria and guidance including BS8233 / ProPG.

Given the level of projected traffic generation from the site, consideration will be required to providing mitigation in the form of localised screening (bunding and/or acoustic fencing) alongside the proposed junctions at existing highways connection points and the proposed link road to provide mitigation to existing properties that will be directly affected by the noise from the development.

For proposed residential properties, appropriate configurations of glazing and ventilation will be required. In order to mitigate external noise levels, to satisfy the lower 'desirable' criterion of ≤ 50 dB LAeq,T for external amenity areas, it is recommended that either;

a) proposed gardens are self-screened from the site access road (by positioning houses between the road and the gardens) or

b) proposed gardens that back on to the site access road are protected with a solid acoustic barrier (e.g. acoustic fencing) and are positioned at a minimum distance of 40 metres from the road.

With regard to the proposed school, existing noise levels are sufficiently low to permit ventilation via open windows whilst satisfying the indoor ambient noise level criteria set out in BB93. However, the introduction of the new link road may exceed the levels such that the indoor ambient noise level criteria (set out in BB93) could not be satisfied with open windows. Therefore, an appropriate configuration of glazing and ventilation will need to be considered. The potential noise impact due to the use of the proposed sports fields at the school has been considered along with recommendations to avoid an adverse impact (i.e. minimum distance between proposed dwellings and sports field).

The potential noise impact of the proposed industrial / commercial units and plant upon both existing and proposed residential properties has been considered. In order to avoid adverse impacts (as defined by BS4142:2014+A1:2019), maximum permissible free-field rating noise levels, from the proposed commercial units and plant, are recommended at existing and proposed noise sensitive receptors. These are based on the measured background noise levels.

Developers should consider the positioning and orientation between associated service yards and existing and proposed residential properties to the north, north-west and east. This would provide barrier attenuation by way of 'self-screening' from the services yards to residential properties. Furthermore, consideration of noise screening will be required.

Masterplan Framework Considerations:

A noise mitigation strategy will be required to protect existing and proposed residential properties from the proposed development using relevant criteria and guidance including BS8233 / ProPG. These include appropriate configurations of glazing and ventilation and acoustic screening at existing and proposed garden perimeters, where necessary. Suitable mitigations will be agreed with the Local Planning Authority, once noise impacts have been identified.

At the planning application stage, it will be essential to understand the noise implications for both construction and operational phases and any subsequent required mitigations. It is suggested the developers use the following in order to assess the impacts; BS4142; 2014 Methods for rating and assessing industrial and commercial sound, BS8233;2014 Guidance on sound insulation and noise reduction for buildings, Design Manual for Roads and Bridges and Calculation of Road Traffic Noise, BS5228;2009 Code of Practice for Control of Noise on Building and Open sites.

Developers are required to follow the requirements of BS5228-1:2009 which details best practice for the control of noise and vibration from construction and open sites. A Construction Management Plan will be required in order to set out potential noise impacts during construction and operational phases and required mitigations. Developers are encouraged to explore the opportunity to use a Customised Code of Considerate Conduct in order to provide a positive commitment to existing residents and a pro-active approach to ongoing community liaison.

4.11 Air Quality

A review of local air quality has been conducted by Wardell Armstrong to inform the scope of the assessment and future discussions with Transport Consultants and the Environmental Health Officers at the council. This has incorporated reviewing the location of local Air Quality Management Areas (AQMAs) and local air quality monitoring data, as well as surrounding land uses which may affect air quality on-site for future residents of the development.

There is an AQMA (AQMA No.1) declared for annual mean nitrogen dioxide (NO2) by the council which covers the southern edge of the site on either side of the M1 motorway. Another AQMA (AQMA No. 2A), declared for annual mean NO2 is located approximately 320m southeast of the site along the A628 Dodworth Road.

The site is, therefore located partially within an existing AQMA. In addition, the M1 motorway is located adjacent to the site and close to the A628 AQMA and will be a key concern in the assessment of air quality.

Masterplan Framework Considerations:

At the planning application stage, it will be essential to understand the air quality implications for both construction and operational phases and any subsequent required mitigations. This is particularly so, given the expected traffic generation from the site and the trip diversion anticipated prior to, and following completion of the link road. Phasing and any interim mitigation measures will require more detailed consideration taking into account short term emissions but also the anticipated transition to lower emission and electric vehicles.

4.12 Ecology

The Local Plan site policy MU1 states that development will be expected to:

- Retain, buffer and manage the watercourse, grassland and woodland north-east of Hermit Lane;
- Retain, buffer and manage the species-rich hedgerows and boundary features. Where this is not possible transplant hedgerows including root balls and associated soils. A method statement for this should be provided and agreed prior to works commencing; and
- Create/retain wildlife corridors through/across the site.

Development proposals will be justified against a Biodiversity Net Gain system in agreement with the Local Planning Authority which demonstrates a minimum 'net gain' of at least 10% following construction compared to the site's current ecological value.

WYG have undertaken a desk-top study, which has identified no Natura 2000 sites identified with 10km of the site. Similarly, no statutory designated sites were identified within 2km of the site.

Redbrook Pastures Local Wildlife Site (LWS) is located adjacent to the eastern site boundary and a further two LWSs are located within 2km of the site (Hugset Wood LWS and Barnsley Canal at Wilthorpe LWS).

These sites could be directly or indirectly impacted by the development of the site. Creation of a method statement detailing measures on how to avoid indirect impacts upon this LWS (e.g. pollution prevention) will be required.

Habitats

Nine main habitats were identified on site including semi-natural broadleaf woodland, semi-improved grassland, improved grassland, marshy grassland, running water, standing water, arable, hedgerows and trees, and buildings and hardstanding.

Consideration of the potential effects upon habitats of value within the site (e.g. woodland, grassland, trees and aquatic habitats) will be required and recommendations for mitigation measures agreed with the Local Planning Authority.

Protected / Notable Species

WYG have undertaken detailed field surveys across the site and noted the site's suitability for the following protected / notable species on site:

- roosting and foraging / commuting bats;
- breeding birds;
- great crested newt;
- common toad;
- other amphibians;
- badger;
- reptiles;
- brown hare; and
- hedgehog.

A stand of Japanese knotweed was identified on the western site boundary (north of Hermit Lane). A pre-construction survey will be produced, to provide up-to-date advice on management / removal.

Bat Survey Report (WYG, 2018)

WYG have completed a series of bat roost suitability assessments of all trees and buildings on and directly adjacent to the site. Subsequent bat emergence / re-entry surveys were undertaken on a total of 25 trees and seven buildings, considered to offer bat roost suitability. The results of which should accompany an application for the development of the site.

WYG also completed site-wide bat activity surveys between April and September (2018) (inclusive). Amongst other bat species, the common pipistrelle were most frequently recorded. The most valuable foraging / commuting routes for bats were identified and included Hermit Lane, Craven Wood, much of the eastern site boundary and several hedgerows in the south of the site.

Areas of ecologically-valuable woodland will be retained within the development. Hedgerows and ditches considered to be of most value to foraging / commuting bats will either be retained in-situ or translocated / replaced elsewhere in the development in a way which provides habitat connectivity.

In addition, adoption of a sensitive lighting scheme will be required, along with the creation of landscaped areas to provide shelter, foraging opportunities and dark corridors across the site.

Breeding Bird Survey Report (WYG, 2019)

A suite of breeding bird surveys, comprised of one visit each month (March – June, inclusive), was completed in 2018. Eleven species notable species (BoCC (Birds of Conservation Concern) Red and Amber, NERC listed or LBAP) were confirmed breeders or considered to be likely breeding. In addition, 22 common bird species (BoCC Green or no BoCC status) were confirmed breeders or considered to be likely breeding.

It is recommended that enhanced nesting habitat be retained or replaced in greater length / area. Phasing of works could minimise impacts to breeding birds in the short-term. Habitat creation, mitigation and management will be required.

Best practice measures will be used, including removal of vegetation / ground clearance outside of the breeding bird season (March – August, inclusive) or otherwise, preceded by a nest check by a suitably experienced ecologist, and presentation of bird habitat illumination.

Badger and Hedgerows (WYG, 2019)

WYG assessed hedgerows on site between 2018 and 2019 against the 'Wildlife and Landscape' Importance criteria within the Hedgerow Regulations 1997, however further assessments will be required to assess the

potential heritage significance of identified hedgerows.

Thirty-four hedgerows exist on site. Of these, three hedgerows meet sufficient criteria, as detailed within the 'Wildlife and Landscape' section of the Hedgerow Regulations 1997, to be considered Important. It is proposed to retain as many hedgerows in-situ (and protect retained hedgerows during construction), where possible. Any Important hedgerows requiring removal could only be removed with Local Planning Authority approval or if present within an area granted with planning permission. If this happens then those hedgerows will be translocated together with their root balls and associated soils to an agreed position within the development. Finally, the hedgerows surveyed in 2019 should be subject to a final walkover (during the main botanical season: April – August, inclusive) prior to removal, to search for evidence of any notable botanical species.

No evidence of badger was identified on site, however, a pre-commencement check is recommended as a precautionary measure, due to the mobility of badgers. In addition, best practice measure during construction will be required, to prevent harm to any badgers which may visit the site.

Great Crested Newt

WYG have carried out some surveying for this species and conducted one eDNA survey (located in Craven Wood) which proved negative. Further surveys have been agreed for 2020 and further permissions will not be given by the LPA until it is satisfied that this species is either not present or the effects can be sufficiently mitigated.

Masterplan Framework Considerations:

- Planning applications should be supported by preliminary ecology appraisals and where identified accompanied by detailed surveys.
- Ecological management plans will be required to demonstrate long term management and maintenance of existing, enhanced and proposed ecological features and habitats.

4.13 Utilities

The site has been reviewed in order to assess the extent and capacity of existing utilities within the vicinity of the site and the potential need for additional infrastructure or diversions.

The site is local to several existing mixed-use developments therefore all major utility infrastructure is local to the site.

The consensus and feedback from all utility providers is the new development can be supported and that there is spare capacity in their networks to allow the site to develop in lines with the masterplan. As major utility infrastructure routes within and adjacent to the development site and boundary and there is potential for it to be extended to meet the demand of the new development.

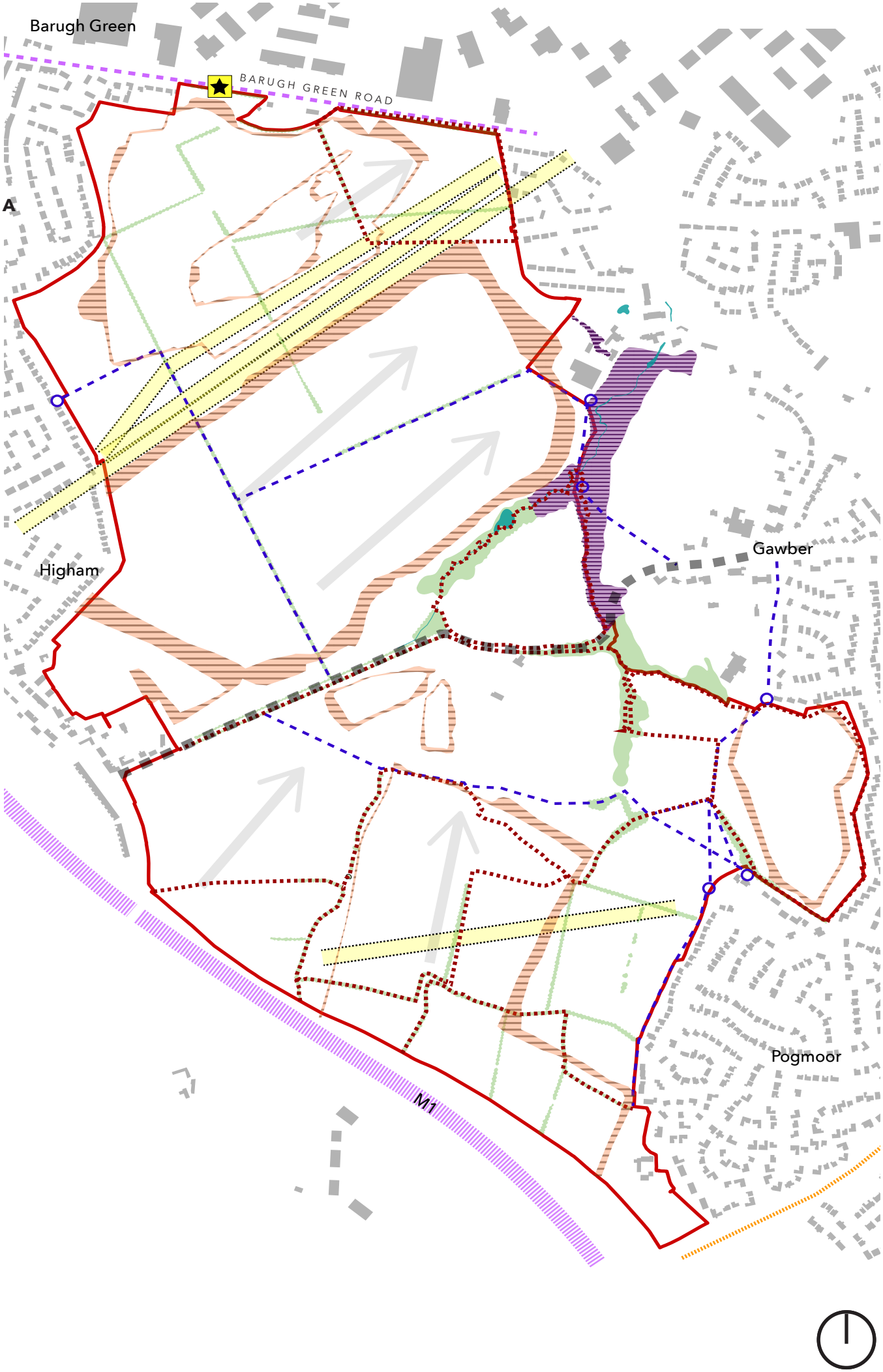
There is evidence of major utility infrastructure being affected by the redevelopment and will require some form of diversion. Affected utilities are:

- Northern Power Grid (66kV and 11kV services route within and through the site.
- Northern Gas Network infrastructure routes along Barugh Green Road and will require some diversion works due to the requirement to connect into the Barugh Green Road highway network.
- Virgin Media and British Telecom (Infrastructure routes within and around the new development and is affected by the Barugh Green Road and Higham Common Road highway modifications).
- All affected utilities have been consulted to establish a resolution and budget costs for the works. Further consultations would be required as detailed designs and planning applications are prepared.

Masterplan Framework Considerations:

Developers will need to undertake further dialogue with services and utilities providers for development within the planning application stage to ensure that appropriate connections can be achieved.

Fig 4.34


Barugh Green
BARUGH GREEN ROAD
A
Higham
Gawber
Pogmoor
M1

4.14 Constraints

The constraints plan has been informed by the assessment of the baseline context. Constraints are considered potential limitations to development and has the potential to influence how a development is designed and evolves through the process. The constraints also provide the basis of identifying the opportunities. For example, the location of public rights of ways, whilst these inform the design response, these are also elements that contribute to the future of character of the area.

The following constraints and opportunities are identified:

- The ground conditions of the site were affected by the previous open-cast mining and infill, meaning that there are clear areas where development is restricted, in locations of the highwalls.
- The topography of the site is currently steeply sloping. The initial site works will require groundworks to reduce some of these slopes and create suitable levels and platforms for development to take place.
- Above ground utilities also run throughout two areas of the site to the north and south, in the form of overhead electrical wires.
- A milepost also sits on the northern boundary which is Grade II listed.
- Background noise levels from the M1 motorway and local road traffic on Barugh Green Road and Higham Common Road. The site has a strong existing network of rights of way and footpaths. These will be retained to create accessible pedestrian and cycle routes into and throughout the development. The strategic location makes sure the site is well connected to local amenities, schools and roads.
- As a consequence of modifying the levels of the site for construction, hedgerows and woodland should be retained where possible. Additionally, new ecology will be introduced elsewhere to create a high-quality, green environment for the development. The sustainable drainage will provide water features to complement this.
- Opportunities identified for the link road within the site to connect into the existing highway network at Barugh Green Road and Higham Common Road.

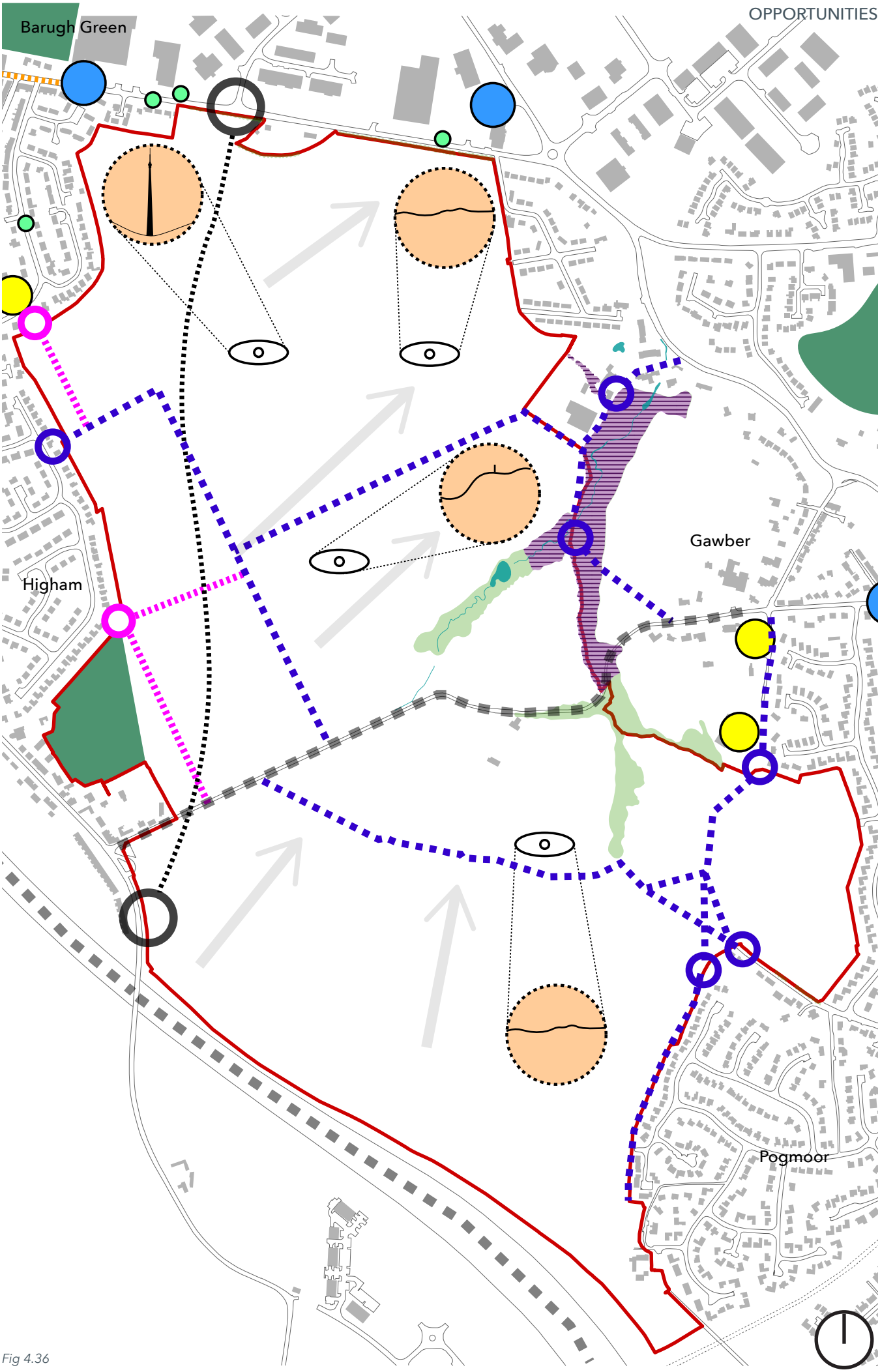


Fig 4.36

4.15 Opportunities

Local amenities on Barugh Green Road *Fig 4.37*

Key view out to local landmarks *Fig 4.38*

View into Barnsley facing east *Fig 4.39*

Fig 4.40

5 MASTERPLAN FRAMEWORK

BOND BRYAN

BARNSLEY WEST, MASTERPLAN FRAMEWORK (MU1)

THE VISION FOR BARNSLEY WEST

Fig 5.1

5 MASTERPLAN FRAMEWORK

5.1 Design Evolution

The design evolution is an iterative design process driven by the constraints and opportunities identified within the supporting technical assessments. This makes sure that all design decision making is underpinned by an evidence based strategy for developing the site.

The constraints and opportunities set out the starting point for the design evolution.

The level of proposed development across the site is set out within the adopted Barnsley Local Plan and is summarised below:

- Development of around 1,700 new homes and 43 hectares of employment land
- A new primary school
- Small convenience shops and community facilities
- Brand-new infrastructure, including an access link road
- Open green space with wildlife corridors, watercourses and key pedestrian footpaths and cycleways paths

The development of the site provides a new strategic link road, the "Claycliffe Link Road", which will form a spine road through the site and provide a key route from M1 Junction 37 up to A635 Barugh Green Road, providing a north-western gateway into Barnsley. As a result, delivery of the link road will also help alleviate local traffic issues, particularly for residents of Higham and Barugh Green to the west of the site, with Higham Lane and High Common Road currently providing the primary access for heavy goods vehicles travelling between the M1 and Claycliffe Business Park. The need for a new strategic link road between M1 Junction 37 and A635 Barugh Green Road is a long-held transport aspiration for the council and is supported by the Sheffield City Region Combined Authority.

The new link road will connect both ends of the site and provide a thoroughfare. This infrastructure is dependent on two roundabouts at either end.

A new access has been designed at Barugh Green Road; the access strategy and road alignment has been agreed in principle.

Furthermore, the location of the Tudor Rose Nursery also limits where the new roundabout access into the site can be positioned. The justification for the roundabout locations has been determined following consideration of existing levels across the site and the need to minimise gradients.

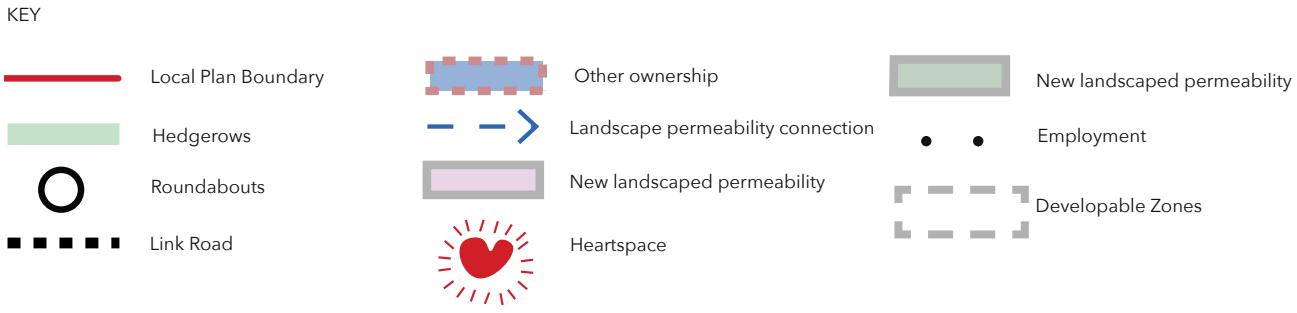
To the south, the roundabout fits into Higham Common Road to allow for M1 access and serve the wider operational requirement to the employment zone.

In order to ensure the link road can function safely, its configuration is driven by extensive testing by the consultant highways designer.

The highwalls are undevelopable land, and as such provide an opportunity to for the location of landscape and recreation areas. These can then expanded by merging with a series of 'character areas' throughout the site, linking up with existing rights of way to promote a permeability through the site, and preserving other features such as the woodland and Hermit Lane. These character areas contain landscaping, recreation areas and flood ponds and set a framework for where buildings can be located.

Setting out the Landscape Framework allows for zones to be allocated for housing and neighbourhoods. The employment zone needs links to the M1 Junction 37 to minimise the impact of HGV's driving through the link road. Additionally, the southern area of the site has frontage to the M1 and will also be closest to what will be an almost constant noise source from the motorway. Taking this into consideration, the logical location for the employment zone is on the southern part of the site.

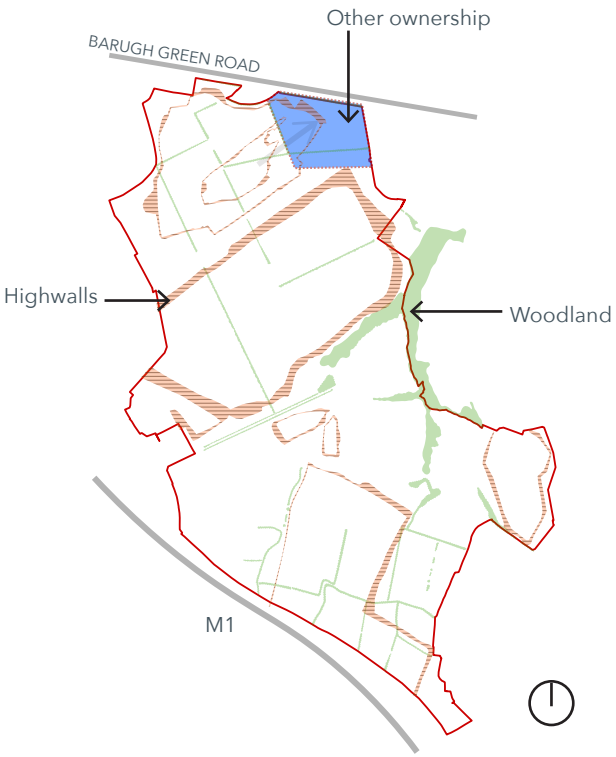
The civic square contains the school and community buildings. Due to its prime frontage on the link road and sufficient distance from other local schools and amenities, there is a strong justification for its location within this part of the site, as well as the playing fields being south-facing in this location.



BARNSLEY WEST, MASTERPLAN FRAMEWORK (MU1)

THE VISION FOR BARNSLEY WEST

1



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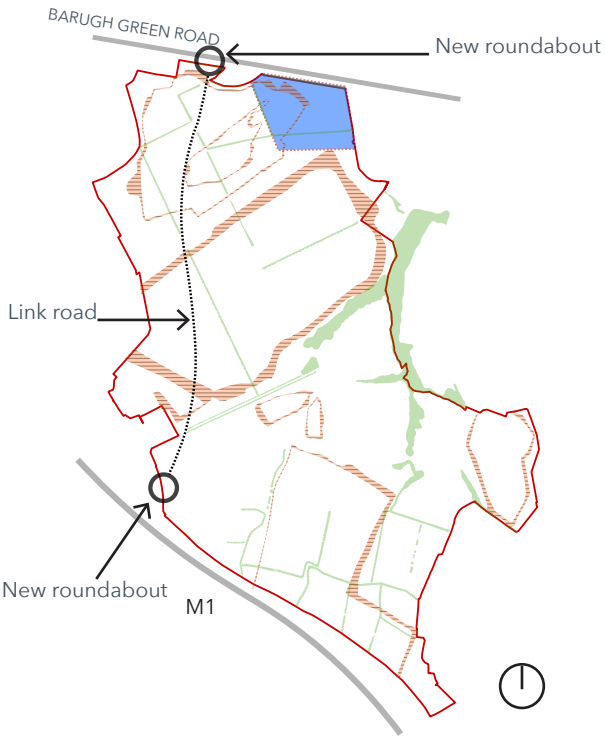

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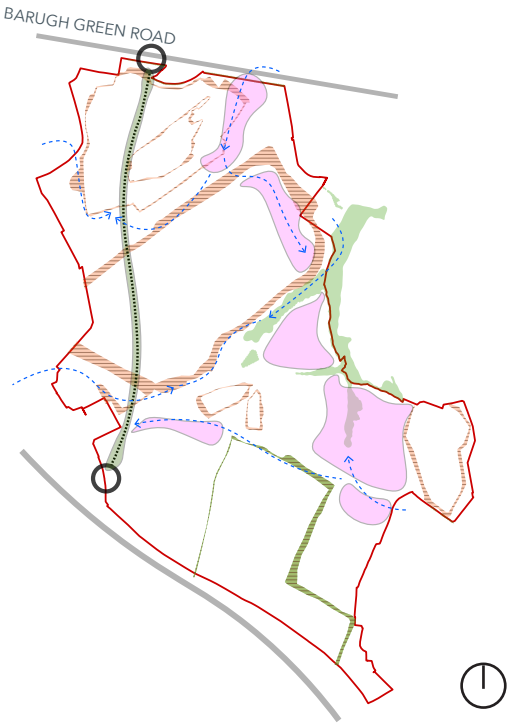


4

Fig 5.2

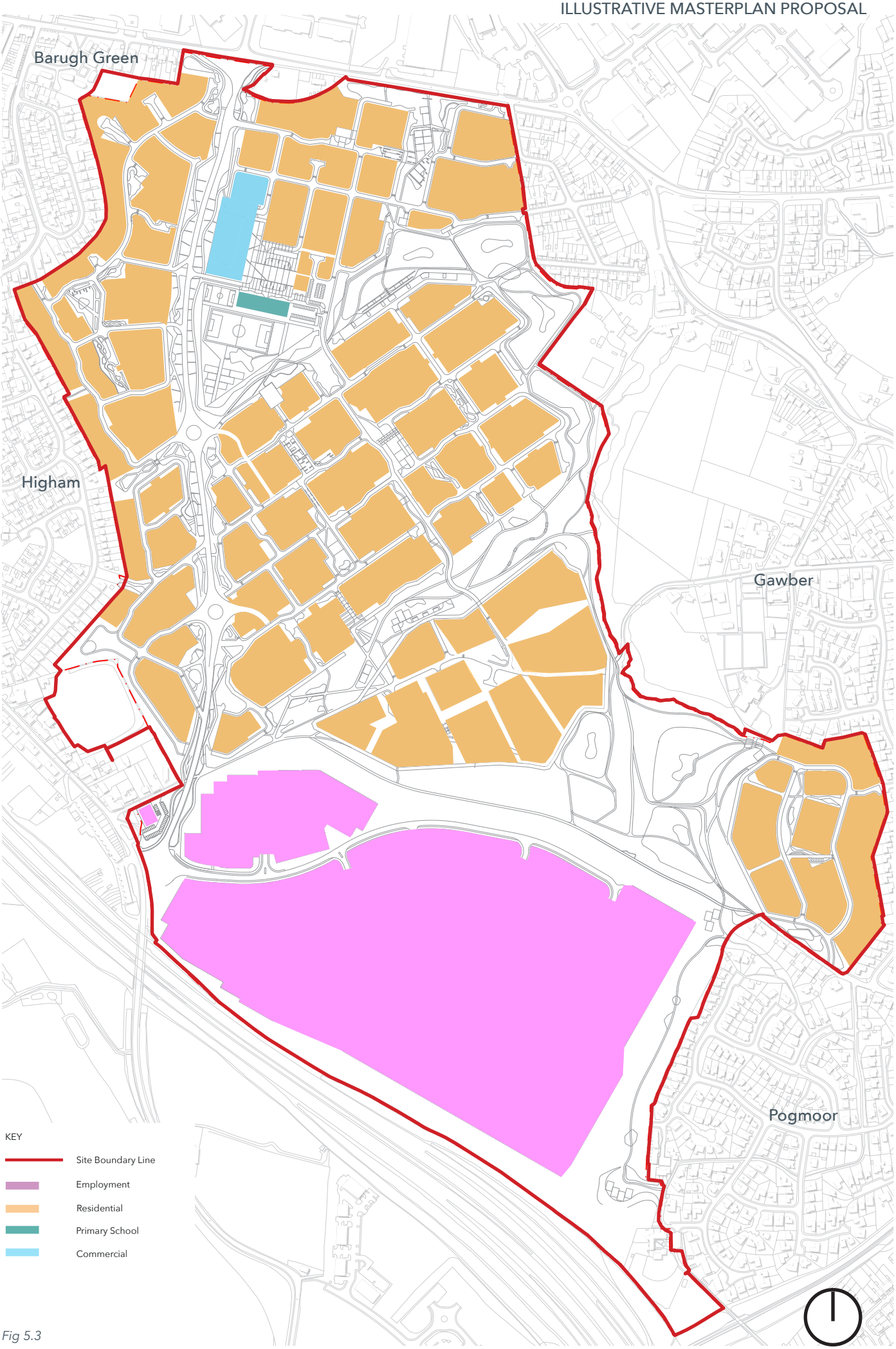

Barugh Green
Higham
Gawber
Pogmoor
KEY
Site Boundary Line
Employment
Residential
Primary School
Commercial

Fig 5.3

5.2 Masterplan Framework

The Illustrative Masterplan will guide the future planning applications for development of the site. The Illustrative Masterplan has evolved from consideration of health and wellbeing, townscape, heritage and socio-economic considerations. It has been used to:

- create a framework for development of the site in terms of mix and quantum of uses, building typologies, streets and open spaces;
- allow for the flexibility to ensure Barnsley can realise the ambition for the homes it will need over the next 15 years. This flexibility ensures it can cater for homes for first-time buyers, downsizers, elderly and family homes to suit a range of tenures from market sale, shared ownership, homes for rent and affordable housing;
- prioritise pedestrians and cyclists with public transport, and convenient and safe pedestrian access through the site to the town centre and surrounding communities, linking town-wide footpaths to enjoy the wider Barnsley environment;
- make sure that community is catered for in the form of education, community and healthcare facilities within walking distance to each new neighbourhood; and
- provide space for a wide range of business from start-up initiatives to established companies in modern workplaces fit for the 21st Century.

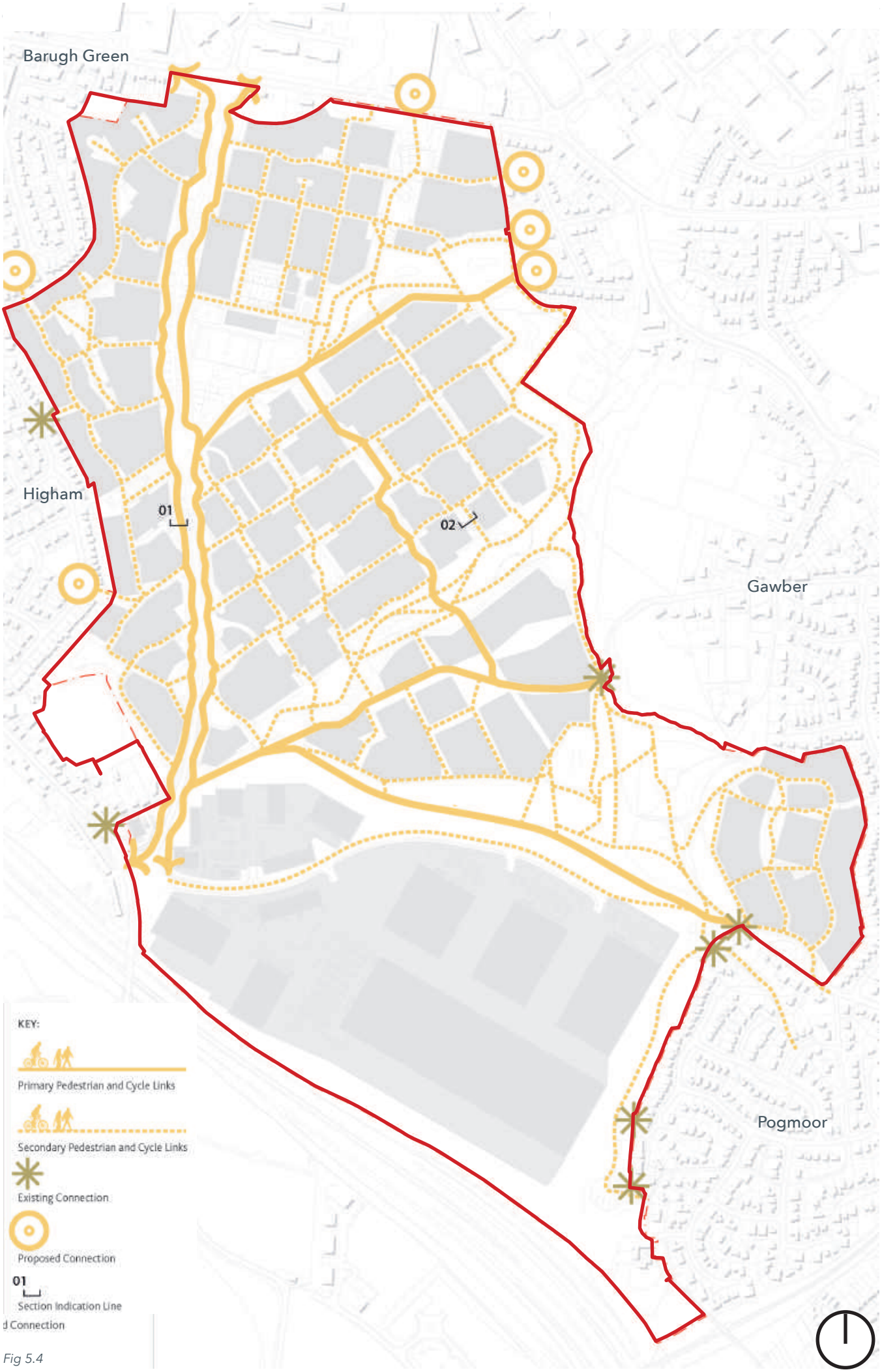

Barugh Green
Higham
Gawber
Pogmoor
01
02
KEY:
Primary Pedestrian and Cycle Links
Secondary Pedestrian and Cycle Links
Existing Connection
Proposed Connection
01
Section Indication Line
d Connection

Fig 5.4

5.3 Sustainable Movement

This diagram demonstrates the extent of pedestrian and cycle permeability that the draft illustrative proposal could achieve. Linking up with existing rights of way, this is enhanced with a series of new pedestrian access points to ensure the Masterplan is carefully sewn into the adjacent communities, and attracts a wider use as a recreational location.

Any new routes through the site need to be as accessible as possible and upgrades sought to existing routes where appropriate.

5.4 Public Transport

To ensure the long-term sustainability of Barnsley West, it is vital that future occupants of the development are able to conveniently access services and amenities, both within the site and the wider area, by modes of travel other than private car.

The concept for Barnsley West is for a "connected neighbourhood' that integrates the development into the wider area and local communities. This can be achieved through a combination of new services and amenities consistent with the Local Plan policy, innovative public transport solutions, high-quality pedestrian and cycle routes, effective management and promotion of sustainable travel options, and thoughtful masterplanning. The aim is to make journeys between the site, the surrounding areas and Barnsley town centre safe, convenient and attractive by sustainable modes of travel.

A programme of bus service provision and enhancements will be required which address frequency, convenience and attractiveness, and supported where necessary by the new highway infrastructure. That programme of provision and enhancements should be agreed in liaison with the SYPTE.

There is an opportunity to provide high-quality frequent and direct public transport connections to Barnsley town centre, and the other main urban areas.

The development will therefore be designed to capitalise on existing bus services, ensuring that pedestrian connections to bus stops are direct and attractive, and supporting new bus stops and upgraded bus stop facilities, where appropriate. The potential to extend and/or divert bus services through the site, utilising the new link road, will also be explored with the local bus operators as part of the detailed site masterplanning at the planning application stage.

The identified bus services should be supported by promotion of sustainable travel options through implementation of travel planning measures.

Public transport proposals have yet to be defined for the site, however it is good practice to serve residential properties with access to bus-stop within a 5 minute (400m) walk.

5.5 Travel Plan

In accordance with national and local policy requirements, a Framework Travel Plan will be prepared for Barnsley West at the outline planning application stage. The coverage and detail of the Travel Plan will reflect the scale and nature of the development proposal. Implementation of the Travel Plan will encourage trips to the site to be made by sustainable (non-car) modes of transport, where appropriate, and help to mitigate the impact of increased traffic.

In developing the Travel Plan, a robust approach will be taken to identifying, monitoring and reviewing targets, supported by appropriate funding. Targets will be identified to encourage access by sustainable modes of travel and to manage demand for car-based travel. The targets will be quantified and detailed in terms of how the targets will be monitored and what the contingency is if the targets are not achieved. The developer will, consequently, be incentivised to take a long-term approach to the provision of sustainable transport to the development.

The Travel Plan will have a clear action plan that will have specific actions in the months leading up to the development opening and beyond. This will facilitate the actions required to develop and maintain the Travel Plan.

The Framework Travel Plan will establish a mechanism for implementing these measures and actions across the various land uses, and it is likely there will be a separate Travel Plan for each housebuilder, school and employment development. This will ensure the Travel Plan is tailored to the specific needs of that land use, however, a coordinated approach will be adopted to maximise on opportunities.


Barugh Green
Higham
Gawber
Pogmoor
KEY:
The Square
Meadow Park
Cascade Arboretum
Gawber Forest
Glades & Greens
Velvet Woods
Green Lanes

5.6 Green and Blue Infrastructure

A 'Healthscape' is a Green and Blue landscape framework with a vision of enhancing health and wellbeing. The 'Healthscape', acts as a setting for the new place, community and workplace that is currently known as Barnsley West.

A new amenity for the new community alongside Gawber, Higham, Barugh Green and the rest of Barnsley, facilitating:

- activity through new passive and active recreation facilities, paths and trails for safe routes to school and work, formal and informal play, for young and old;
- a strong and resilient community; through landscape for the community to adopt, space for community events and social gatherings;
- the community's connection to nature and the seasons, for health and wellbeing;
- Improved biodiversity, through some retention of existing trees and woodland and creation of new meadows, wetlands, hedgerows, and forests; and
- reducing carbon footprint and improving air quality, through mass tree planting and reducing the need to drive a car.

The new landscape for Barnsley West has driven and shaped the Masterplan. This green and blue landscape has been called the 'Healthscape', which will act as a setting for the new place, community and workplace that will be Barnsley West.

This will be a fantastic amenity for the new community but also Gawber, Higham, Barugh Green, Redbrook and the rest of Barnsley. A truly healthy place for people and nature, facilitating:

- activity through new passive and active recreation facilities, formal and informal play, paths and trails for safe routes to school and work, for young and old;
- a strong and resilient community; through landscape as a resource for the community to adopt, space for community events and social gatherings;
- the community's connection to nature and the seasons, for health and wellbeing;
- biodiversity net gain, through retention of existing trees and woodland and creation of new meadows, wetlands, hedgerows, and forests; and
- reducing carbon footprint and improving air quality through mass tree planting and reducing the need to drive a car.

The Healthscape will have a series of different character areas and spaces to make it really interesting and varied in the way it feels and to give different identities to different areas of Barnsley West.

The areas and spaces include:

- Retained and improved the existing beautiful Velvet Woods and streams to the East of the site. The intention is to enhance these further by connecting into a proposed new wood called Gawber Forest, that will surround the commercial area to the South;
- A tree species rich, linear park and arboretum along the new link road, with shared footpath and cycle routes and linear swales, which will soften this road and create an iconic landscape gateway and feature for the new place;
- Large open green lanes that run across the site and connect the new and two existing communities together. These will extend and enhance the current public rights of way. These spaces will also be enriched by informal and formal play spaces and trim trails to ensure that the health and wellbeing of residents is a top priority;
- New ecology corridors with additional species rich native hedgerows, meadow, trees and thickets, linking open green spaces to the existing and new woodland;
- The topography of the land will enable the landscape to exploit key views across Barnsley and provide more interesting landscape forms;
- New Meadow Parks will be created to give large open spaces which will connect the 'green lanes' but also provide the appropriate quantum of water attenuation for the development. Meadow grassland and informal paths will be the theme to these areas;
- A new Civic Square in the centre of the development, containing the school and new community facilities which will create a new heart to the community. This will be a leafy but flexible hard space for events and gatherings;
- A network of pedestrian and cycle friendly streets in compact neighbourhoods;
- Community orchards and allotments are dotted

around the development offering residents opportunity to grow and pick their own for healthy eating, and to foster a strong sense of community;

- New greens in residential areas and glades in woodlands, provide pocket park focal points for residents and workers, which will include hard and soft landscape features and provide a mix of functions, but often informal or formal play.

National Planning Policy seeks 10% biodiversity enhancements from new development. Seeking net biodiversity gains requires improvement to all aspects of the environmental quality through a scheme or project.

5.7 Management and Maintenance

The management, governance and stewardship of the proposed green and blue infrastructure opportunities have only been considered in principle at this stage. The likely option will be for the new residents and occupiers of the employment units is to enter into a service charge arrangement run by a local management organisation or trust who specialise in maintaining open space provision, detention basins and swales. When determining the management arrangement structure, consideration should be given to the following:

- making sure that there would be opportunities to secure biodiversity gains;
- community engagement to deliver added social value;
- include management of hard and soft landscaping;
- purpose, power, responsibilities, financial arrangements and internal procedures of the open space owner(s) / manager (management body / entity / organisation);
- preference for a single management organisation for all areas of green and blue infrastructure unless very special reasons why this cannot be achieved;
- annual reporting to the council for the first five years of management;
- incorporation of information boards and signage to educate residents; and
- stewardship on par with those being implemented for garden communities.

This approach will be subject to further work including assessing the scope and management required and the feasibility of management models, funding sources and legal structures. Developers should engage with a local management organisation or trust at an early stage so that they can input into the design of green and blue infrastructure.

The vision for transferring green and blue infrastructure to a land management arrangement is based around core principles for residents and occupiers:

- They should be instrumental in the major decisions that affect their new community;
- They should have an ongoing role in 'co-producing' the planning, decision and commissioning of services;
- They should make sure that the benefits of biodiversity enhancements are continued in perpetuity; and
- They would be the beneficiary of the initiatives funded by the management organisation and are therefore best placed to evaluate the impact of these initiatives.

Fig 5.6

Fig 5.7 Meadow Park

5.8 Strategic SUDS Drainage

The Barnsley West Masterplan will integrate sustainable urban drainage systems where possible on the scheme. The intention is to capture all of the surface water using large detention basins, which will be allocated per area of land and will be placed within flat plateaus of the site to ensure that they maximise the benefit of holding stormwater.

These detention basins will typically be wet, and possibly dry in summer months. If the basins are dried out, they are unlikely to be suitable for recreational access as they are likely to contain soft soils. Small areas within these basins will provide opportunities for wildlife value however. Amenity use around these areas may comprise a footpath around the overall perimeter, which could be linked to a trim trail. These basins will have vegetation within them that can cater for water or dry conditions and will managed in a way to encourage biodiversity.

These basins will also cater for the commercial part of the site as well as the residential areas.

There will be a linear swale along the link road to help provide an area for stormwater run-off from the link road itself whilst also naturally treating this water before it connects back to the water attenuation ponds.

5.9 Strategic Foul Water

The site is served by an existing 150/225 mm public foul sewer in Wharfedale Road and 175/225 mm public foul sewers in Hermit Lane and Higham Common Road.

The topography of the site falls significantly to the north or northeast. Both the Masterplan arrangement and the infrastructure facilities will be developed to provide new foul sewers within both the central spine road and the secondary road network to drain to the existing sewer network by gravity where possible.

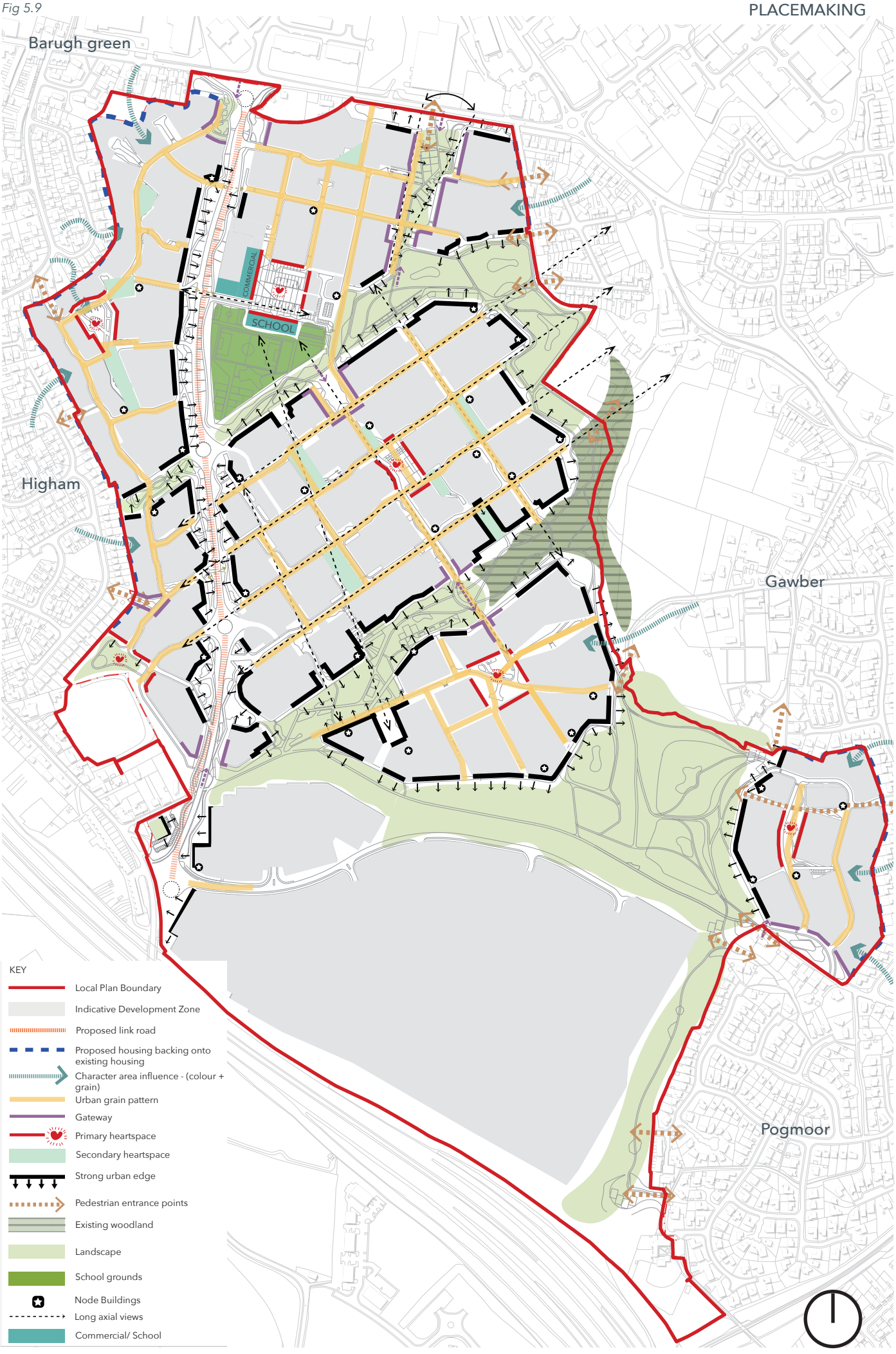
New and/or upgraded sewers shall be required within Barugh Green Road which will ultimately discharge to the Darton treatment works.

- Large water attenuation basins for storm water from residential and commercial areas
- Linear swales with check dams along Link road are being proposed*
- Permanent water bodies at the bottom of the water attenuation basins
- Permeable paving to be introduced where possible*

*viability of these is still to be investigated further due to site specific investigations


Barugh
Higham
Gawber
Pogmoor
KEY:
Attenuation Basin
Permenant Water Body
SuDs
nt Water Body

Fig 5.8


Barugh green
Higham
Gawber
Pogmoor
COMMERCIAL
SCHOOL
KEY
Local Plan Boundary
Indicative Development Zone
Proposed link road
Proposed housing backing onto existing housing
Character area influence - (colour + grain)
Urban grain pattern
Gateway
Primary heartspace
Secondary heartspace
Strong urban edge
Pedestrian entrance points
Existing woodland
Landscape
School grounds
Node Buildings
Long axial views
Commercial/ School

5.10 Placemaking

The placemaking concept ensures the physical built elements of the Masterplan are a direct response to the "Healthscape". All buildings will be located in such a manner to promote recreation spaces that enhance health and wellbeing. How buildings and streets relate to one another has also been carefully considered around issues of solar orientation, views, parking and crime.

The placemaking strategy for the Masterplan is realised as a series of components that will create an environment to live work and play:

- Gateways: Key primary buildings at the north and south entrances are required to create a 'gateway arrival' to Barnsley West. This is important in giving this district its own identity that complements the adjacent communities.
- The layout of the buildings shall create a series of "heart spaces" through the neighbourhood. These heart spaces are designed in a range of sizes and scales to give variety and identity to different neighbourhoods These spaces are landscaped and are linked together with long views and frame local landmarks with pedestrian and cycle routes between them.
- A civic square shall sit at the heart of the development, with a school that will also provide a range of services out of hours and term time to the local community. The scale of the square shall be sufficient to provide a range of community events throughout the year.
- Although the topography will change to develop the site, the configuration to Hermit Lane is retained and transformed as part of a link through a new neighbourhood and public square.
- All edges to the development shall be respected with gardens backing onto adjacent gardens along the boundary. Within Barnsley West strong edges to neighbourhoods will give definition to open spaces

The example images show the sort of character the development is aiming to create.

Example image: Heartspaces *Fig 5.10*

Example image: Link between neighbourhoods *Fig 5.11*

Example image: Subtle gateway buildings *Fig 5.12*

Illustrative View: Northern Gateway *Fig 5.13*

Illustrative View: Heartspaces *Fig 5.14*

Illustrative View: Civic Square *Fig 5.15*

Illustrative View: Entrance To Employment Zone *Fig 5.16*

6 INFRASTRUCTURE AND DELIVERY

BOND BRYAN

BARNSLEY WEST, MASTERPLAN FRAMEWORK (MU1)

THE VISION FOR BARNSLEY WEST

Fig 6.1

6 INFRASTRUCTURE AND DELIVERY

MU1 is a strategic site which must deliver key infrastructure and a mix of uses to ensure the development of a sustainable and healthy community. It is therefore essential 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 and delivered in a comprehensive manner. This section sets out the minimum requirements relating to the delivery of infrastructure, utilities and facilities across the site.

Further detail and discussion about trigger points will be agreed during the course of planning applications and secured by legal requirement where necessary.

Landowners and/or developers are strongly encouraged to engage with the service providers at the earliest opportunity to discuss timing of delivery and specific site requirements.

Infrastructure Element	Description	Trigger	Funding Source	Lead delivery organisation
Roundabout 1	Northern access point to site via Barugh Green Road	To be installed prior to commencement of residential development	SCRIF	Developer
Roundabout 2	Southern access point to site via Higham Lane	To be installed prior to commencement of commercial development	SCRIF	Developer
Link road	1.1km of 7.3m single carriageway with associated landscaping, 3m wide shared footway and cycleways. Two internal four arm roundabouts (c43m diameter) for access to the development zones. Link road to operate at 30mph.	The link road will be delivered in a phased manner with the strategic link formed by the completion of the 237 dwelling on the site and 34,206m² of commercial space.	SCRIF and developer	Developer
Drainage	Surface and foul water systems to serve the site	These systems will be installed in a suitably phased manner alongside the development to make sure capacity and connections are always available	Developer	Developer
Education	The scheme will facilitate the delivery of an on-site Primary School and make a financial contribution towards secondary education places . The new primary school will deliver around 300 new places in order to meet demand generated from the development and wider Local Plan growth. The school infrastructure will enable future expansion to 420 (two form) places in the future should the demand arise. The financial contribution for secondary school places will be used to increase the capacity of existing schools within the locality.	The primary school is to be in operation by the second summer -following the start of residential development.	Developer	Developer
Open space	Strategic green infrastructure and on plot Green infrastructure	Will be delivered with associated phases.	Developer	Developer

6.1 Transport

A new link road is proposed which will provide a key route from the M1, Junction 37 up to A635 Barugh Green Road, providing a north-western gateway into Barnsley. Delivery of the new link road will help alleviate local traffic issues, particularly for residents of Higham and Barugh Green, with Higham Lane and Higham Common Road currently providing the primary access for heavy goods vehicles travelling between the M1 and Claycliffe Business Park.

The need for a new link road between the M1, Junction 37 and A635 Barugh Green Road is a long-held transport aspiration for Barnsley Council and it is supported by the Sheffield City Region Combined Authority. The link road and the associated access improvements are being provided through the Sheffield City Region Infrastructure Fund (SCRIF).

There are three separate but interrelated planning applications coming forward for the delivery of new highway infrastructure works to facilitate access and support economic development and housing delivery in Barnsley. The planning applications are as follows:

- Application 1 – Barugh Green Road roundabout.
- Application 2 – Higham Road roundabout.
- Application 3 – Higham Lane / Capitol Park road improvements.

The above planning applications if/once approved will provide the necessary access to help with the future delivery of the new link road, as identified in Barnsley's adopted Local Plan. The new link road will be subject to a future planning application, as part of the strategic development of the site (MU1). The impact of the new link road and associated highway infrastructure improvements, have been assessed as part of the consideration of the potential for significant transport effects to arise for the overall transport schemes within the three SCRIF planning applications.

Future delivery of the link road will be steered by various potential areas of impact of the development on local communities, residents and highways. Final link road deliver will also be considerate of air quality, noise and public amenity impacts when determining its required delivery date.

To make best use of SCRIF investment and enhance early connectivity and local community benefits the link road should be delivered as early as possible in the development of the Masterplan.

6.2 Education

The MU1 site policy sets out the requirement for an on-site Primary school and the provision of financial contributions towards secondary school places.

Primary School Places – The new primary school on-site will need to deliver around 300 new primary school places. The delivery route of the school is yet to be finalised, however current government guidelines would require the appointment of a Multi Academy Trust to work alongside the developer and the council to make sure a high quality community free school is delivered.

Current local authority pupil projections indicate the primary school has to be open and operational by the second summer following the start of development on the residential element of the scheme.

The Government have a requirement for new Primary schools to provide nursery's and consideration will be required within the Primary School site for such provision. In addition, further earlier years provision by private providers could also be an appropriate use to consider within the community facilities.

Secondary School Places – The developers of the site will pay a financial contribution towards the provision of additional secondary school places in the borough. The additional school places will be delivered by Barnsley Council in line with capacity forecasts for neighbouring schools. Further detail and discussion about trigger points and phasing of payments will be agreed during the course of planning applications and will be secured by legal agreement.

Notwithstanding the above, future school capacity will change as updated information on likely admissions becomes available. Given the timescales involved in completing a development of this scale, school place capacity will need to be reviewed throughout the development to ensure that contributions are made if there is likely to be inadequate capacity within the planning area.

6.3 Community Facilities

The requirement for small scale convenience retail and community facilities is set out within the Local Plan site policy to cater for residents of the site as well as the existing wider area. Any development to meet this need should also provide other facilities that might be expected for the scale of development to ensure that

the needs of the community are met. Such uses may include small scale convenience retail, a health centre and a community centre.

6.4 Healthcare

During the preparation of the Local Plan, the Clinical Commissioning Group (CCG) engaged with Barnsley Council to provide an overview of current and future service provision.

NHS Barnsley's CCG formed in April 2013 and is a membership organisation bringing together all general practices serving residents across the Barnsley borough.

The CCG has around £400 million funding for health services including hospital, community and primary medical services (GPs) for Barnsley residents. The level of funding available is based on a national formula which is linked to population size and various other factors including deprivation levels and the age profile of the local population. The cost of increasing health provision is therefore intended to be met by funding from central government and NHS England using this formula. NHS England work with the local CCGs, via a delegation agreement, to make sure services are being commissioned and delivered to meet the needs of the local population and assure the CCG's plans for transformation and a sustainable healthcare provision.

During the preparation of the Infrastructure Delivery Plan the CCG confirmed that there were no specific issues for the provision of health infrastructure. Through discussions with representatives of the Barnsley CCG and Barnsley Hospital it was confirmed that the NHS in Barnsley have the physical infrastructure in place to deliver the required level of health provision, based on historical growth, but that the level of development (alongside other external factors) may result in increased pressure on the hospital's A&E service and on its Primary Medical Service. The trust is continuing to develop its estates strategy which will guide the use and development of the hospital site. The CCG is also reviewing its estates strategy in light of the recent publication of the long term plan and primary care network development.

The Infrastructure Delivery Plan concluded that given the recent investment in health provision in the borough it is unlikely that major new facilities will be required, with workforce being the capacity issue rather than premises.

Barnsley West (MU1) Masterplan Framework and GP Practices

The CCG has since reviewed Barnsley Council's housing trajectory down to neighbourhood level enabling them to see where the specific proposals are planned in relation to the GP practices within the area. The Barnsley West (MU1) Masterplan Framework site mainly sits within the Penistone CCG Neighbourhood Network which is covered by six GP practices. A proportion of the site also sits within the North CCG Neighbourhood Network which is covered by five GP practices.

Future Service Provision

The CCG is establishing a robust plan with Barnsley Council to it and local GPs are consulted early in the planning of new housing developments. The CCG has committed to consulting with GP practices that are likely to be significantly impacted by the housing growth set out in the Local Plan and sites with planning permission. Early involvement with consultation plans will make sure the CCG has the opportunity to work with GP practices to assess the possible impacts on capacity, workforce and any estate implications arising from the plan. This, in turn, will ensure that service provision and patient access is not compromised.

Early engagement began as part of the Masterplan Framework process and further consultation will be carried out when planning applications are being determined. The CCG can then assist GP practices to plan and respond to growth, this may include workforce recruitment and/or upskilling the existing workforce.

Summary of GP practices covering the Barnsley West (MU1) Masterplan Framework area

GP Practice	Neighbourhood	Patient list size at July 2019
ASHVILLE MEDICAL CENTRE	Central	11,994
THE DOVE VALLEY PRACTICE	Central	10,415
THE KAKOTY PRACTICE	Central	6,642
BURLEIGH MEDICAL CENTRE	Central	11,321
THE GROVE MEDICAL PRACTICE	Central	5,129
PENISTONE GROUP	Penistone	17,112
WOODLAND DRIVE MEDICAL	Penistone	5,123
HUDDERSFIELD ROAD SURGERY	Penistone	13,610
APOLLO COURT	Penistone	5,084
VICTORIA MEDICAL CENTRE	Penistone	11,667
KINGSWELL SURGERY	Penistone	4,143

CCG NEIGHBOURHOOD NETWORK AROUND MU1

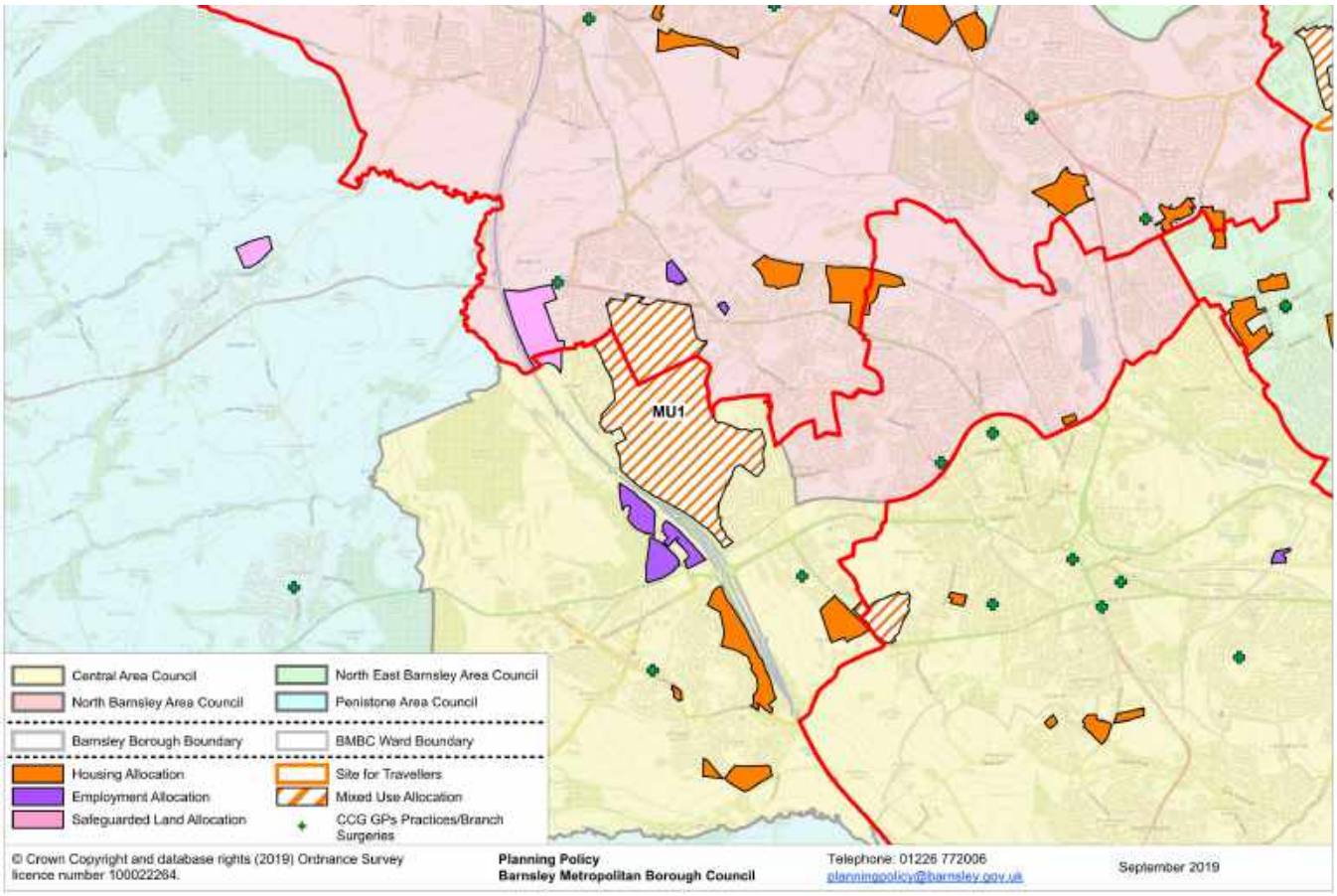


Fig 6.2

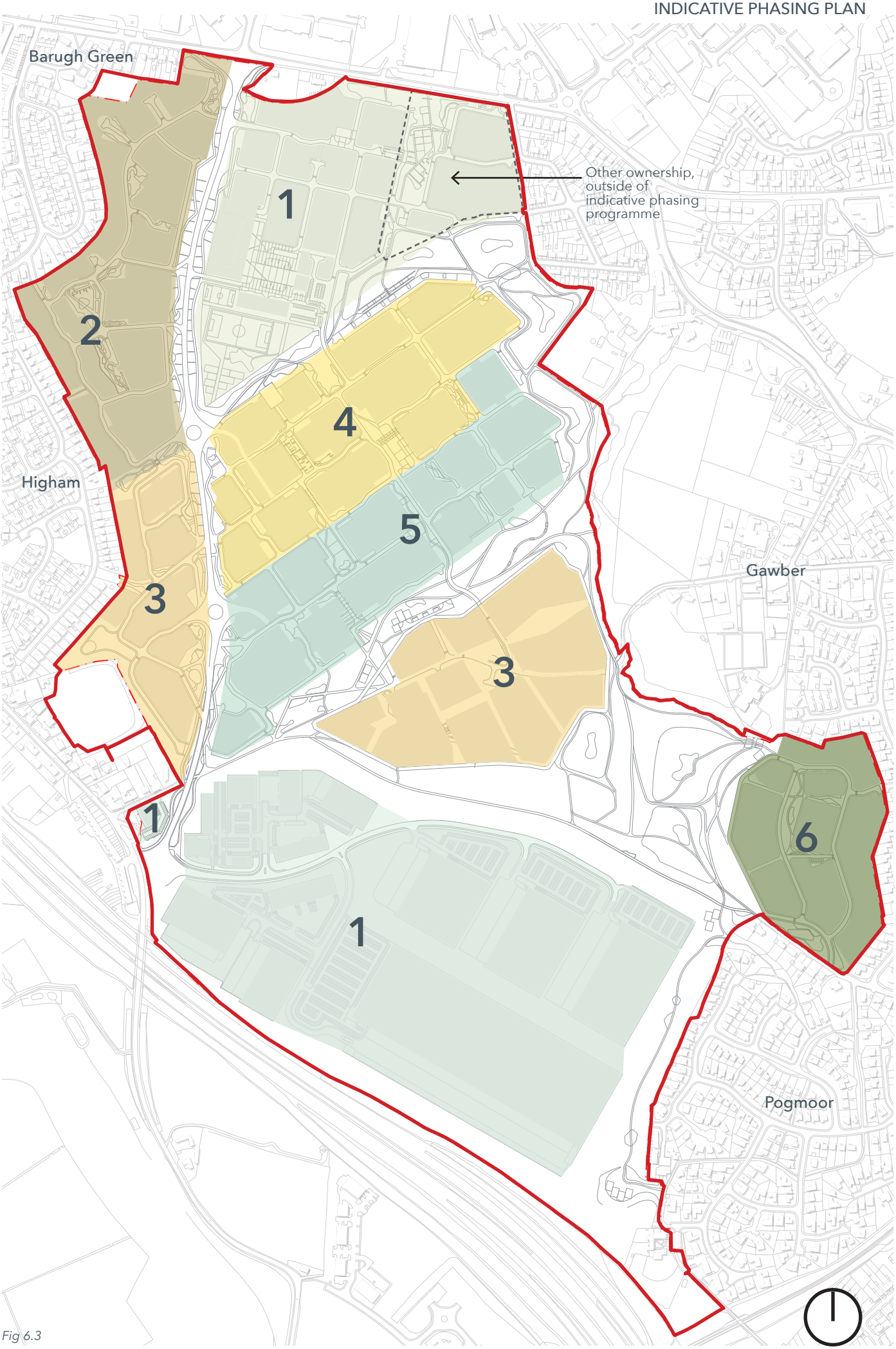

Barugh Green
Higham
Gawber
Pogmoor
1
2
3
4
5
3
1
1
6
Other ownership, outside of indicative phasing programme

Fig 6.3

6.5 Approach to Delivery and Phasing

A development of this scale will be delivered in a number of phases, the proposed delivery timescale for the whole of the MU1 site allocation is 15 years depending on market conditions.

The phasing plan has been prepared for indicative purposes at this stage. With current thinking being that the residential development will commence to the north of the site with access from the new roundabout at Barugh Green Road, this will be coupled with the start of the commercial development to the south of the site.

It is then thought that dependent upon market conditions additional phases of residential development would be opened from both the north and south working towards the centre of the site.

Each phase will provide the necessary mix and quantum of development in order to deliver the overall requirements of the site policy.

6.6 Housing Mix Assumptions

The housing mix should consider the current Strategic Housing Market Assessment at the time of planning approval. Proposals should make sure the site provides a mix across a range of house types, to cater for the need as indicated and include a mix of detached, semi-detached, mews, apartment and bungalow homes.

Affordable homes should be provided in accordance with the council's planning policy at the time of planning approval, and should, where necessary, be subject to the provision of evidence with regards to viability to ensure the development is deliverable

6.7 Planning Strategy

Barnsley West provides a significant opportunity to deliver new homes and jobs to the borough. Given the scale of the Masterplan area, the delivery of the site will span 15 years.

It is intended that the Masterplan Framework forms the basis for proposals to be made as part of any future planning applications for the site.

Developers are expected to proactively engage with the Council, local communities and the Design Review Panel at the pre-application stage and include the required information/technical assessments (validation requirements and anything else identified by the Council at the pre-application stage) in subsequent planning applications.

Depending on the form of planning application developers will take, outline planning applications will include the general principles of how the site will be developed, with matters to be reserved for each defined phase; for example, access, appearance, landscaping, layout and scale. For each detailed phase of the development, reserved matters will then be submitted to enable flexibility of delivery within the defined timescales. The detailed phases shall align with the Design Code within this framework. This approach will make sure future phases are both responsive to market needs at the time of delivery, and relate directly to the parameters of the outline application Masterplan.

Future planning applications would also need to have regard to the up to date Environmental Impact Assessment (EIA) legislation and relevant case law to determine whether screening /scoping opinions are required in the context of reviewing the cumulative impact of the proposal on the basis of the over-arching development requirements for the whole Masterplan Framework area.

7 SUMMARY

BOND BRYAN

BARNSLEY WEST, MASTERPLAN FRAMEWORK (MU1)

THE VISION FOR BARNSLEY WEST

Fig 7.1

7 SUMMARY

Objectives

The objective for this development is to create a "Healthscape". A healthscape is green and blue infrastructure designed to improve health and wellbeing. The healthscape acts as a setting for the new place, community and workplace that is currently known as Barnsley West. As the largest site within the Local Plan, this vision document is the result of a collaborative process with the council to create a highly sustainable community that sets a benchmark for 21st century development across Barnsley.

Placemaking Strategy

The placemaking concept ensures the physical built elements of the Masterplan are a direct response to the "Healthscape". All buildings will be located in such a manner to promote recreation spaces that enhance health and wellbeing. How buildings and streets relate to one another has also been carefully considered around issues of solar orientation, views, parking and crime.

Landscape Strategy

The green and blue infrastructure provides a network of linked open spaces across the site. The spaces create a meaningful network of interlinking areas that provide a range of open spaces for new and existing Barnsley residents to enjoy. These spaces should incorporate a range of natural and play spaces for all to enjoy. The diverse range of spaces also protect, enhance and extend the existing wildlife areas on site which should create new habitats for a diverse range of different biodiversity.

Transport and Movement Strategy

To ensure the long-term sustainability of Barnsley West, it is vital that future occupants of the development are able to conveniently access services and amenities, both within the site and the wider area, by modes of travel other than private car. The concept for Barnsley West is for a "connected neighbourhood' that integrates the development into the wider area and local communities. This can be achieved through a combination of new services and amenities consistent with the Local Plan policy, innovative public transport solutions, high-quality pedestrian and cycle routes, effective management and promotion of sustainable travel options, and thoughtful masterplanning. The aim is to make journeys between the site, the surrounding areas and Barnsley town centre safe, convenient and attractive by sustainable modes of travel.

Drainage Strategy

The Barnsley West Masterplan will integrate sustainable urban drainage systems where possible on the scheme. The intention is to capture all of the surface water using large detention basins, ensuring that they maximise the benefit of holding stormwater. The drainage systems will ensure the risk of on site surface water flooding beyond the site boundaries is prevented.

Health and Wellbeing

Within the Barnsley West Masterplan Framework, health and wellbeing are important considerations and form a common theme throughout the document and the approach should ensure that development will deliver tangible health benefits to both existing and new residents.

Sustainability and Climate Change

The council declared a climate emergency in September 2019 with the objective for the borough to achieve zero carbon by 2045 (Zero 45). The new developments associated this Masterplan Framework will look to play their part. Consideration will be given to the latest Building Regulations for housing, BREEAM for employment and CEEQUAL for infrastructure, landscaping and public realm. This will include identification of suitable low carbon technologies, investigating renewable energy solutions and Combined Heat Power (CHP). Subject to feasibility, this approach will make sure that the development is future proofed particularly given the anticipated build out rates over a 15 year period

Conclusions

The Barnsley West Masterplan Framework provides a firm foundation for Barnsley Council and developers to create a new sustainable community, combining high-

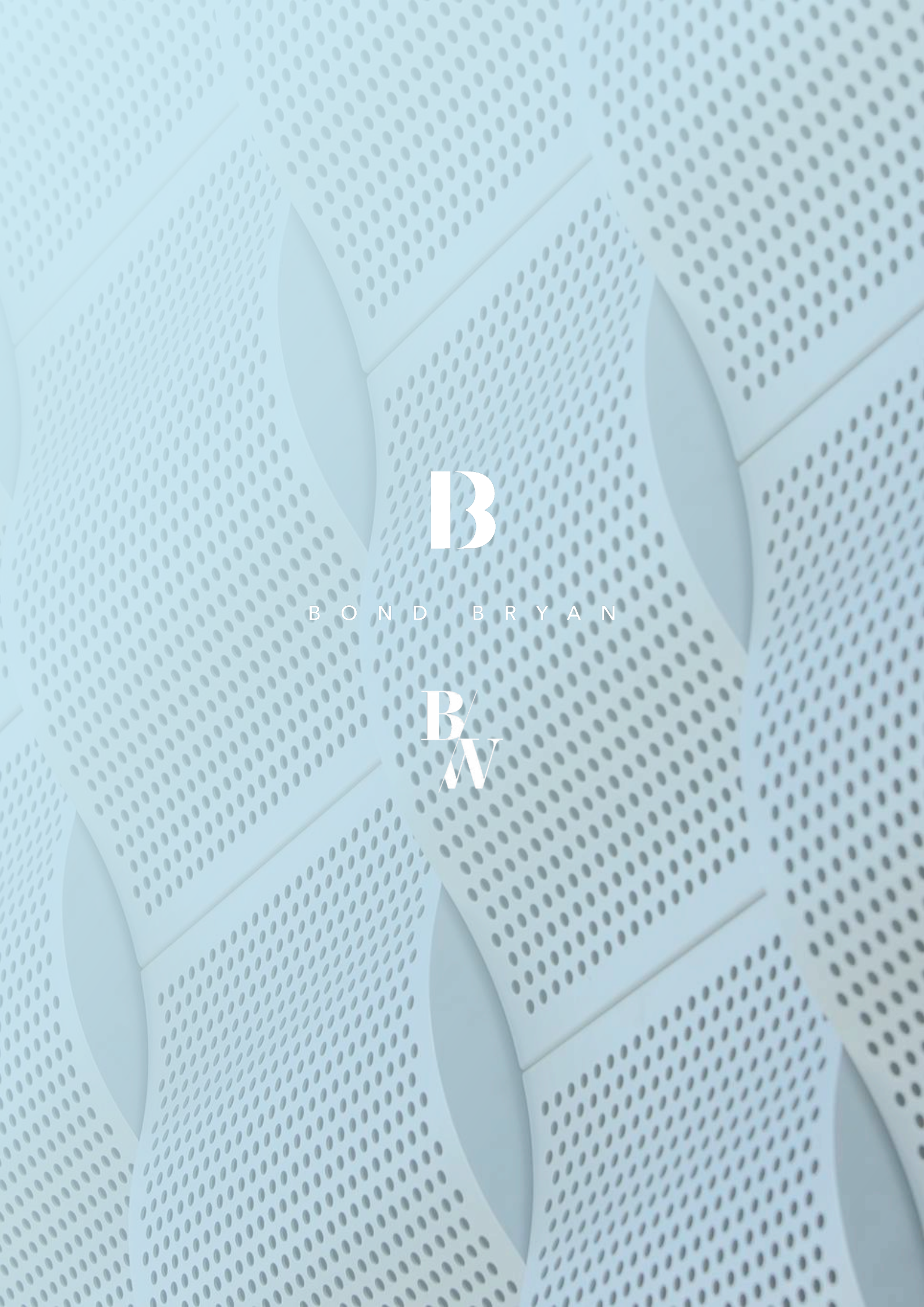
quality new homes with new jobs, facilities and open space, available to new and existing residents – to enjoy for living and working.

Barnsley West will play an essential role in realising the housing and employment requirement for Barnsley over the next 15 years. Health and wellbeing is at the heart of the Masterplan Framework as a landscape-led development and will seek to create a more productive landscape for walking, cycling, growing food and biodiversity.

Through the principles identified in this document there is an opportunity to shape a new sustainable urban extension of Barnsley, whilst fulfilling the aspirations of the Local Plan by delivering housing and economic growth but also setting the benchmark for future high-quality development.


Pogmoor
Gawber

Fig 7.2


BOND BRYAN

BOND BRYAN

BARNSLEY WEST, MASTERPLAN FRAMEWORK (MU1)

THE BARNSLEY WEST DESIGN CODE

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8 INTRODUCTION

BOND BRYAN

BARNSLEY WEST, MASTERPLAN FRAMEWORK (MU1)

DESIGN CODE

Fig 8.1

8 INTRODUCTION

8.1 Preface

The Barnsley West Design Code has been prepared by Bond Bryan, Gillespies and Pegasus on behalf of Strata Homes and Sterling Capitol Plc working in collaboration with Barnsley Council. Strata Homes and Sterling Capitol Plc have the largest land interests within the Masterplan Framework. Landowners and developers who have smaller land interests have also been consulted.

8.2 Project Team

- Developer: Strata Sterling Barnsley West
- Masterplanning Architect: Bond Bryan
- Landscape Architect: Gillespies
- Employment Area Architect: The Harris Partnership
- Planning Consultant: Pegasus Group
- Project Manager / Quantity Surveyor: Rex Proctor & Partners
- Public Sector Consultant: Victor Violet
- Public Relations: Robert Beaumont Associates
- Lawyer: Tyr Law
- Highways Consultant: Fore Consulting
- Structural / Civil Engineer: JPG Group
- Drainage and Flood Risk: JPG Group
- Utilities / M&E Consultant: Hydrock MRB Consultant Engineers
- Air Quality: Wardell Armstrong
- Ecology: White Young Green
- Noise Surveyor: ENS Acoustics
- Aboriculture: White Young Green
- Archaeology: Prospect Archaeology
- Land Trust: The Land Trust
- Overhead Power Cables Surveyor: BTS Group
- Land Quality Endorsement: National House-Building Council

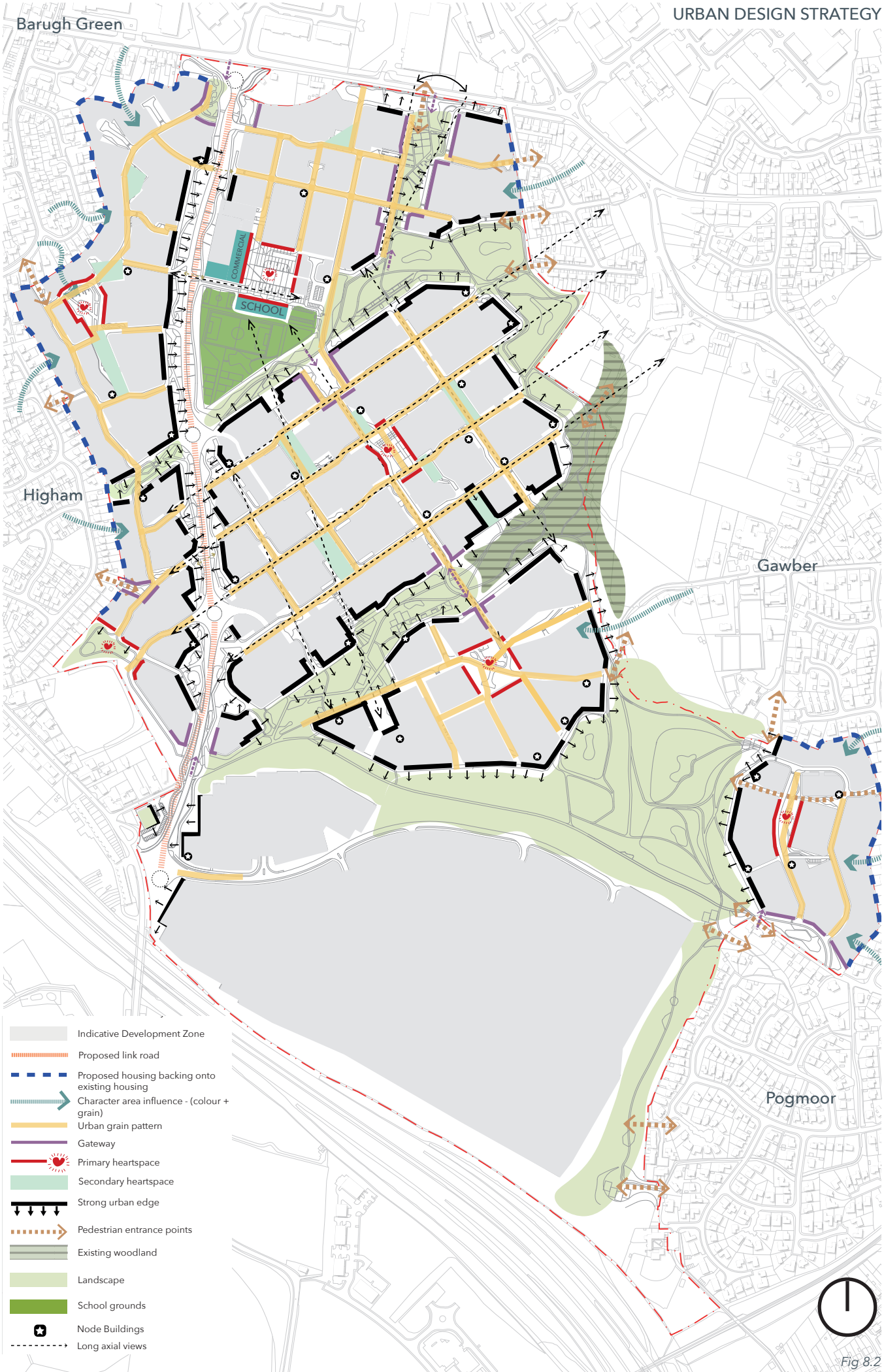

Barugh Green
COMMERCIAL
SCHOOL
Higham
Gawber
Pogmoor
Indicative Development Zone
Proposed link road
Proposed housing backing onto existing housing
Character area influence - (colour + grain)
Urban grain pattern
Gateway
Primary heartspace
Secondary heartspace
Strong urban edge
Pedestrian entrance points
Existing woodland
Landscape
School grounds
Node Buildings
Long axial views

Fig 8.2

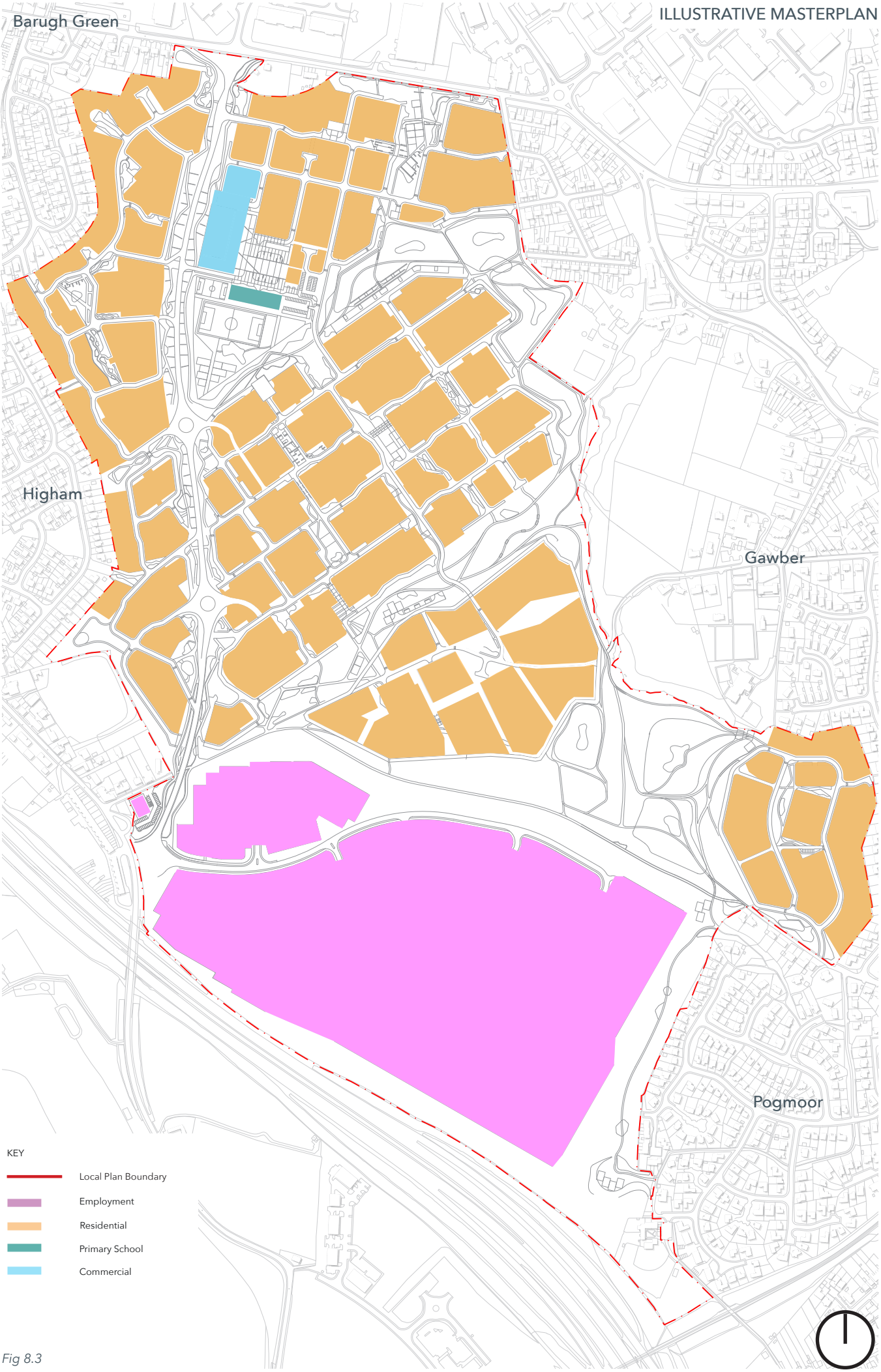

ILLUSTRATIVE MASTERPLAN
Barugh Green
Higham
Gawber
Pogmoor
KEY
Local Plan Boundary
Employment
Residential
Primary School
Commercial

Fig 8.3

8.3 The Purpose of the Design Code

Design codes can provide a benchmark for quality and make sure the vision for Barnsley West is translated through the delivery of its components.

Through undertaking this process, it became clear that the best design codes achieve a good balance between flexibility and prescription. For instance, we have set out quite detailed requirements of the public realm, landscaping and streets where uniformity will help mould together a long-term, multi-phase development whilst retaining an element of flexibility in the architecture of the buildings.

Design codes alone cannot produce the excellence and quality that is required of Barnsley West. They are not an alternative for talented designers but they can establish a baseline quality that will set a precedent for other developments in years to come.

8.4 How to Use the Design Code

Developers and Contractors

Barnsley West aims to set a benchmark for quality throughout all of Barnsley. Developing on this site goes hand in hand with a commitment to the Design Code and further information on the process of approval is explained in this chapter. Developers and Contractors should aim to create great places rooted in their community and offer high quality choices to consumers.

Developers, Contractors and their design teams will be expected to:

- Have a thorough understanding and familiarity of this code.
- Be able to clearly demonstrate and engage in this understanding in any detailed applications they submit to the Council.

Members of the Public

The Barnsley West Design Code aims to inspire the public about the design, planning and delivery of these new neighbourhoods and districts. We have aimed to create a framework for creating genuinely distinctive and sought-after places. Through this we aspire to generate a positive perception of new development and a more engaging process for boosting housing supply and employment space.

In doing so, members of the public are encouraged to:

- Become familiar with the principles and aspirations of the design code.
- Engage with the consultation process on any detailed planning applications that come forward within the Masterplan Framework.

8.5 Compliance with the Code

The process of gaining planning consent is partly down to demonstrating that proposals respond to the local context. Too often this is watered down to making a superficial reference to a small collection of local buildings, rather than undertaking a thorough assessment of the local and wider environment- its buildings, spaces and landscape, and looking at how proposals can respond and interact with them. The importance for Barnsley West and the aspiration for quality demands this more considered approach. Successful placemaking involves much more than stylistic preference. It should start with a well-resolved Masterplan with principles that create a framework for character and identity. This character will grow out of a variety of interconnected issues including viability, form of construction and company specific design approach.

The compliance with the code has been set with this in mind; a balancing act that creates a long-term framework for quality that sits within a commercial and planning context.

The most suitable way of demonstrating compliance will be the Detailed Planning Stage. All Applicants will be the subject of a Design Review Panel as part of the process to demonstrate compliance. Furthermore, all applicants should include a Design Code Compliance Statement as an appendix in any design and access statement. The Design Code Compliance Statement should reflect a breadth of topics covered by the Design Code and should therefore address, as a minimum the following:

- The vision for the site
- Site context
- Quantum of development
- Aspects of the development relating to the public realm
- Aspects of the development relating to the Character Areas
- Does it adhere to the Health and Wellbeing Framework? (see section 9)
- Does it adhere to the Landscape Framework? (see section 10)
- Sustainability

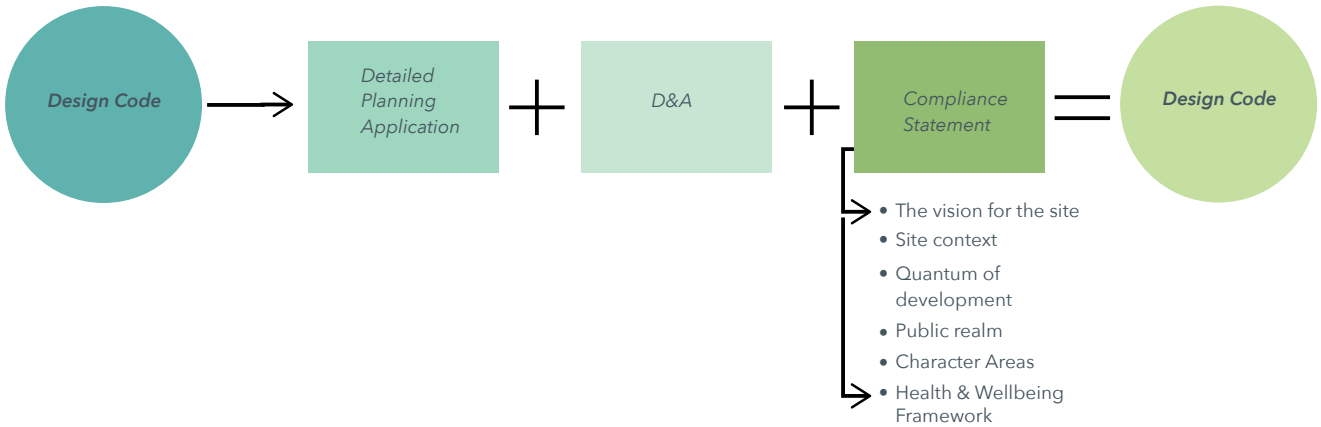


Fig 8.4

8.6 Process of Approval: Planning Applications. (Full, Outline and Reserved Matters)

'The council will require a compliance statement for both outline and full applications, as an appendix to the design and access statement. Following outline planning approval any reserved matters application will require a separate compliance statement. For any planning conditions that involve more detailed work on the design or layout of the development a compliance statement will need to accompany the information submitted.'

8.7 Allowance for Flexibility

This design code sets rules for the design of the Barnsley West development. It builds upon the vision document, which showed how the site's constraints and opportunities have had a significant impact on the general principles of the layout and design of the proposals. These principles, along with a design approach which has included both a strong health and wellbeing focus and a landscape-led focus, have fed into this design code.

This code will help to ensure a consistency of quality of design for the resulting townscape and landscape. However the design code is not a straightjacket- there is room for some flexibility and variety in layouts and building design, so long as they meet the overall objectives and high quality design standards set out in the code. Design Teams are welcome to come forward with their own interpretation of the principles set out. It is naturally expected that there will be a number of different approaches over time by different developers that could achieve a compliance with the code.

Chapter 12 further expands on flexibility and demonstrates how a variety of complaint outcomes, in this case specifically regarding the layout of dwellings, can be achieved'

9 HEALTH AND WELLBEING

BOND BRYAN

BARNSLEY WEST, MASTERPLAN FRAMEWORK (MU1)

DESIGN CODE

Fig 9.1

9 HEALTH AND WELLBEING

The built environment has long been recognised as an important factor towards health and wellbeing. Historically, this focussed on pollution, disease and over-crowding but there is now increasing evidence of the health and wellbeing impacts – both positive and negative of the built environment.

Chronic health conditions are rising across the UK and impose significant costs for the NHS, social care and for employers. And yet, many of these conditions are heavily influenced by the built environment. Within this country they account for significant spending on health and social care. As such, promoting health and wellbeing has been the starting point for Barnsley West. Across the scheme, encouraging physical activity and a healthy lifestyle is one of the most impactful measures the architects, designers and planners can take to enable positive health and wellbeing and reduces rates of chronic disease, obesity and mental health conditions.

The Council actively promotes a health and wellbeing approach to Masterplan Framework sites. A Health Impact Assessment for the over-arching framework is being produced and more detailed assessments will be required to accompany planning applications. The Council also actively supports Sport England's 'Active Design Principles' which, through the design and layout of developments, seeks to encourage activity in people's day-to-day lives.

9.1 Overview

The layout promotes a pedestrian and cycle permeability that is knitted into existing communities. Providing access to greenspace, affordable healthy food, and leisure facilities is integrated throughout to support health and wellbeing. Also, orchards and allotments create a culture of growing food and an understanding of where food comes from all support the core health and wellbeing principles.

9.2 Health and Wellbeing Framework

The Health and Wellbeing Framework has been developed to ensure that any scheme that comes forward for detailed planning can be assessed on its qualities in this area. As a minimum, the Health and Wellbeing Framework must comply with the following principles:

1. Landscape-led layout that promotes a strong connection with the surrounding landscape
2. Engaging with the local and wider community
3. Places to meet, socialise and play
4. Promote walking, cycling and public transport use
5. Safety and natural surveillance
6. Responsive to microclimate and environmental context
7. Identity and sense of place

On the following page, health and wellbeing principles are colour-coded to demonstrate in more detail how a Developer can comply with the Health and Wellbeing Framework. Furthermore, this reference will aid members of the public in understanding how the Code that has been put forward can have benefits to health and wellbeing.

NB:

*ALL DESIGN CODE RULES CAN BE FOUND IN THE YELLOW BOXES WITHIN THIS DOCUMENT

9.3 The Health and Wellbeing Principles

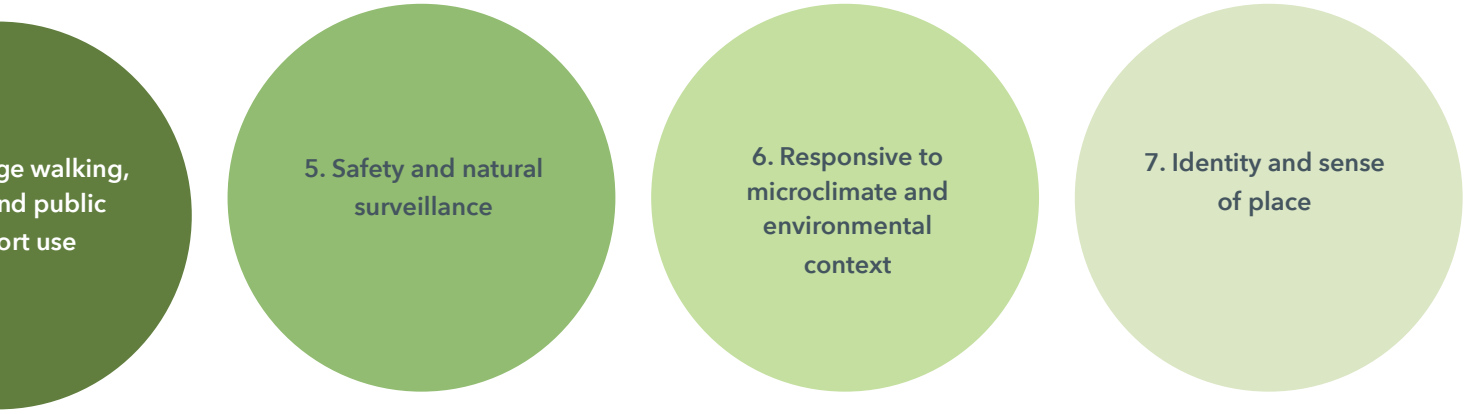
All applications that come forward on the site should consider inclusive design and the equalities act 2010.

As a modern approach to masterplanning, the buildings are a secondary element to the landscape. Buildings must have a strong connection to the landscape. This principle can be achieved by ensuring primary internal spaces frame specific views or aspect to the outside world. This could be to a tree, pond or greenery.

Spaces that promote engagement and interaction are proven to improve health and wellbeing. We encourage developers to think 'outside the box' to achieve this principle. This could be by providing orchards for community growing projects, or public realm that can accommodate seasonal community events.

Too often, public realm lacks the variety required for year-round usage. This principle can be achieved by demonstrating a broad range of hard and soft landscaping, with suitable spaces to meet, socialise and play.

Developers sho
credible propos
dedicated walki
public transport



uld put forward
sals to encourage
ng, cycling and
routes.

Proposals should be designed with consideration for safety and natural surveillance.

Passive supervision of public spaces through appropriately sized and located window openings directly overlooking the public realm.

Sensitive planting and landscaping will not create hidden spaces for antisocial behaviour.

Appropriate lighting will increase the perceived safety of public spaces during darkness, encouraging increased use and with it better levels of passive supervision.

The buildings and structures that make up the built environment should not exist in isolation. Developers and designers should demonstrate that buildings are conceived and designed in order to respond to, support and enhance their surroundings.

Sense of place: the way we perceive places such as streets, communities and spaces influences our wellbeing. This principle is achieved by following the code.

Fig 9.2

9.4 Sustainability and Future Adaptation

Barnsley West aims to be an exemplary site. The following guidelines set out the aims and aspirations for all future applications. This section should be read in conjunction with the Barnsley Local Plan Sustainability Appraisal 2016 publication. The aspirations for Barnsley West can be broken down to into the following themes:

- Energy and carbon- reducing energy demands through design of building envelopes and efficient heating systems.
- Water- reducing water consumption and waste Rainwater harvesting.
- Materials and waste- a holistic approach to specifying building materials which have a low impact on the environment, are efficiently built, robust, and may be readily reused or recycled.
- Transport- enabling sustainable types of travel through design.
- Landscape and ecology- developments which minimise negative impacts and/or enhance the landscape and surrounding ecology through a site specific landscape strategy.
- Social and economic- creating safe, social neighbourhoods and employment opportunities.
- Climate adaptation- resilience to future climate change through robust construction details, and flood/ drought resistant landscaping strategies.

These topics are broad and apply to various stages of the design and construction process. Some or all of these topics will be relevant depending on the scale and nature of the Reserved Matters Application.

Consideration must be given to the following:

- Future adaptation and integration of new sustainable technologies
- Aspect / orientation of dwellings
- Materials (both building and landscape)
- The Council's zero carbon strategy

Fig 9.3

Fig 9.4

Fig 9.5

Fig 9.6

10 LANDSCAPE FRAMEWORK

BOND BRYAN

BARNSLEY WEST, MASTERPLAN FRAMEWORK (MU1)

DESIGN CODE

Fig 10.1


Barugh
Higham
Gawber
Pogmoor
KEY:
The Square
Meadow Park
Cascade Arboretum
Gawber Forest
Glades & Greens
Velvet Woods
Green Lanes
Allotments & Orchards
Green Lanes
Allotments & Orchards

Fig 10.2

10 LANDSCAPE FRAMEWORK

10.1 Key Principles

CASCADE ARBORETUM

Fig 10.3

- A tree lined street with a mix of species
- Shared cycle and pedestrian routes on either side of the road to be separated by a rich planted verge
- Swale on one side of the road

GAWBER FOREST

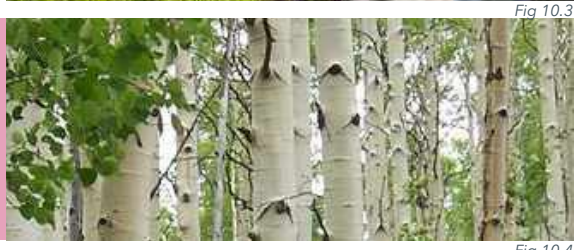


Fig 10.4

- Rich woodland matrix buffering the commercial development from the motorway and the residential development with pockets of seating areas and usable shared spaces for commercial users.
- Good path network through the woodland linking the surrounding areas to one another

CIVIC SQUARE

Fig 10.5

- Predominantly hard space with planting to act as a buffer between residential blocks and square
- Drop off area for school
- Flexible hard space for community events

VELVET WOODS

Fig 10.6

- Retain existing woodland as much as possible
- Pathway network to link into existing public rights of way and new residential development

MEADOW PARK

Fig 10.7

- Large water attenuation areas which are for 1:100 year storm events so will mainly be dry basins
- Permanent water basins at the bottom of the attenuation areas
- Pedestrian and cycle network

GREENS & GLADES

Fig 10.8

- Key pocket areas of village 'greens' and 'glades' providing respite with informal and formal play areas
- Community orchards
- Pocket street tree spaces to break up and soften the streetscape
- These spaces are a mixture of hard and soft areas

GREEN LANES

Fig 10.9

- Trim trail network with informal and formal play areas to ensure this complies with planning regulation requirements
- Green space along the high walls to provide usable amenity space for the new and existing communities

Fig 10.10

GILLESPIES

Section B

section continues

10.2 Landscape Framework – Levels Strategy

Section A

Proposed Section through Gawber Forest

Fig 10.11

- Proposal is for site to have a consistent average fall of 1:20 from East to West of the site
- Commercial area has flat plateaus due to the nature of how these areas will be funded to ensure the maximum flexibility is achieved for end users
- Some areas where large level changes are required should be treated to visually minimise impact by introducing usable 1:3 planted slopes
- Level access and inclusive design for all abilities to key areas should be established where possible. This should be in line with the Equalities Act 2010.

Stepped access in the landscape *Fig 10.12*

Usable 1:3 planted slopes *Fig 10.13*

Level access footpaths in the landscape *Fig 10.14*

Fig 10.15


Barugh Green
Higham
01
02
Gawber
Pogmoor
KEY:
Primary Pedestrian and Cycle Links
Secondary Pedestrian and Cycle Links
Existing Connection
Proposed Connection
d Connection

Fig 10.16

10.3 Pedestrian and Cyclist Connectivity

Section 01 - *Primary connections - Typical Section* *Fig 10.17*

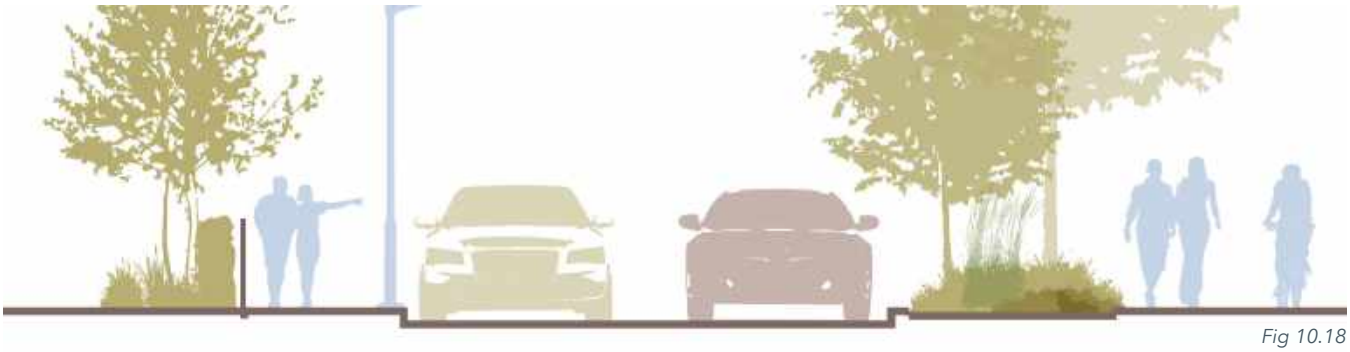


Fig 10.18

Section 02 - *Secondary connections - Typical Section*

- Proposed development should ensure priority is given to cyclists and pedestrians, through:- priority crossing points, shared space streets, wide path network *
- Shared Primary routes are to be a minimum of 3m wide
- Shared Secondary routes are to be a minimum of 2m wide *
- Existing public rights of way should be diverted and enhanced by creating additional routes which link up to each other to provide a circular route
- Existing connections into the site should be retained and enhanced by creating improved 'gateways' into the scheme
- Additional connections into the site are being proposed to create improved pedestrian permeability through the site *

** to be confirmed with the council, including highways.*

Pedestrian, cyclist centric design *Fig 10.19*

Diverted right of way *Fig 10.20*


Barugh Green
Higham
Gawber
Pogmoor
KEY
Local Plan Boundary
Indicative Development Zone
Landscape

Fig 10.21

10.4 Ecology and Biodiversity

All landscape areas across the Masterplan should be designed and managed to provide a flourishing, ecologically rich and bio-diverse landscape.

- Management and maintenance should include provisions for long term habitat creation across the site.
- Species rich wildflower meadows with formalised access routes throughout, enabling ground nesting species to flourish. Signs should be incorporated across the scheme designating areas and their habitats, aiming to raise awareness of species.
- Retaining and enhancing the existing woodlands within the Masterplan Framework. Woodland management should be sensitive to the existing trees, species and habitats within them.
- Maintenance should be focussed on bio-diversity, encouraging the creation of log-piles and bug hotels within the landscape, attracting new wildlife.
- Nesting and roosting opportunities for birds and bats should be encouraged within the landscape setting and woodlands.


Fig 10.22


Fig 10.23


Fig 10.24


Fig 10.25


Fig 10.26

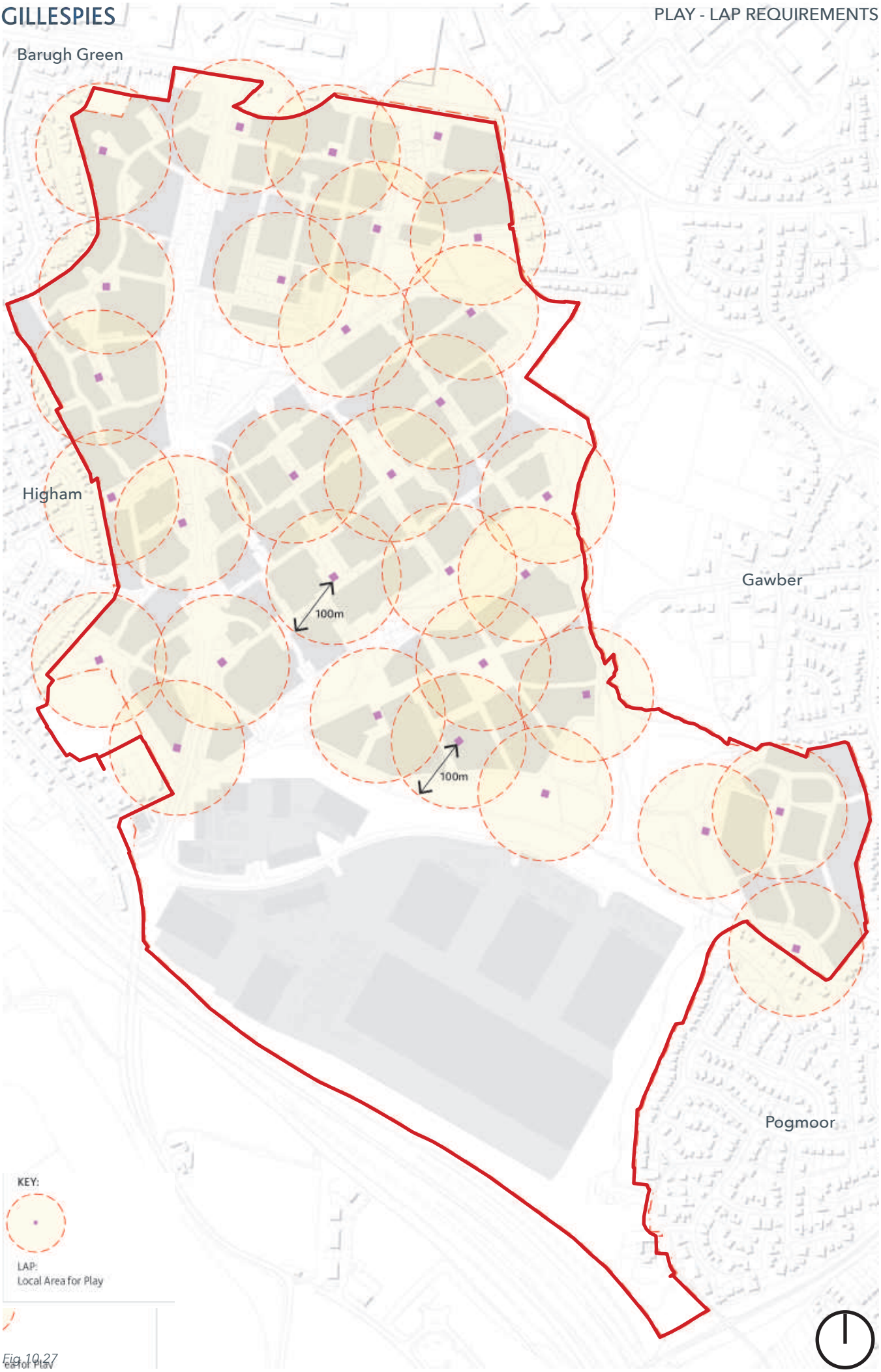

Barugh Green
Higham
Gawber
Pogmoor
100m
100m
KEY:
LAP:
Local Area for Play

Fig 10.27

10.5 Play – LAP (Local Area for Play) Requirements

Landscape proposals are integral to the provision for play across the development. The creation of meaningful play opportunities which maximise play value should be designed using natural materials where possible such as logs and boulders, forming an attractive and integral part of the landscape setting and further enhancing the 'sense of place'.

Spaces should encourage informal play and social interaction, utilising natural play elements.

Key LAP Features:

- 'Door-step' play spaces
- Up to the age of 6
- Within 1 minute walking time of a child's home
- They should be located within approximately 100m
- Informal, immersive and sensory play
- Rocks, logs and low earth mounding
- Play should be designed for ease of observation
- Play should be positively encouraged through design
- Spaces should encourage informal play and social interaction, not relying on play equipment
- To be positioned beside a well used pedestrian route
- Should include a minimum 100m² activity zone
- Planting should be designed to incorporate a mix of scents, colours and textures
- Play area should include a sign designating the space as 'children's play' and that dogs are not welcome

Fig 10.28


Fig 10.29


Fig 10.30


Fig 10.31


Fig 10.32

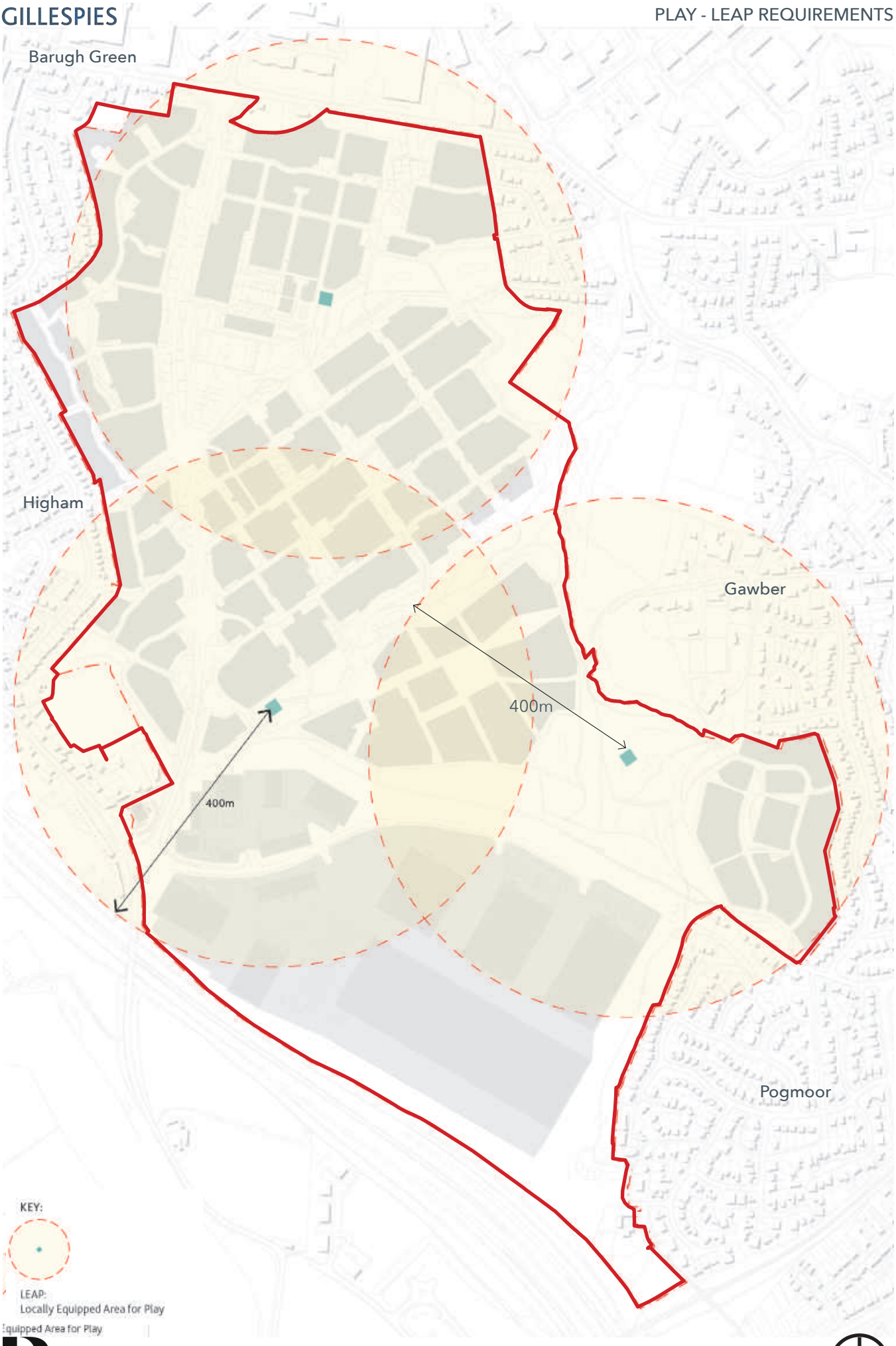

Barugh Green
Higham
Gawber
Pogmoor
400m
400m
KEY:
LEAP:
Locally Equipped Area for Play
Equipped Area for Play

Fig 10.53

10.6 Play – LEAP (Local Equipped Area for Play) Requirements

LEAPs should be designed specifically as a designated place of play with laid out features, including equipment for children who are beginning to play independently. They should be located within approximately 400m walking distance (5 minutes) walk from dwelling to play. Due to the sites topography, the actual walking distance should take into account winding paths on steeply sloping parts of the landscape. In addition to this, it is expected that play areas should be designed to make the most of the sites terrain, incorporating slopes and embankments into the design where necessary or required.

Key LEAP Features:

- Independent play
- Approx. 20m x 20m space – Minimum activity zone 400m²
- 10m min buffer zone between the activity zone and boundary of nearest property
- Informal equipment
- Seating opportunities
- Equipment type
- Rock climbing
- Climbing
- Sliding
- Sand
- Water
- Number of 'play pieces' should be consulted upon with local residents within the detailed design stages.

Naturalistic play encased by planting *Fig 10.34*

Play features make use of level changes *Fig 10.35*

Play spaces within a natural setting *Fig 10.36*

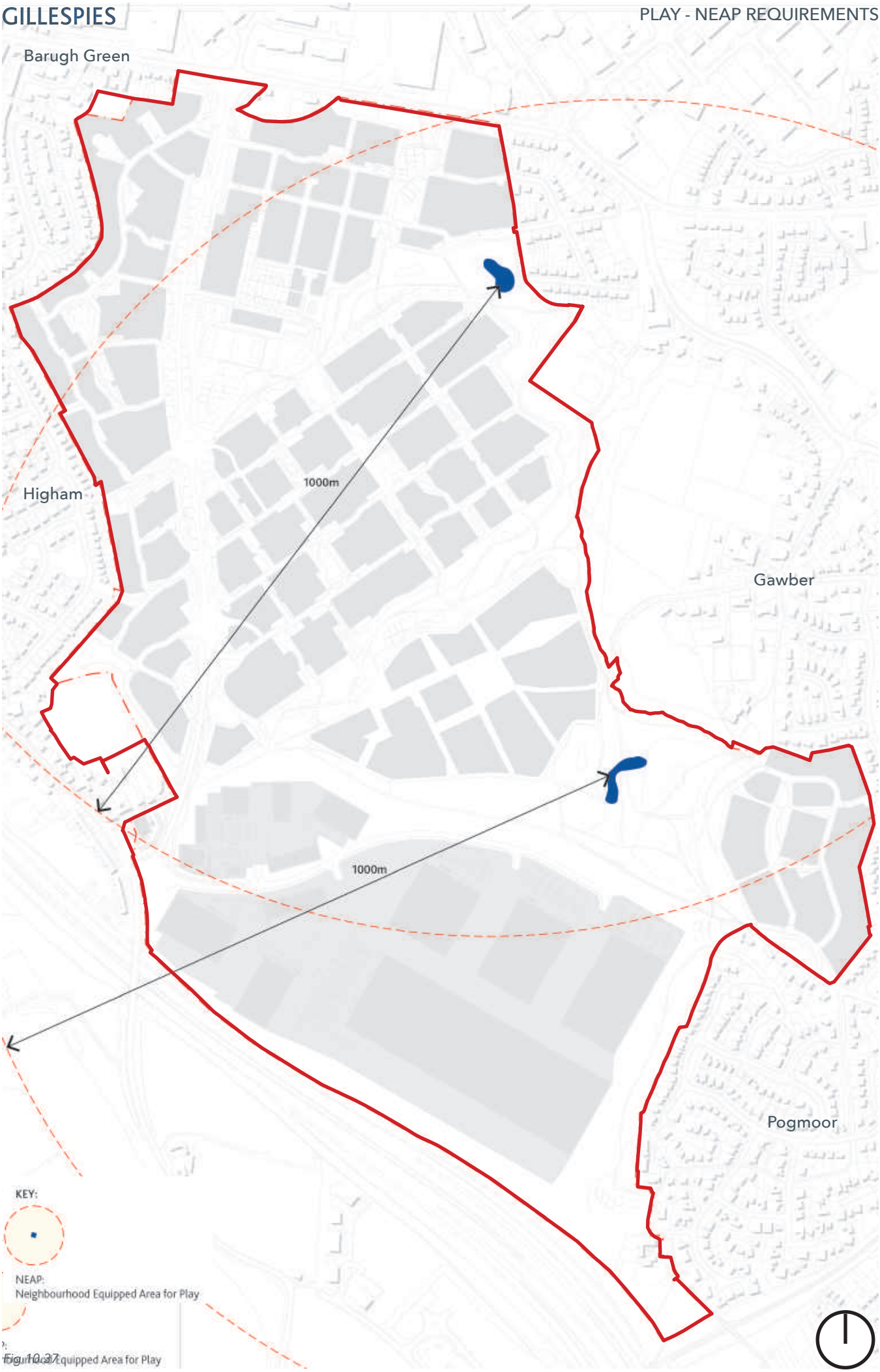

Barugh Green
Higham
1000m
Gawber
1000m
Pogmoor
KEY:
NEAP:
Neighbourhood Equipped Area for Play

Fig 10.37

10.7 Play – NEAP (Neighbourhood Equipped Area for Play) Requirements

NEAPs should be designed to provide at least a 31.6m x 31.6m (1000m²) activity zone, comprising an area specifically for play equipment, structures and a hard surfaced area of at least 465m² for ball game provision.

The NEAP should provide a space for both younger children and teenagers to play in, offering a variety of activities for both age groups. Facilities should incorporate a M.U.G.A (area for multi-use games) such as football and/or basketball, as well as adequate provision for roller skating or cycling. Ramps for skateboarding or cycling, a rebound wall and a shelter should also be provided

Further opportunities for consultation as to the play facilities and types provided should be explored within the next stage of design. The undulating landform across the site lends itself to create well designed play spaces which utilise the landform, incorporating the level changes through steps, slides and bike trails/ pump tracks.

Design of play areas for the development should make reference to the guidelines as set out in the 'Guidance for Outdoor Sport and Play: Beyond the six acre standard' report.

Key NEAP Features:

- Older children/teenagers
- Inclusion of hard surfaced area (min 465m²)
- Ball games
- Wheeled activities
- Rebound wall
- Shelter
- Roller skating/ cycling
- Min 30m buffer zone
- They should be located within approximately 1000m

Play set within large level changes *Fig 10.38*

Level changes enhance the play space *Fig 10.39*

Informal multi-use games area *Fig 10.40*

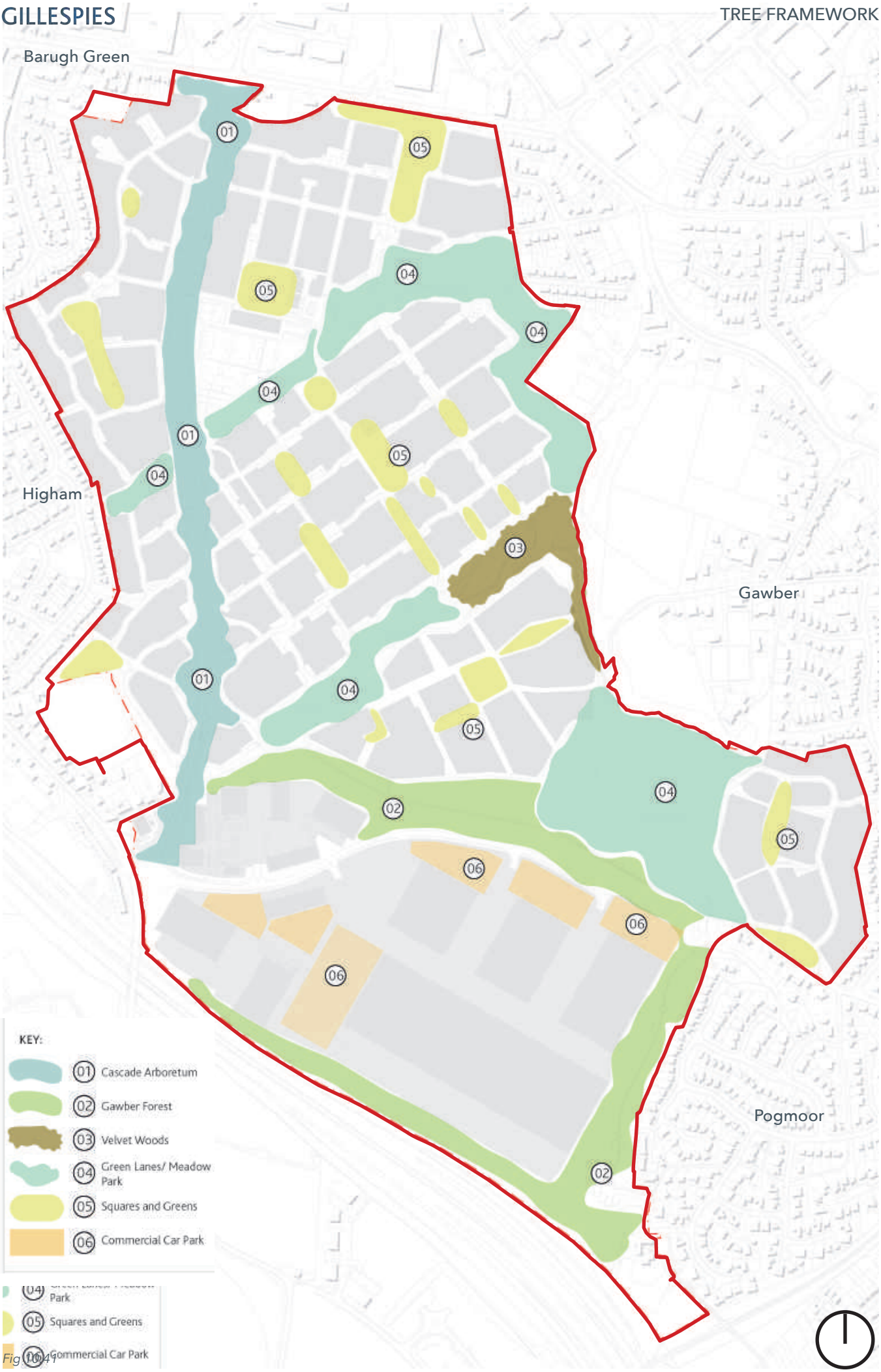

Barugh Green
Higham
Gawber
Pogmoor
KEY:
01 Cascade Arboretum
02 Gawber Forest
03 Velvet Woods
04 Green Lanes/ Meadow Park
05 Squares and Greens
06 Commercial Car Park

Fig 10.41

10.8 Tree Framework

CASCADE ARBORETUM


Fig 10.42


Fig 10.43


Fig 10.44

- Tree species to provide 'seasonal moments' throughout the year
- Species selection should provide a variety of heights and forms
- Species should be selected for their individual interests such as; bark tone and texture/ leaf colour and form

GAWBER FOREST


Fig 10.45


Fig 10.46

- Mixed deciduous and evergreen woodland
- Species selection for their screening benefits
- Form, scale and colour should be encouraged to create contrast, providing a distinct and interesting woodland mix.

VELVET WOODS


Fig 10.47


Fig 10.48


Fig 10.49

- Retain and maintain the existing woodland
- Enhance and build upon the existing woodland ensuring its preservation as an asset for local residents and wildlife

GREEN LANES


Fig 10.50


Fig 10.51

- Fruiting species should be encouraged throughout the landscape, accessible to the local community and its residents.
- Species selection should provide a mix of fruits and cultivars.
- Planting should be linear and formal in its arrangement

MEADOW PARK


Fig 10.52


Fig 10.53


Fig 10.54

- Large 'parkland' trees are strongly encouraged to be provided within the park, establishing a parkland setting within the landscape.
- Species selection should provide interest and interaction for residents.
- Species should provide seasonal interest

GREENS & GLADES


Fig 10.55


Fig 10.56


Fig 10.57

- Trees to be planted within hard and soft landscape areas
- Species to be chosen appropriately for their location
- Species selection is encouraged to create and enhance the developments 'sense of place' and identity

COMMER-CIAL CAR PAR


Fig 10.58


Fig 10.59

- Species to be selected for their capabilities of being located within hard surfacing.
- Should form appropriate canopies for parking areas
- Provide a 2m clear stem where required


Barugh Green
Higham
Gawber
Pogmoor
01
02
03
04
05
06
KEY:
01 Cascade Arboretum
02 Gawber Forest
03 Velvet Woods
04 Green Lanes
05 Meadow Park
06 Greens, Glades & Squares
06 Greens, Glades & Squares

Fig 10.60

10.9 Planting Framework

01. CASCADE ARBORETUM


Fig 10.61


Fig 10.62


Fig 10.63

- Planting should be low maintenance and seasonal.
- Provision for wildlife and bio-diversity corridors is strongly encouraged through plant species selection enabling long seasonal interest and flowers supporting a broad range of species throughout the year.
- Planting should be tolerant of both wet (during floods) and dry periods (during drought)

02. GAWBER FOREST


Fig 10.64


Fig 10.65


Fig 10.66

- Woodland plantings should provide a varied and interesting understory with a mixture of evergreen and deciduous species.
- Embankments should be planted to XXXXXXX
- Grass clearings should also be included within these areas

03. VELVET WOODS


Fig 10.67


Fig 10.68


Fig 10.69

- Maintenance should be but put in place to maintain and enhance the existing flora and fauna within the existing woodlands.
- Areas where this interfaces with new development, should provide similar species to match the existing fauna

04. GREEN LANES


Fig 10.70


Fig 10.71


Fig 10.72

- Predominantly lawns, mixed with large swathes of meadows, seasonal bulbs and additional ornamental planting areas.
- Planting areas should be used to demarcate the edges of play areas, social seating areas and also as a buffer edge to roads and dwellings.

05. MEADOW PARK


Fig 10.73


Fig 10.74


Fig 10.75

- Predominantly lawns, mixed with large swathes of meadows, seasonal bulbs and additional ornamental planting areas.
- Wetland/marginal plantings will form the edges of the basins and pond margins, with species tolerant of both dry and wet conditions being used throughout the basins.

06. GREENS & GLADES


Fig 10.76


Fig 10.77


Fig 10.78

- Simplistic stylised planting palettes should encourage more sensory experiences, evoking play and imagination.
- Species should be chosen for their individual characteristics, such as scent, texture, colour and form.
- Shrubs and hedges should be used where clear and distinct boundaries are required


Barugh Green
Higham
Gawber
Pogmoor
01
02
03
04
H
KEY:
01 Cascade arboretum
02 Woodlands
03 Greens and glades and squares
H 03 Hard landscaped squares
04 Meadows park / green lanes

Fig 10.79

10.11 Material Palette

CASCADE ARBORETUM


Fig 10.80


Fig 10.81


Fig 10.82

- Shared pedestrian and cycle route
- 3m width
- Interspersed play and social spaces along route
- Resin bound gravel surface to main route
- Self binding gravel to be used in seating and play areas

GREENS AND GLADES & SQUARES


Fig 10.83


Fig 10.84


Fig 10.85

- High quality block paved hard spaces for socialising/ mixed uses
- Informal routes resin bound gravel
- Play spaces rubber crumb surfacing/ bark mulch
- Squares: Hard / soft landscaped predominantly.
- Hard squares denoted with "H"

MEADOWS PARK/ GREEN LANES


Fig 10.86


Fig 10.87


Fig 10.88

- Self binding gravel with timber edge to main routes
- Rubber crumb/bark mulch play surfaces
- Mown grass routes

WOODLANDS


Fig 10.89


Fig 10.90


Fig 10.91

- Bark footway with timber edge
- Decking walkway
- Informal low key edged compacted earth routes


Barugh Green
Higham
Gawber
Pogmoor
KEY
Local Plan Boundary
01 Cascade Arboretum, Green Lanes and Meadow park
02 Woodland
03 Greens and Squares

Fig 10.92

10.11 Street Furniture Palette

GENERAL RULES

- The palette and materials used throughout the development should create a distinct hierarchy of character areas whilst also working together to provide a harmonious and consistent palette.
- Street furniture across the scheme should be developed to comply with relevant standards and requirements
- Street furniture should be used as a strategy for creating 'sense of place' and informal wayfinding.

GREENS AND SQUARES


Fig 10.93


Fig 10.96

- Greens and squares should maintain a more formal aesthetic feel to street furniture.
- A coherent and distinctive 'family' of furniture elements which read well as a group.
- Opportunities for creating a 'sense of place' through colour and furniture design are strongly encouraged to create and enhance neighbourhood identity.
- Furniture should provide a mix of seating elements at various heights to suit all abilities and age groups.
- Spaces should provide appropriate lighting levels, utilising varied lighting sources and types, whilst ensuring that adjacent dwellings are not in direct light.

CASCADE ARBORETUM, GREEN LANES AND MEADOW PARK


Fig 10.98


Fig 10.99


Fig 10.100

- Parkland furnishings which utilise natural materials and sit harmoniously within their setting.
- Furniture should provide an array of opportunities for seating, informal play and socialising.
- Furniture should be both grouped and scattered allowing for group socialising and sitting alone.
- Well used routes should be adequately lit, ensuring good visibility and route delineation.
- Where appropriate, key spaces should be well lit ensuring safe and comfortable conditions for users.
- Bollard lighting should be the direction for lighting these areas. Lighting will be subject to adequate/ required LUX levels to be achieved along well used routes.

WOODLANDS


Fig 10.104

- The woodlands furniture should be sympathetic to its setting, utilising natural materials.
- The furnishing palette should strongly encourage the re-use of on-site materials.
- Trees which are felled within the site should be re-purposed e.g. as seating and log stepping stones.
- Woodland seating, play elements and picnic areas should be located alongside well used routes creating 'pockets' of activity within the woodland.
- Existing woodlands should avoid lighting as to not disturb the native fauna, such as birds and bats. Lighting would have a negative impact on its setting.
- Proposed woodlands should designed to include sensitive and low-key lighting solutions as not to detract from potential wildlife value.


Barugh Green
Higham
Gawber
Pogmoor
KEY:
S1 - Primary Signage
S2 - Secondary Signage
S3 - Tertiary Signage
S2 - Secondary Signage
S3 - Tertiary Signage

Fig 10.105

10.12 Wayfinding Palette

Wayfinding should be provided to give a consistency to development.

PRIMARY GATEWAY SIGNAGE

Fig 10.106

Signage Should

Signage for the Masterplan should be designed as a family, forming Primary, Secondary and Tertiary signage types which read as a group to form a key and distinctive furniture item for the development.

Primary signage should in general, be larger format and include the following information.

SECONDARY SIGNAGE

Fig 10.107

Secondary Signage Should

Be formed of a simplistic and elegant signage type which is designed to be in keeping with the primary and tertiary signage types. Secondary signage should be more simplistic, showing users directional, distance and name information for various route options.

TERTIARY SIGNAGE

Fig 10.108

Tertiary Signage Should

Be legible and simplistic in its design and need only highlight the route which users are on. Signage should also show the various directions a user may travel on the specific route if at a junction of routes.

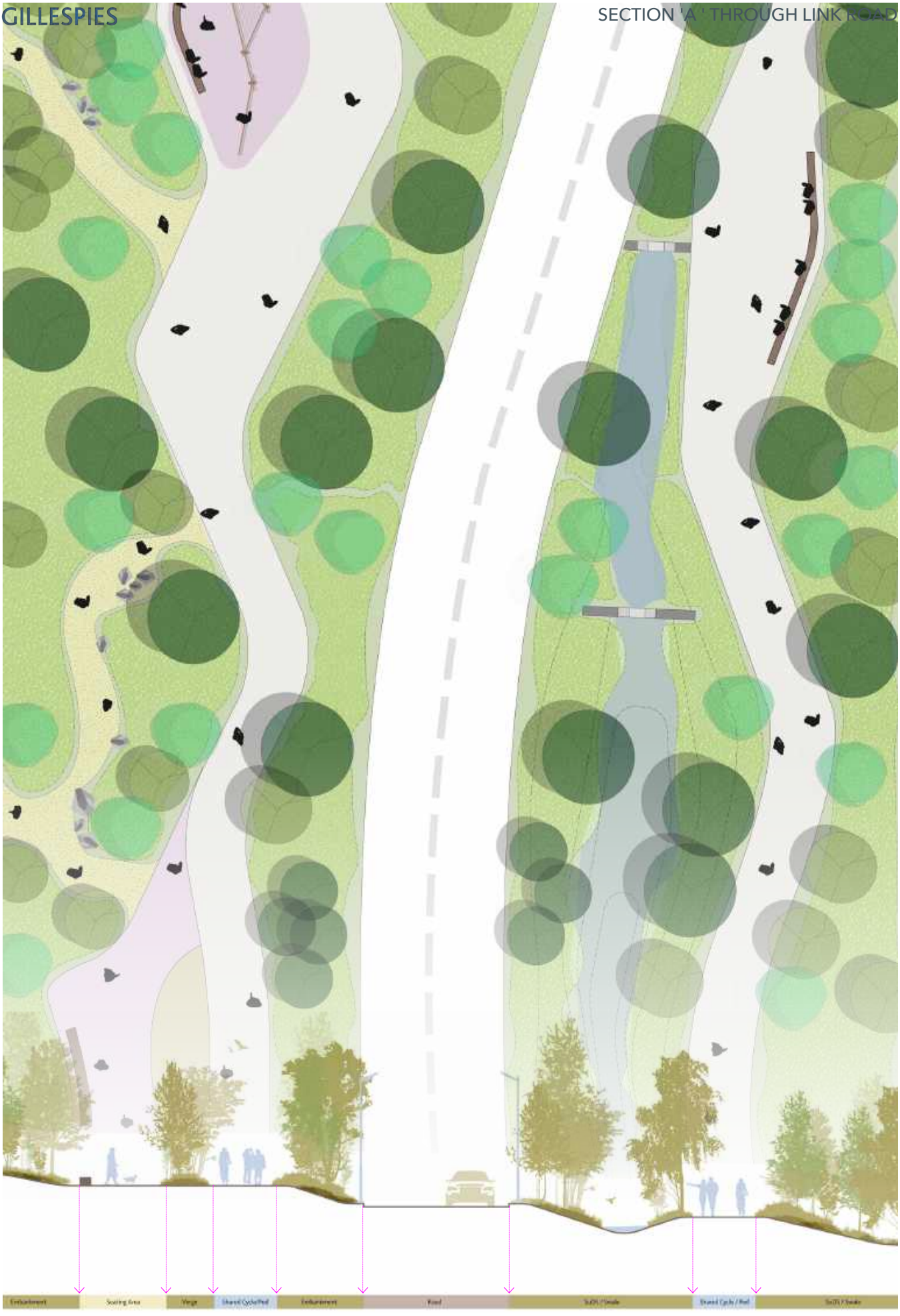

Embankment
Swale
Verge
Shared Cycle/Ped
Embankment
Road
SuDS / Swale
Shared Cycle / Ped
SuDS / Swale

Fig 10.109

10.13 Link Road

Fig 10.110
Roadside rain garden Sheffield precedent image

Fig 10.111
Sunken social area precedent image

Fig 10.112
Distinct and legible pedestrian/ cycle route

Fig 10.113

- 3m wide shared cycle and pedestrian link on both the East and West side of Cascade Arboretum (segregated from the link road)
- Linear swale with check dams incorporated due to the level change from the South to the North of the site
- Areas of planting and grass proposed to soften and green the route
- Informal path links to residential areas for improved pedestrian permeability
- Routes will be 'Equalities Act 2010' accessible
- Width of route varies to add interest and activity along the route
- Rich and diverse selection of tree species to provide an interesting and varied arboretum

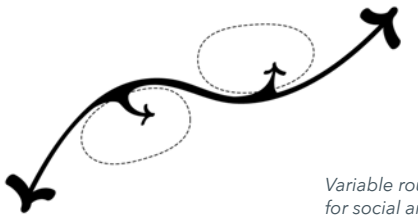


Fig 10.114
Variable route with additional areas for social and play opportunities

11 THE CHARACTER COMPONENTS

BOND BRYAN

BARNSLEY WEST, DRAFT MASTERPLAN FRAMEWORK (MU1)

DESIGN CODE

Fig 11.1

11 THE CHARACTER COMPONENTS

11.1 The Principal Character Areas

This section will demonstrate the different qualities and principles of the character areas. The principle character areas are broken down into the following 'character components':

- Community Hub
- Central Squares
- Velvet Village
- Higham Edge
- Pogmoor Edge
- Employment A
- Employment B
- Link Road, Northern Gateway, Southern Gateway


Barugh Green
Community Hub
Higham Edge
Central Squares
Higham
Gawber
Velvet Village
Employment Zone B
Pogmoor Edge
Link Road
Employment Zone A
Pogmoor

Fig 11.2

11.2 Community Hub: example sample

Key characteristics

- Dense urban grid
- Central urban square
- School, community buildings and homes fronting the square
- Density: Up to 45 units per hectare

Dominant urban grain

Precedent Project: Marmalade Lane, Cambridge

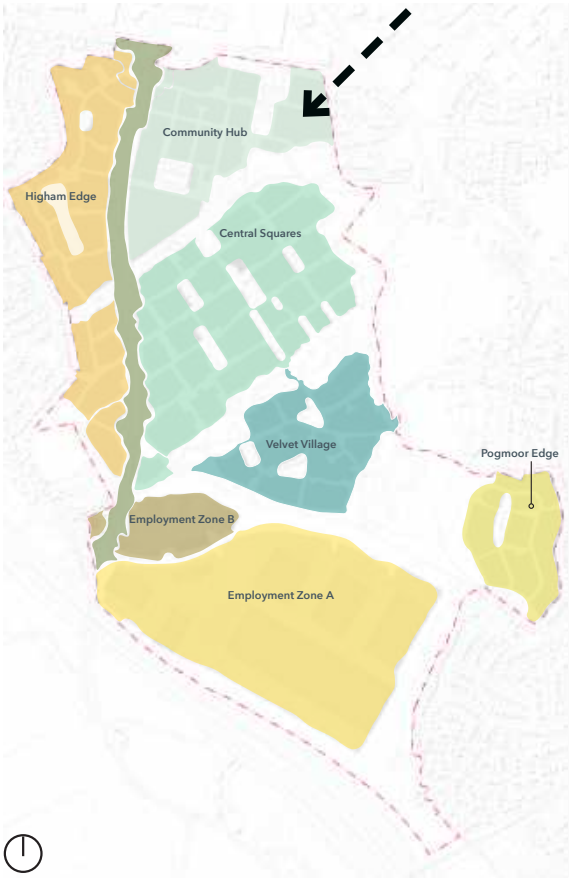


Fig 11.3

11.3 Central Squares: example sample

Key characteristics

- Long views down east-west and north-south routes
- Grid of squares within urban grid of streets
- Density: Up to 40 units per hectare

Dominant urban grain

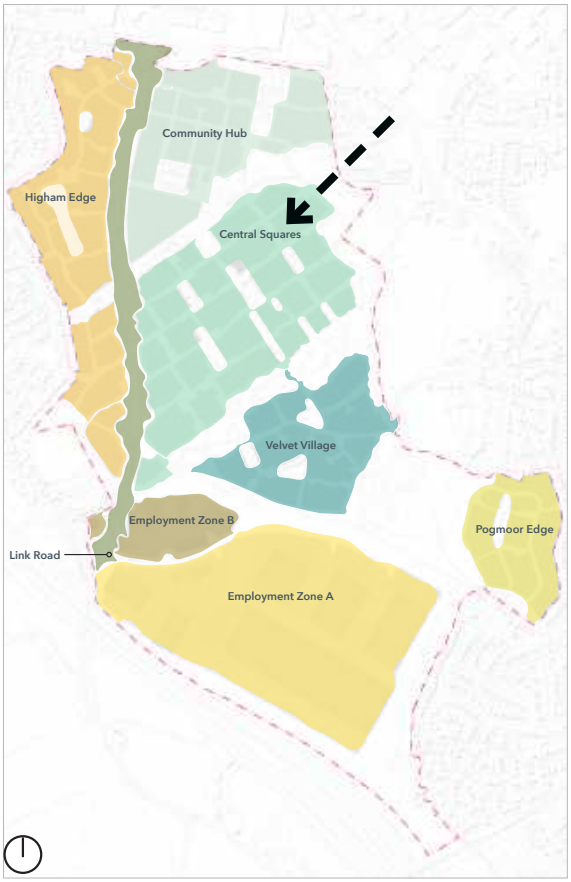
Secondary urban grain

Key public open spaces

Visual connection between spaces

Precedent Project: Great Kneighton, Cambridge

Strong linear dense urban grain with framed long views down quiet residential streets. *Fig 11.4*



11.4 Higham Edge: example sample

Key characteristics

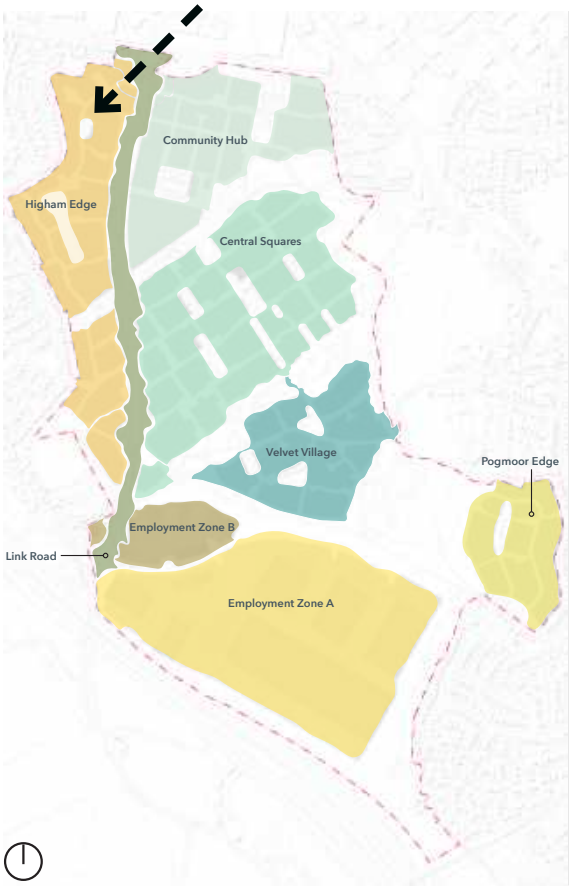
- Takes colour and grain from Higham
- Looser grain
- Greenspaces that are 'organic' in configuration
- Density: Up to 40 units per hectare

Organic form of public open spaces

Sinuous primary route

Secondary urban grain

Precedent Project:
The Avenue, Saffron Walden



Naturalistic setting with winding lanes and organically shaped green public spaces.

Fig 11.5

11.5 Velvet Village: example sample

Key characteristics

- Radial arrangement of streets around a 'central public space'
- Views over mature woodland valleys
- Looser gridded grain
- Density: Up to 40 units per hectare

Legible central heartspace

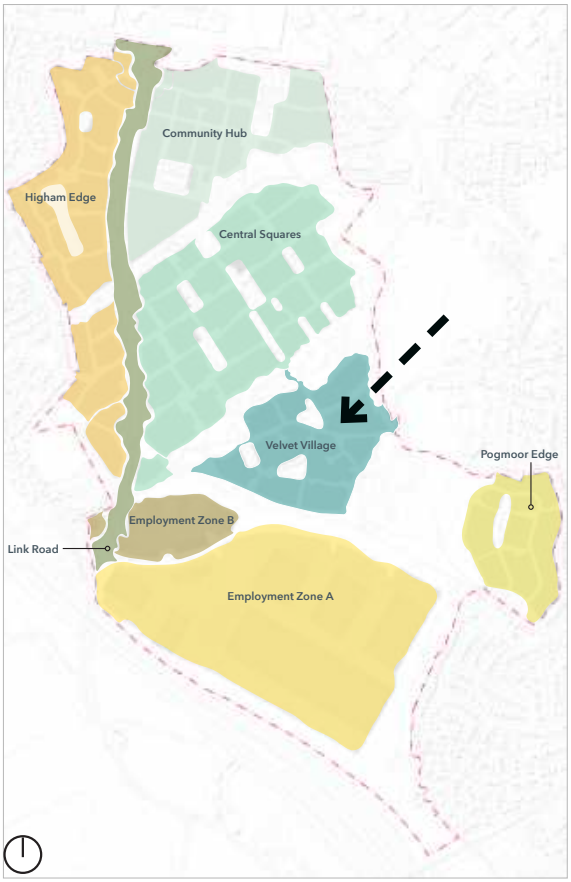
Primary street (follows approximate route of Hermit Lane)

Radial secondary streets

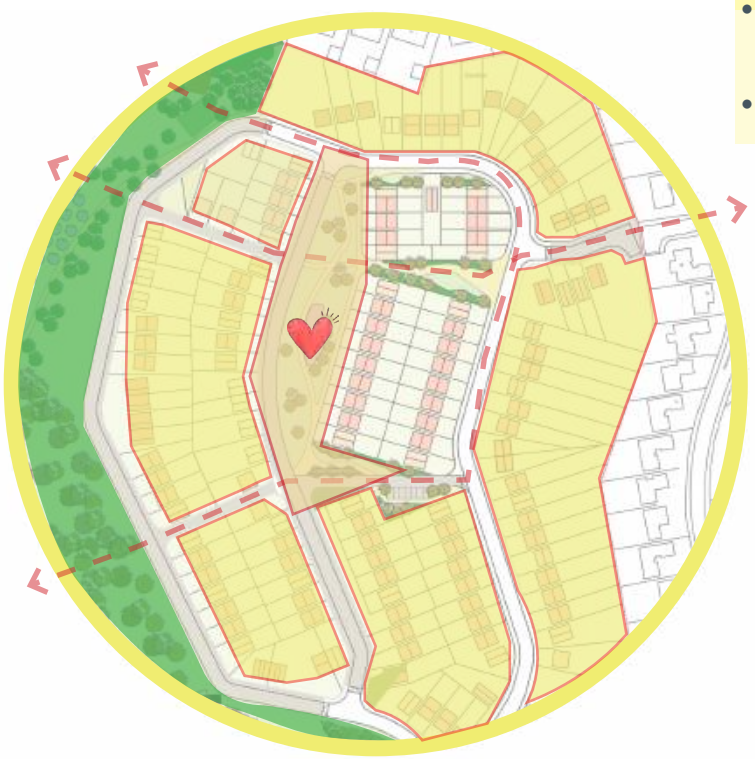
Precedent Project: Cane Hill, Coulsdon

Central square as a key social space

Fig 11.6

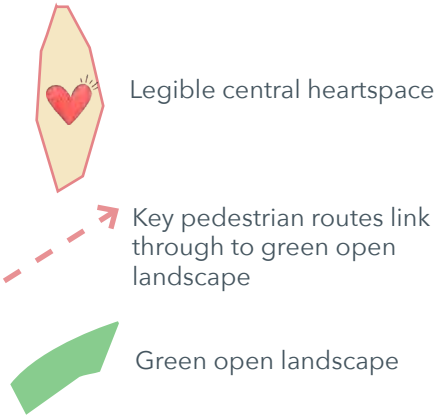


11.6 Pogmoor Edge: example panel



Key characteristics

- Loose organic layout but very permeable to pedestrian movements and links to open space
- Density: Up to 35 units per hectare

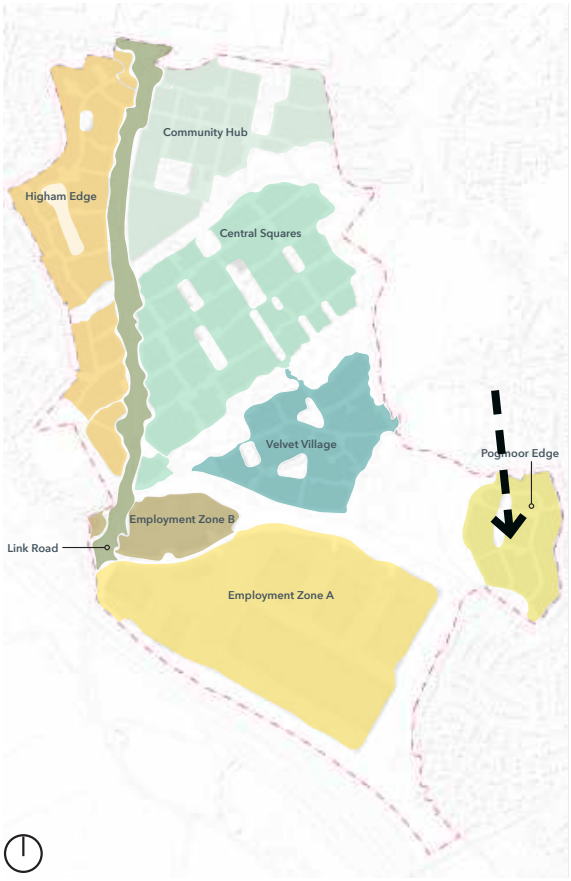


Precedent Project:

Derwenthorpe development, York

Outward looking properties relating positively to an open landscape context

Fig 11.7



11.7 Employment Zone A: example sample

Key characteristics

- Larger units
- Surrounded by dense woodland
- Square Footage: Should equate to 43h of employment land combined with Employment Zone B

Larger unit sizes

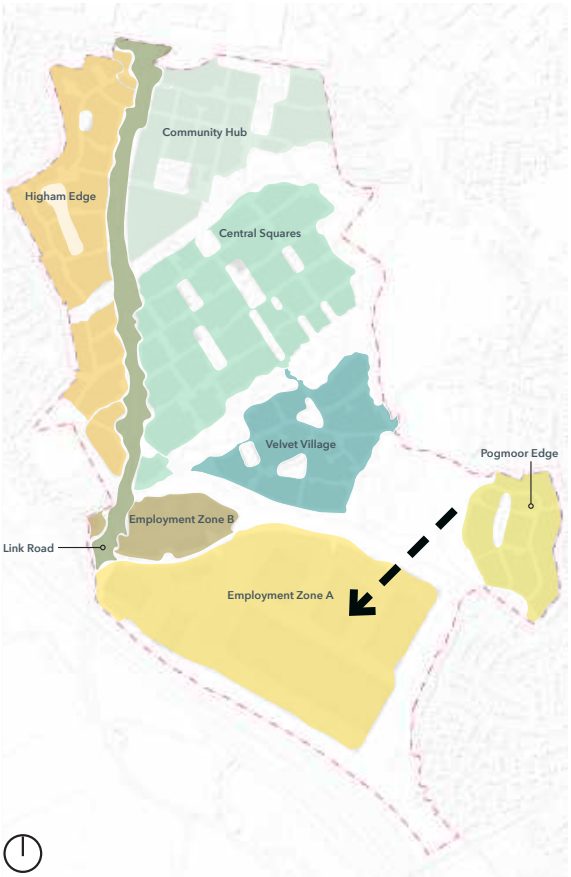
Dense woodland belt

Buildings set apart within landscape

Precedent Project: Thorpe Park, Leeds

Larger units set in landscape adjacent to M1 motorway surrounded with tree belt.

Fig 11.8



11.8 Employment Zone B: example sample

Key characteristics

- Smaller units
- Forms gateway from south
- Square Footage: Should equate to 43h of employment land combined with Employment Zone A

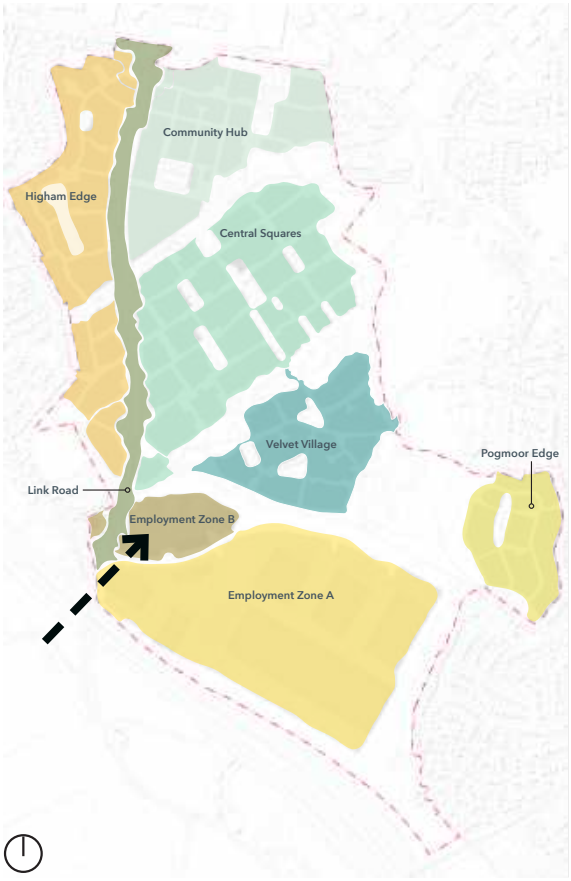
Smaller unit sizes

Link road

Precedent Project: Thorpe Park, Leeds

Smaller units set within open landscape surrounded with tree belt.

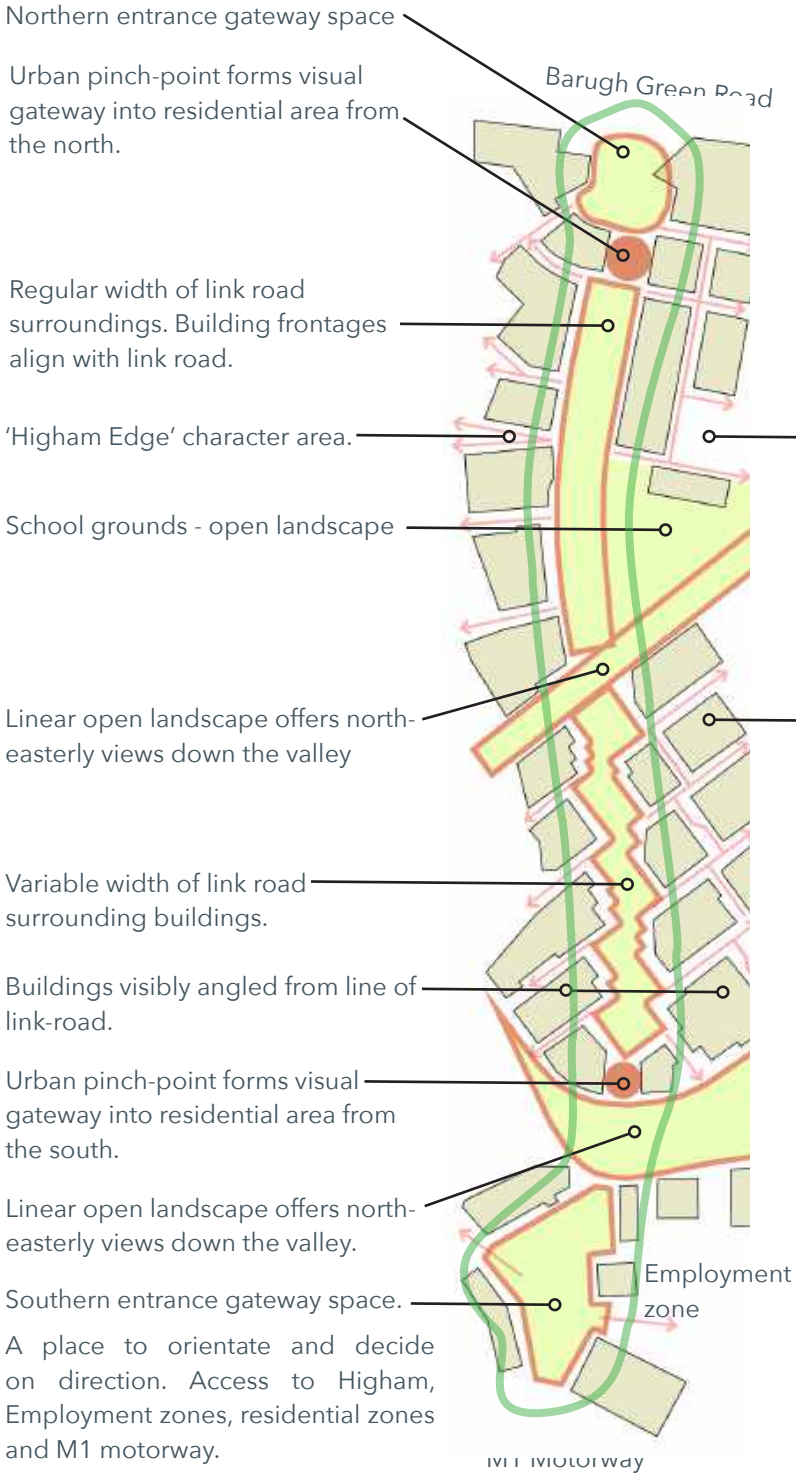
Fig 11.9



11.9 Link Road, northern Gateway, Southern Gateway

Key characteristics

- An urban arboretum
- A dynamic space that changes in character along its route
- Clearly structured gateway and mid-points



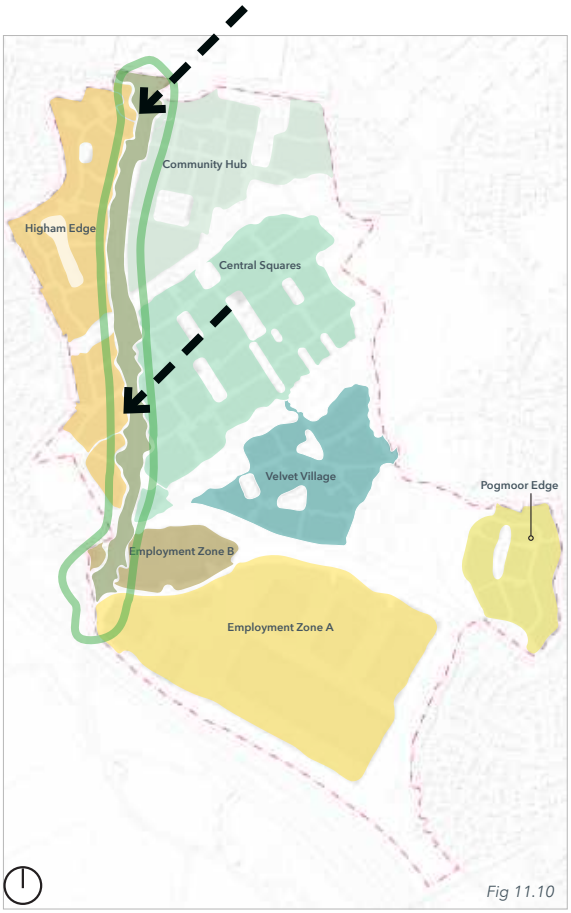
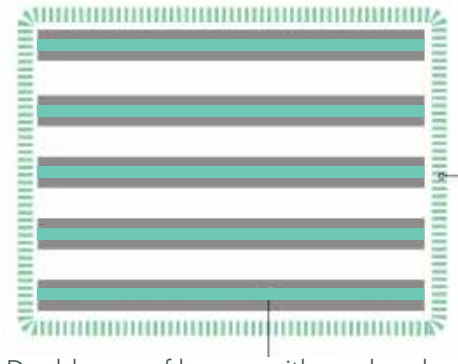


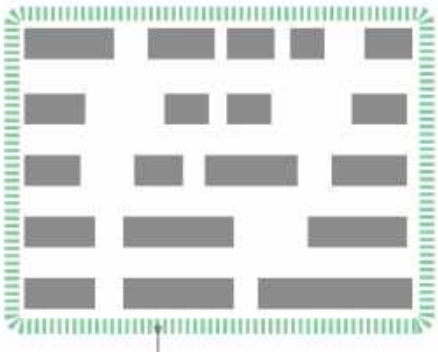
Fig 11.10

11.10 Figure ground concept diagrams

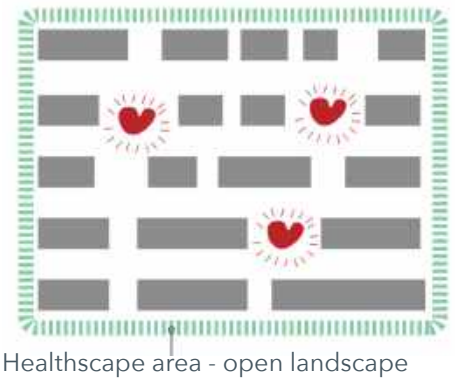
Step 1: Creating an efficient figure ground within site parameters



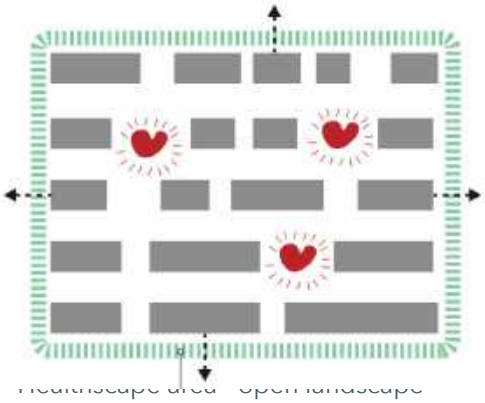
Step 2: Break the blocks down to a more human scale



Step 3: Through breaking down the block, heartspaces form within the neighbourhood



Step 4: Create node buildings that act as focal entrance/ exit navigation points into the neighbourhood



Step 5: Enhance their appearance through a possible form, material and/or facade language that softly contradicts the adjacent dwellings. In doing so, they act as navigation entrance/ exit points

Step 6: Pedestrian/ cycle links form through the neighbourhoods to create a framework for permeability

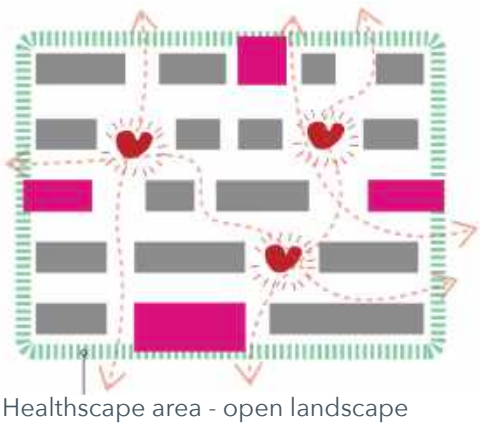


Fig 11.11

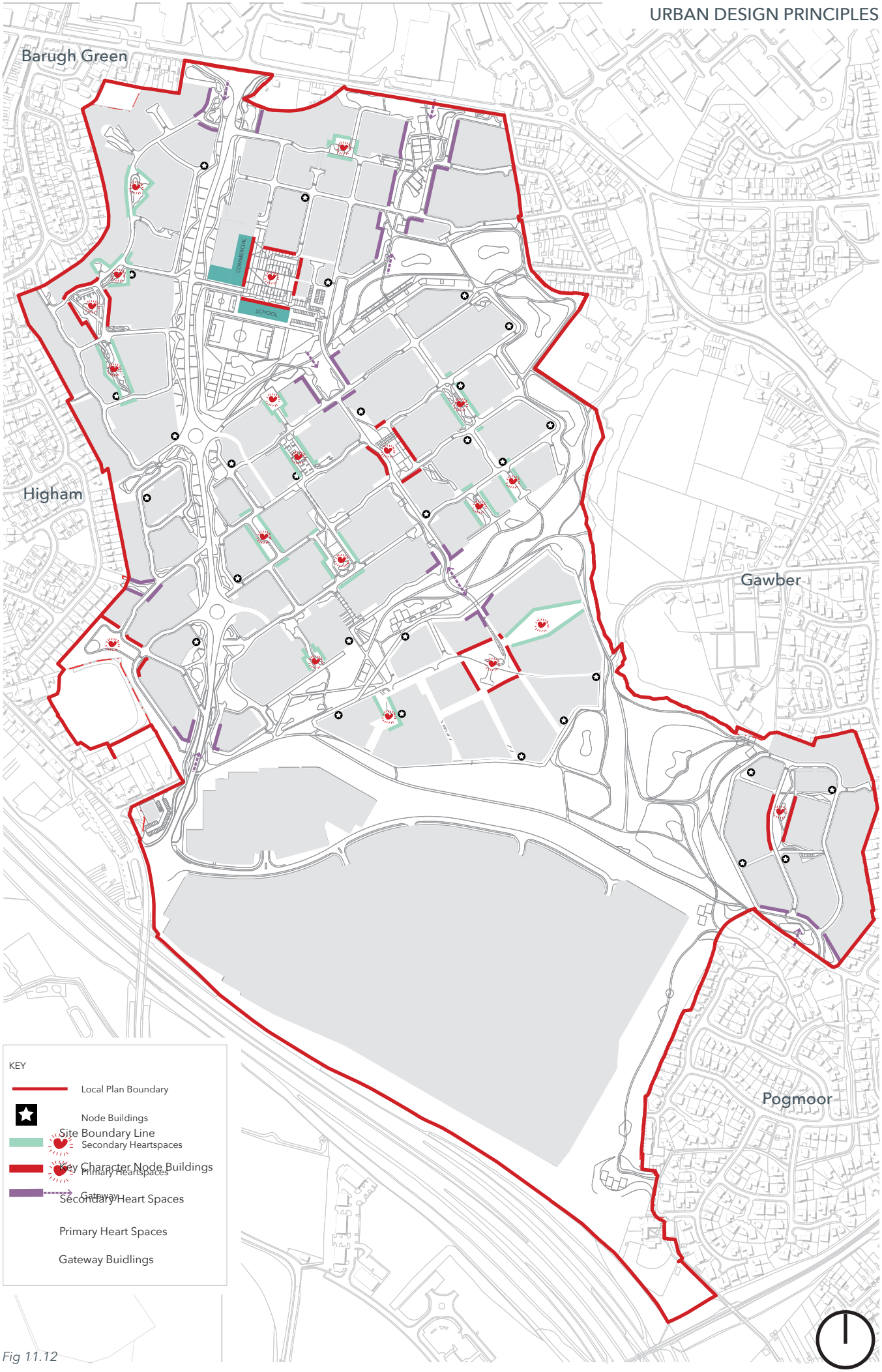

Barugh Green
Higham
Gawber
Pogmoor
COMMERCIAL
SCHOOL
KEY
Local Plan Boundary
Node Buildings
Site Boundary Line
Secondary Heartspaces
Key Character Node Buildings
Primary Heartspaces
Gateway
Secondary Heart Spaces
Primary Heart Spaces
Gateway Buidlings

Fig 11.12

11.11 Node, Gateway and Heartspace Buildings

The purpose of the node, gateway and heartspace buildings is to provide an architectural language that subtly differs from other buildings to create distinctive spaces and moments in the townscape. Through doing so, they both provide the opportunity to create a sense of arrival and act as a navigation points throughout the area.

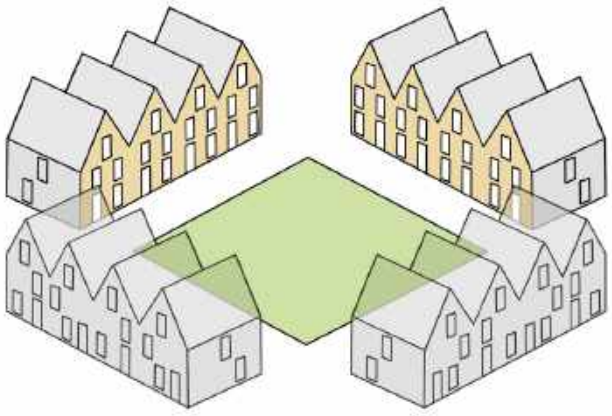
11.12 Principles of Heartspaces and Heartspace Buildings

Heartspaces are integral to defining the character of an area. They are moments of arrival and within each character area, serving their purpose at the heart of that community.

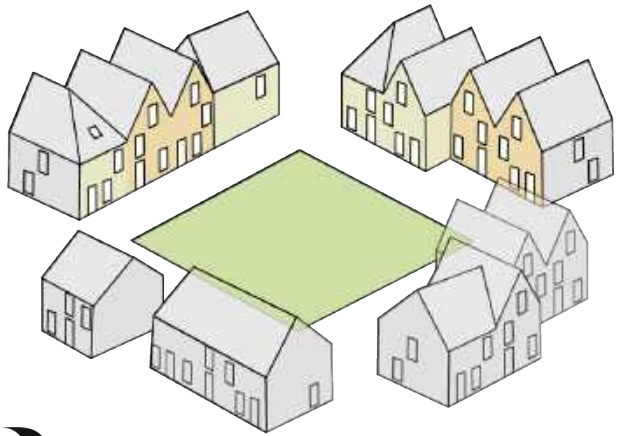
- Higher density, three storey units are promoted around heart spaces.
- Front gable facing
- Use a colour that contrasts against the adjacent back ground buildings
- More ordered façade language
- Consistent building line along the street
- Terraces encouraged or narrower plots
- Town house in character

- The architectural language of the node, gateway and heartspace buildings should subtly differ from the other buildings. This provides the opportunity to create a sense of arrival and for buildings to act as navigation points to help aid permeability through the development.

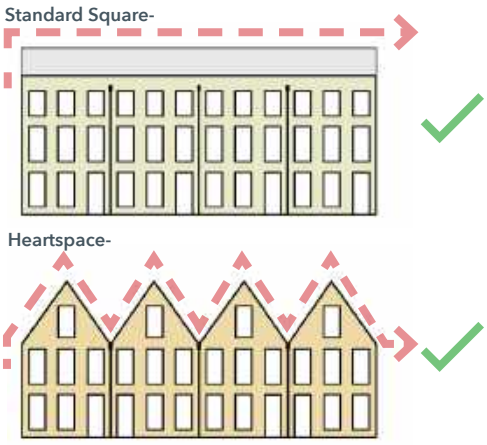
Ideal principles: Regular, ordered and legible space with a clear geometry and building language.



Principles not adhered to: Irregular space with lack of orientation or structure.



Ideal facade principles: Homogenous and continuous building geometries surround heartspaces which can be read as a whole.



Facade principles not adhered to: Varied architectural language with large gaps in frontages.

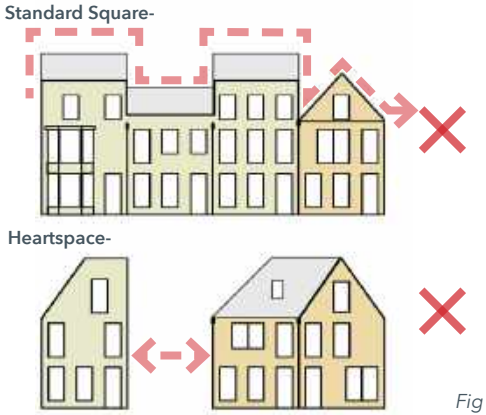


Fig 11.13

Example image: Heartspace buildings with simple repeated facades and roof forms. *Fig 11.14*

Example image: Heartspace buildings with regular formal window arrangements. *Fig 11.15*

Example image: Heartspace buildings with a constant material colour palette and formal facade arrangement rising to up to 3 storeys in height in key heartspaces. *Fig 11.16*

11.13 Principles of Node Buildings

- Node buildings act as 'navigation points' into heartspaces. They are intended to stand out in a subtle manner.
- Node buildings are a single building
- Ensure all gable-ends should read as "front facades"
- Be monochrome in colour i.e. black, white or grey
- Project forward in the building line
- A more relaxed and playful facade language is encouraged and must contrast against the adjacent block
- Contrasting roof forms are promoted
- More playful facades and roofscapes are promoted to ensure the buildings stand out but sit within a coherent set of buildings

Node buildings illustrative diagram:

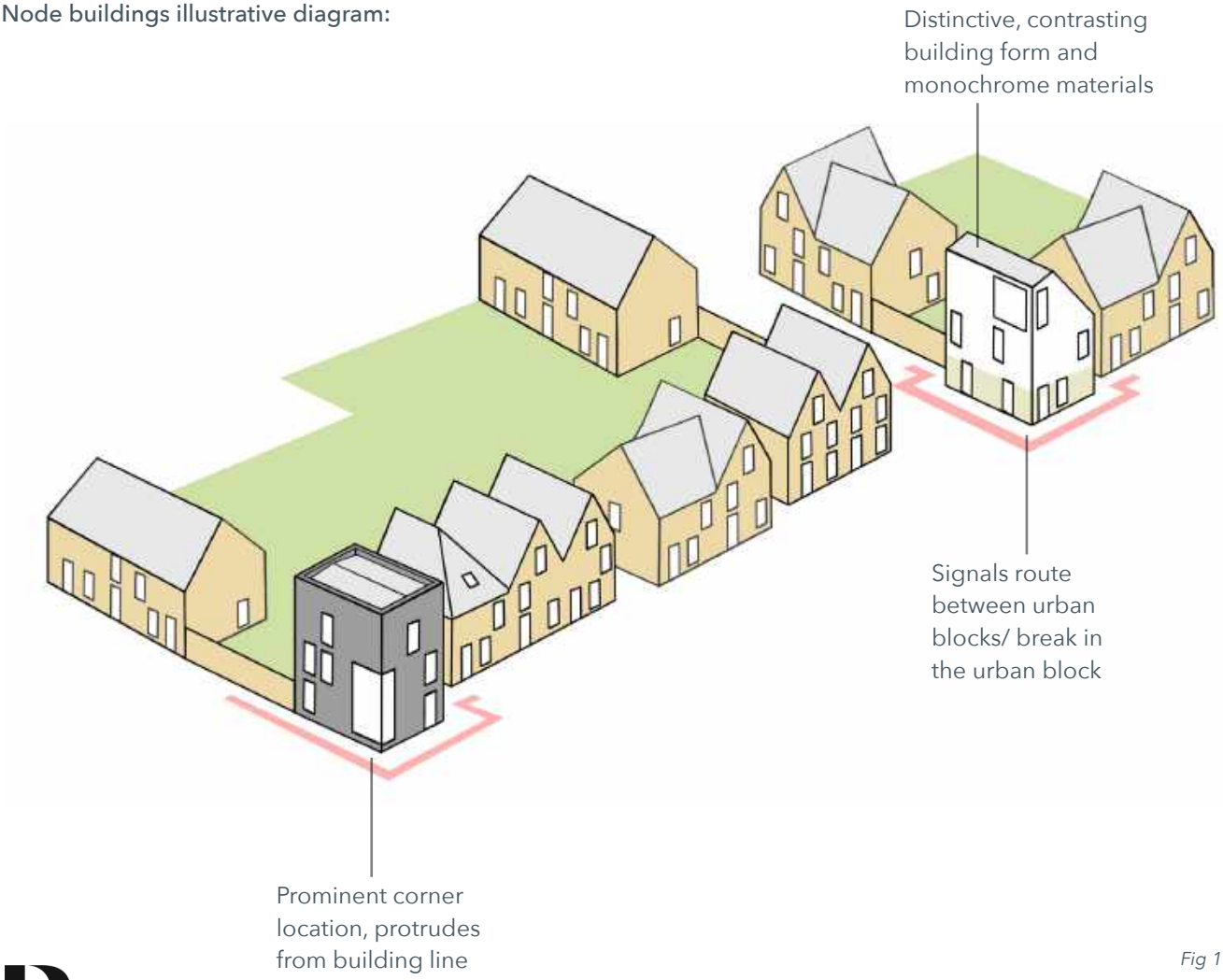


Fig 11.17

Example image: Node buildings - distinctive contrasting material to context Fig 11.18

Example image: Node buildings - irregular window arrangements to highlight them as 'distinctive' Fig 11.19

Example image: Node buildings - irregular window arrangements including corner windows may be employed Fig 11.20

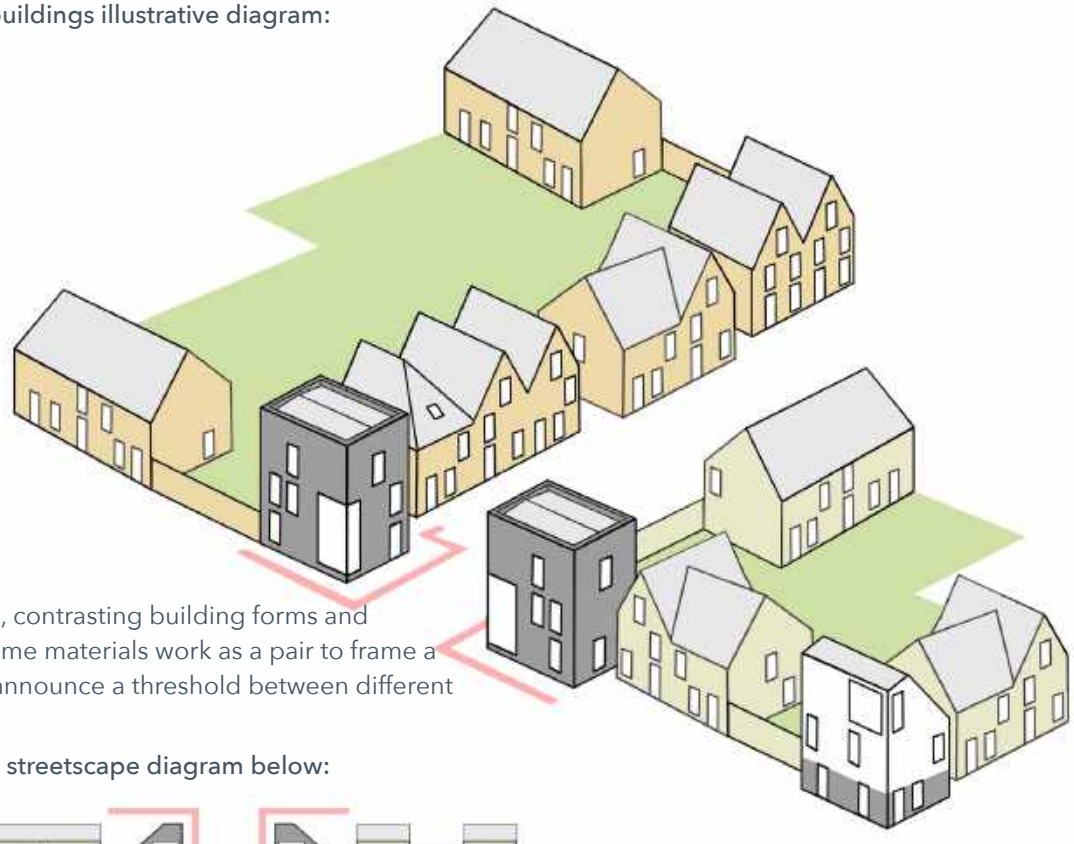
Example image: Node buildings - distinctive use of materials and detailing - feature brickwork shown in example Fig 11.21

11.14 Principles of Gateway Buildings

The purpose of gateway buildings is to signal the notion of going through a set of buildings or space. They create a sense of arrival or departure and should align to the following principles.

- The language, height and colour should be reference the principles of node and heartspace buildings.
- A gateway building could be two node buildings separated by a road.
- Gateways should mirror each other and be coherent
- Create a 'pinch point' effect. This could be done not only through built form but landscape or planting.

Gateway buildings illustrative diagram:



Distinctive, contrasting building forms and monochrome materials work as a pair to frame a view and announce a threshold between different spaces.

Illustrative streetscape diagram below:

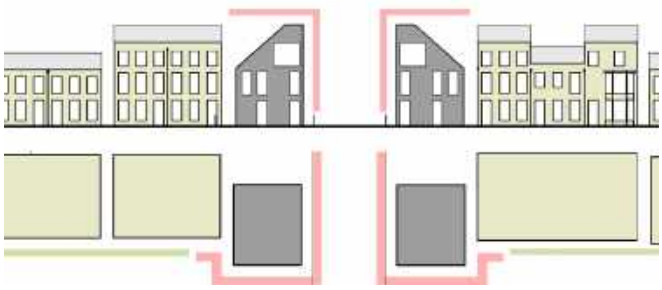


Fig 11.22

Example image: Gateway buildings - symmetrical facades and arrangement suggest an axis of movement Fig 11.23

Example image: Gateway buildings - distinctive materials frame a view into an urban block Fig 11.24

Example image: Gateway buildings - distinctive building forms and features employed on a pair of buildings either side of an key opening in an urban block Fig 11.25

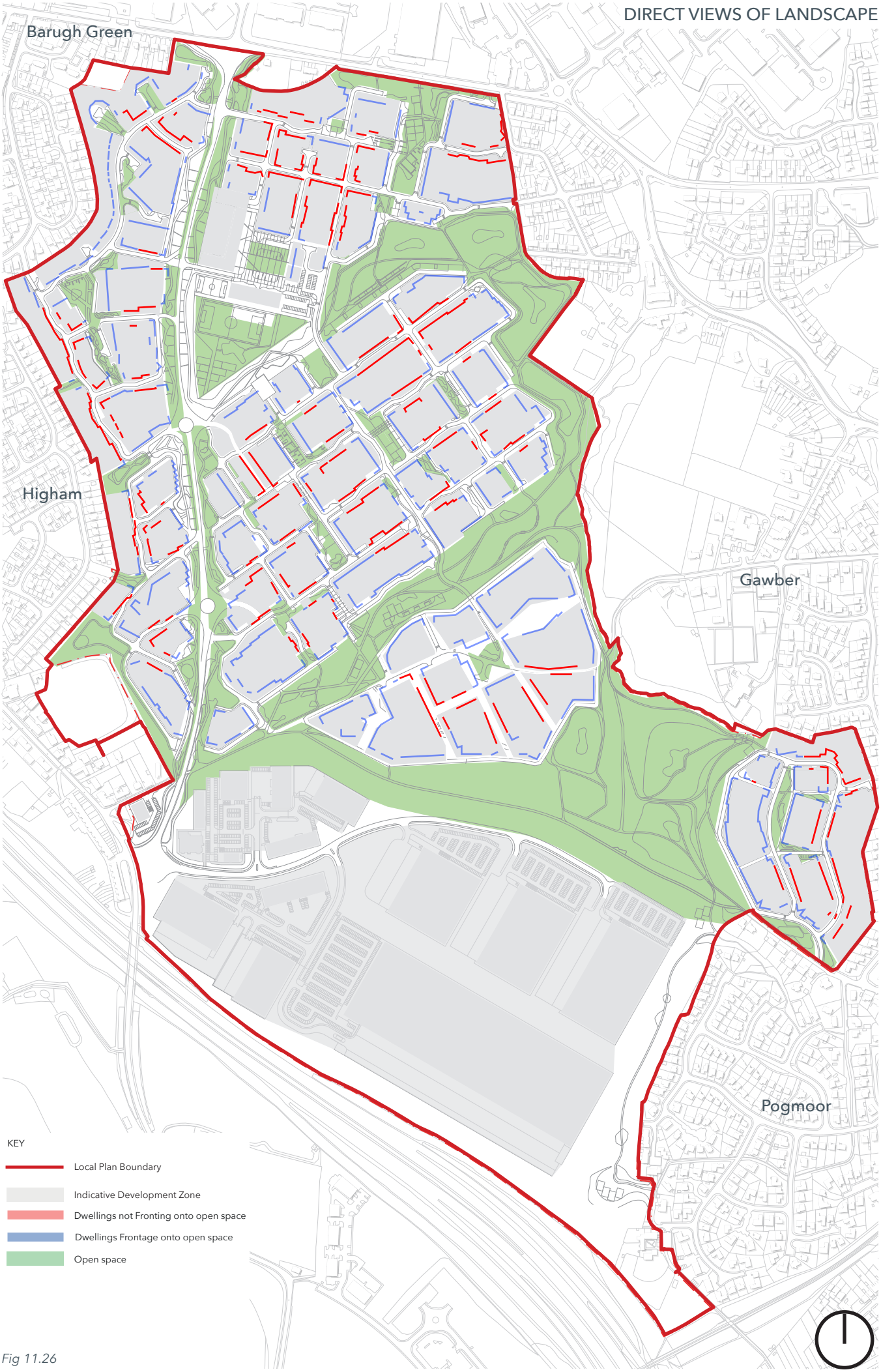

Barugh Green
Higham
Gawber
Pogmoor
KEY
Local Plan Boundary
Indicative Development Zone
Dwellings not Fronting onto open space
Dwellings Frontage onto open space
Open space

Fig 11.26

11.15 Direct Views of Landscape

Ensuring that buildings have a connection to the landscape is essential to health and wellbeing.

In order to achieve this, each character area should have:

A minimum of 60% of dwellings should directly face onto a formal open space.


PROXIMITY TO OPEN SPACE
Barugh
Higham
Gawber
Pogmoor
1min walk
KEY
Local Plan Boundary
Indicative Development Zone
1min walk from open space
Open space

Fig 11.27

11.16 Proximity to Open Space

Varied and frequent high quality public spaces are an essential component of the Masterplan and must be carried through on any detailed application.

In order to achieve this:

At least 70% of dwellings should be no more than one minute walk to an open space from the front door.


Barugh Green
Community Hub
Claycliffe Avenue
Higham Edge
Central Squares
Higham
Gawber
Velvet Village
Employment Zone B
Pogmoor Edge
Employment Zone A
Pogmoor
KEY
Local Plan Boundary
Distincive character area colour palettes.
Indicative Development Zone
Colour influences on new development parcels
Surrounding building colour palettes.

Fig 11.28

11.17 Site Wide Colour

Background buildings might have their own character and vary subtly, but they should not shout or jostle for attention. They might be rich with contrasts and surprises, but retain a certain consistent language. The 'site wide colour' diagram suggests a sampling of the principal facade material colours in neighbouring areas. For example, terracotta red for the red brick which is prevalent in Claycliffe Avenue, the buff colour of brick and stone employed in Pogmoor and the mix of pale orange and buff brick and stone of Higham. Whilst exact material matching is not required, matching with a similar colour palette is required.

To achieve this, background buildings should:

- Form a cohesive urban environment
- Have an order or consistency, contrasting against node and gateway buildings
- Read as an assemblage of buildings in a block with a common theme

1. Surrounding building colour palettes.

Fig 11.29

2. Colour influences on new development parcels.

Fig 11.30

3. Distinctive character area colour palettes.

Fig 11.31

1. The surrounding urban settlements have distinctive material colour palettes which form an important part of the distinctive character of these areas.

2. These colour palettes should help inform the primary colour palette of adjacent urban developments, forming harmonious extensions to the existing urban fabric. (Coloured render and brick may be suitable substitutes for the local buff stone if used sensitively.)

3. With influences from each of the adjoining districts informing the proposed development parcels, a patchwork of distinctive 'villages' should be identifiable in the landscape. Within each 'village', key spaces feature contrasting material colours to provide a sense of place. For example, an area of predominantly red brick may have its key public space or 'heart-space' surrounded with buildings of a contrasting buff brick or stone.

11.18 The Edges of Urban Blocks

The edges of urban blocks should have a positive relationship to adjacent open landscapes with primary building frontages and/ or gable ends of dwellings having large windows overlooking the open landscape. This ensures passive supervision of public spaces, a strong connection between homes and the shared landscape and positive long views across and into the site.

Rear gardens back onto one another to provide a secure 'island' block with well defined private rear gardens and semi-public front gardens fronting the street and open landscapes.

Diagram below illustrates poor urban responses which will not be acceptable: Buildings backing onto open landscape offering limited views over landscape and little connection to public open spaces. Exposed rear gardens provide less secure property boundaries.

Over time, rear boundary treatments are replaced in a haphazard and potentially insensitive manner.

Blank gables fail to maximise views onto the landscape and offer dull expanses of blank facade to the public realm.

Fig 11.32

Fig 11.33

Fig 11.34

Fig 11.35

Fig 11.36

Rear gardens should back onto one another to provide a secure 'island' block with well defined private rear gardens and semi-public front gardens fronting the street and open landscapes.

Gable ends onto these spaces should have primary building frontages with large windows overlooking the landscape.

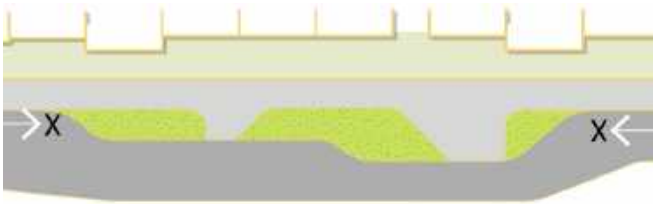

Barugh Green
Higham
Gawber
Pogmoor
KEY
Local Plan Boundary
Indicative Development Zone
Primary street

Fig 11.37

11.19 Primary Streets

Primary streets should:

- Be clearly demarcated for vehicular use by a kerb; with a minimum 100mm upstand.
- Pedestrian footpaths should be designed at a minimum of 1.8m widths.
- Where possible, pedestrian routes should also be provided segregated from the road enabling pedestrians to walk through greener surroundings.
- Planting and grass verges should be provided where space allows.
- One way priority sections should be encouraged creating a varied streetscape
- Forward visibility should be discouraged through road alignment and landscaping to reduce vehicle speeds.



Forward visibility reduced

Primary street separation precedent image *Fig 11.38*

Primary street precedent image *Fig 11.39*

Fig 11.40

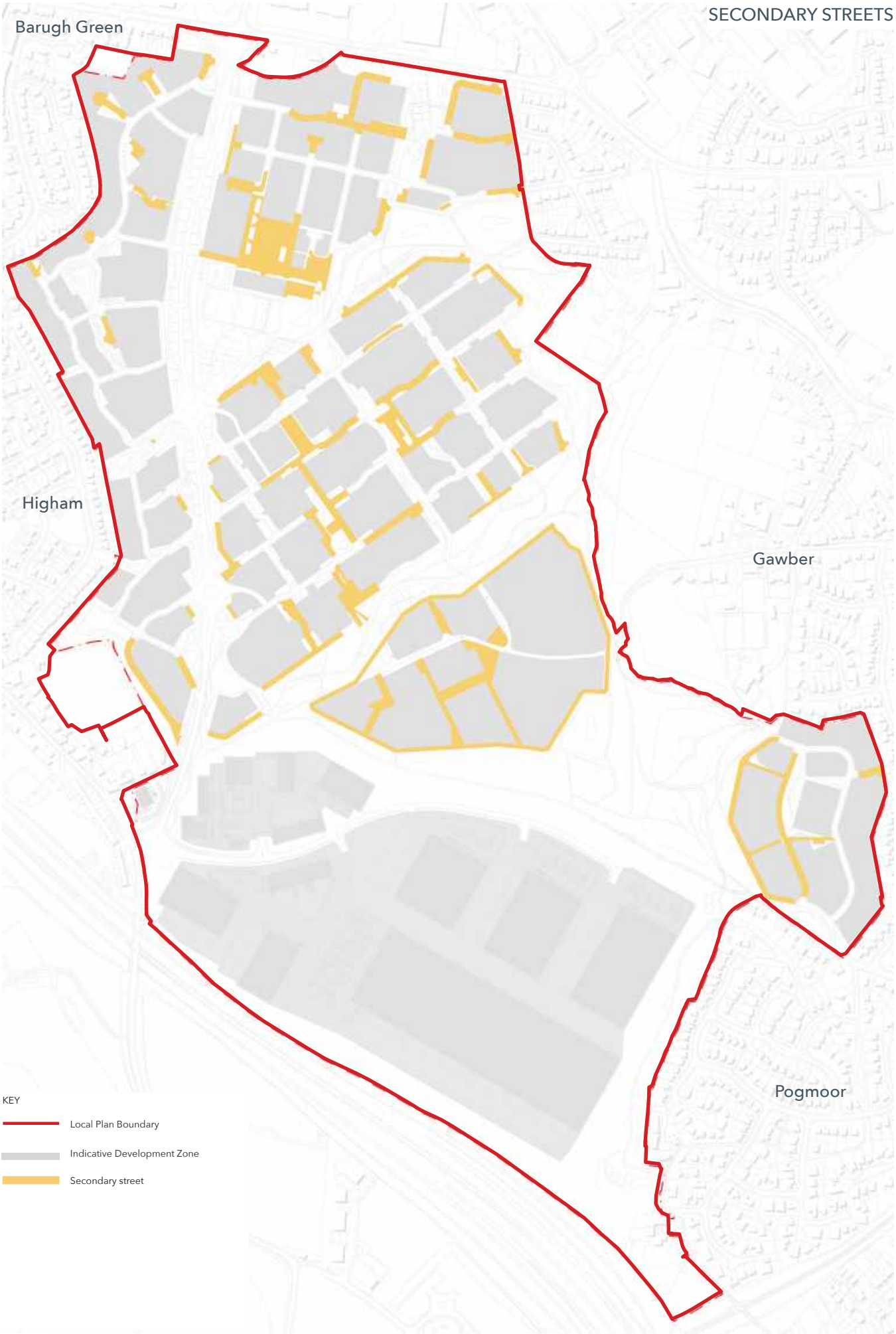

Barugh Green
Higham
Gawber
Pogmoor
KEY
Local Plan Boundary
Indicative Development Zone
Secondary street

Fig 11.41

11.20 Secondary Streets

Secondary streets should:

- Provide a 'shared space' design, encouraging slower vehicle speeds.
- Carriageway widths should be kept to a minimum
- The carriageway should be delineated by small kerb upstand
- Surface materials for the carriageway and footpath should be of a similar material with clear delineation between the two.
- Clearly demarcated raised table access should be provided on ingress and egress of the secondary street.

Shared space character precedent image Fig 11.42

Fig 11.43


Barugh Green
Higham
Gawber
Pogmoor
01
02
KEY
Local Plan Boundary
Indicative Development Zone
Proposed Edges
Pogmoor Land Edges

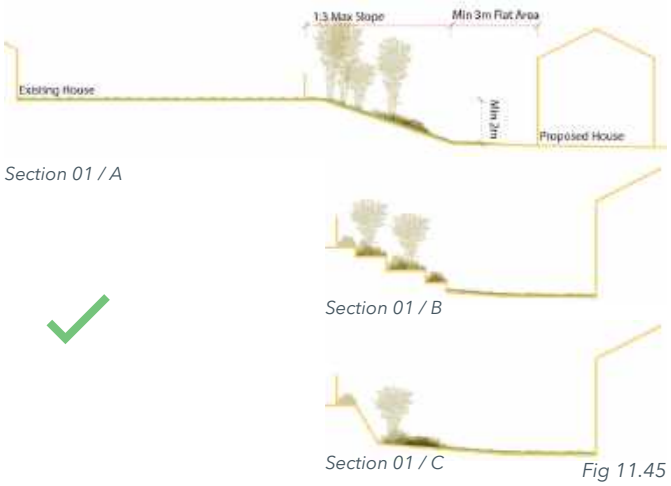
Fig 11.44

11.21 Edge Parameters

GENERAL RULES

- Proposed houses should as a rule be set lower than existing dwellings (where possible) to reduce visual impacts.
- All gradients/ embankments should not exceed 1:3 slopes
- Planting should be used as a method of screening where appropriate
- Planting species should be selected to provide year-round interest and screening and of a variety which can be easily maintained at a specified height

PROPOSED EDGES



Section 01 / A

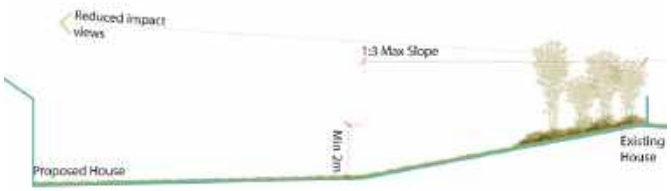
Section 01 / B

Section 01 / C

Fig 11.45

- Houses should be set lower than existing dwellings to reduce impact on visibility
- Max 1:3 slopes should be used where appropriate. Terraced treatments or retaining walls should be explored as shown in sections B and C to allow more usable garden space.
- Min 3m flat area for garden should be allowed to rear of proposed dwelling.
- Planting and trees should be used where appropriate, creating a soft buffer between proposed and existing.

POGMOOR LAND EDGES



Section 02

Fig 11.46

- Proposed houses to be set down across most of the edge at a min 2m.
- Proposed embankments should provide adequate screening for existing dwellings through appropriate planting. This should not detract or provide complete visual screening for either dwelling.
- A mix of evergreen and deciduous species should be selected providing year-round interest and screening

EDGE TYPE EXAMPLES TO BE AVOIDED

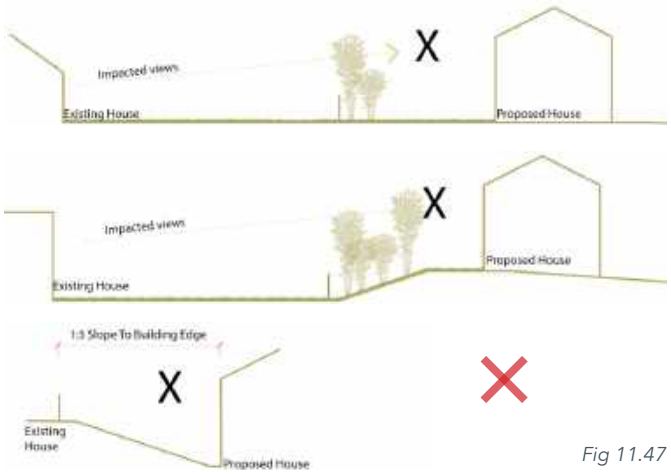


Fig 11.47

- Houses should be set below the level of existing houses and only proposed on the same level if unavoidable.
- It it strongly recommended that houses sited above the level of existing dwellings should be avoided unless absolutely necessary.
- If this treatment type is unavoidable, adequate buffer planting space should be provided to screen direct views
- Screening/ buffer planting should not detract from either property, or take away considerable usable garden space for the dwelling.
- Proposed dwellings should have adequate flat/ usable garden space and slopes should not fall directly to the building edge.


Barugh Green
Higham
Gawber
Pogmoor
KEY
Local Plan Boundary
01 Cascade Arboretum, Green Lanes and Meadow park
02 Woodland
03 Greens and Squares

Fig 11.48

11.22 Boundaries

GENERAL RULES

- The boundary types used throughout the development should create a distinct hierarchy of character areas whilst also working together to provide a harmonious and consistent palette and where possible link back to the street furniture palette

GREENS AND SQUARES


Fig 11.49


Fig 11.50


Fig 11.51


Fig 11.52


Fig 11.53

- Boundaries within these spaces should be more formal
- Brick walling to match the brick of the house type
- Combination of brick walling and railing is acceptable as long as this also responds and connects back to the architecture
- A combination of using hedge and railing will also be acceptable
- In the less formal spaces, a simple hedge will be viable

CASCADE ARBORETUM, GREEN LANES AND MEADOW PARK


Fig 11.54


Fig 11.55


Fig 11.56

- These spaces will be less formal and will be a looser feel and some may not require a boundary
- Low knee rail to direct people to walk onto footpaths
- Post and rail fences used when big level changes are required
- Low native hedgerow planting to existing boundaries

WOODLANDS


Fig 11.57

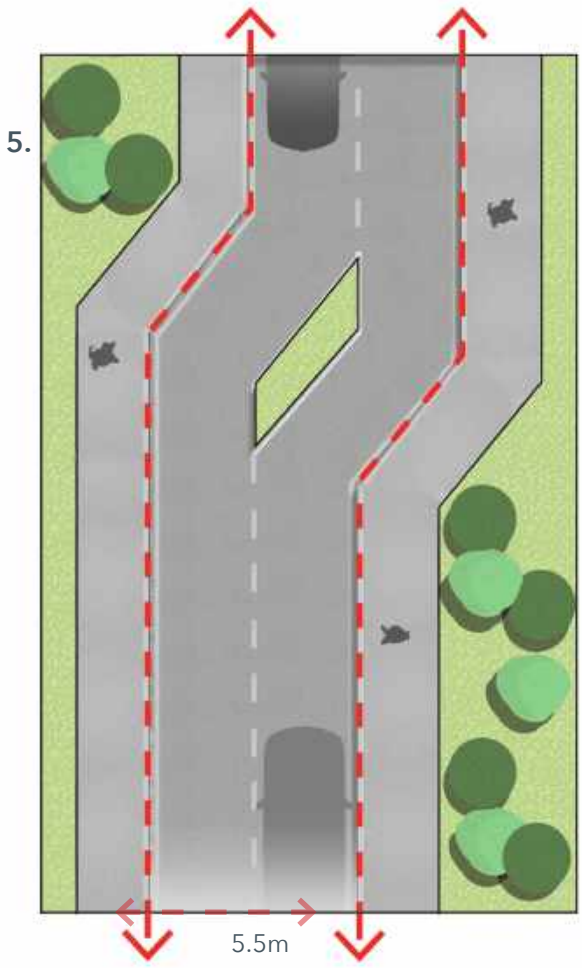

Fig 11.58

- Generally these spaces will not require a boundary, however when they do they will be keeping with the character of the woodland
- Post and rail fence
- Post and fence to prevent people crossing boundaries
- Native hedgerow planting to existing boundaries

11.23 Traffic Calming

In Squares and public spaces, the road surface should change and/ or the road surface may be raised to the level of the square. However to maintain pedestrian safety the edge of the square must be protected by street furniture and or planting to avoid vehicle access onto pedestrian surfaces.

Key
1.Trees in narrowing
2.On street parking
3.Raised tabled pedestrian crossing
4.Carriageway narrows for designated pedestrian crossing 3.8m for 10m max.
5. Road Chicane



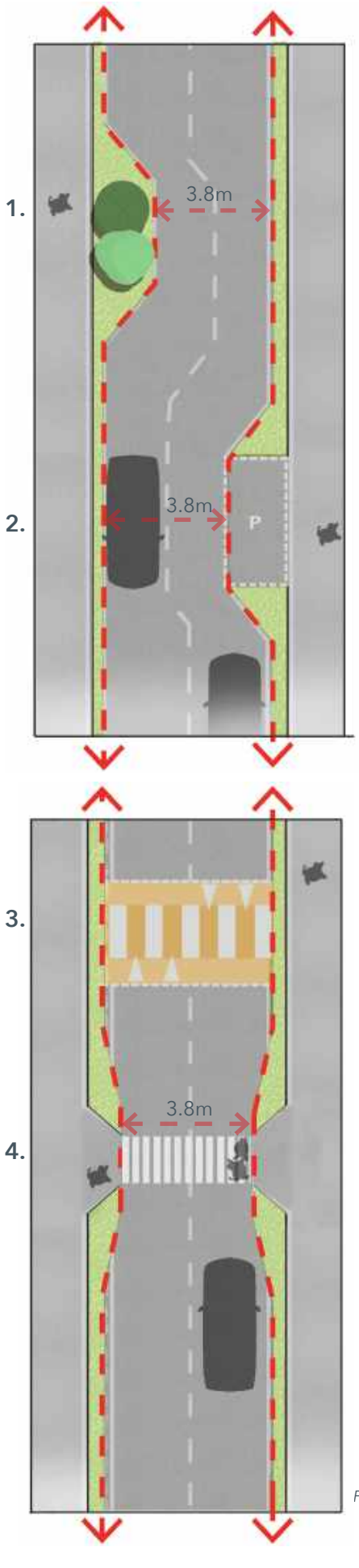


Fig 11.60

11.24 Parking Types

The current visual impact of parking motor vehicles in our urban streetscape should not be underestimated. Whilst they form a part of modern lifestyles, the visual impact can and should be considered and reduced.

Where possible, parking spaces are to be located to the side of properties to limit their visual impact from the street.

Generally, no more than three consecutive plots are to have the same parking solution to avoid a repetitive streetscape dominated by parking.

A more regimented and repetitive approach to parking may be deemed appropriate within formal squares to continue the more ordered architectural treatment of buildings within these key spaces.

Key

- On plot front driveway parking.
- On plot side driveway parking.
- On plot undercroft /carport parking.
- On plot integral garage parking.
- On plot detached garage parking.
- On plot designated front garden parking court. *(Maximum 6no. parking bays).*
- Off plot designated parking within public square. *(Maximum 4no. parking bays in tandem).* *(No rear parking courts will be permitted).*
- On street un-designated parking bays. *(Form chicanes and width restrictions for traffic calming).*

Illustrative potential residential layout highlighting a variety of different parking methods which may employed.

Fig 11.61

12 FLEXIBILITY

BOND BRYAN

BARNSLEY WEST, MASTERPLAN FRAMEWORK (MU1)

DESIGN CODE

Fig 12.1

12 ALLOWING FOR FLEXIBILITY

12.1 Overview

The code has been composed to allow for flexibility.

The following diagram demonstrates a typical scenario where compliance is achieved and principles are maintained through three different outcomes.

The over-arching guiding principles are adhered to and interpreted slightly differently to suit evolving house market needs and types.

- Strong Building Lines and key buildings front main spaces .
- All properties front onto some type of green space.
- Strong building edge formed with housing fronting onto open landscape areas. Clearly defined spaces.
- Sense of enclosure and individual character to each key urban space.

Sample area of Masterplan layout.

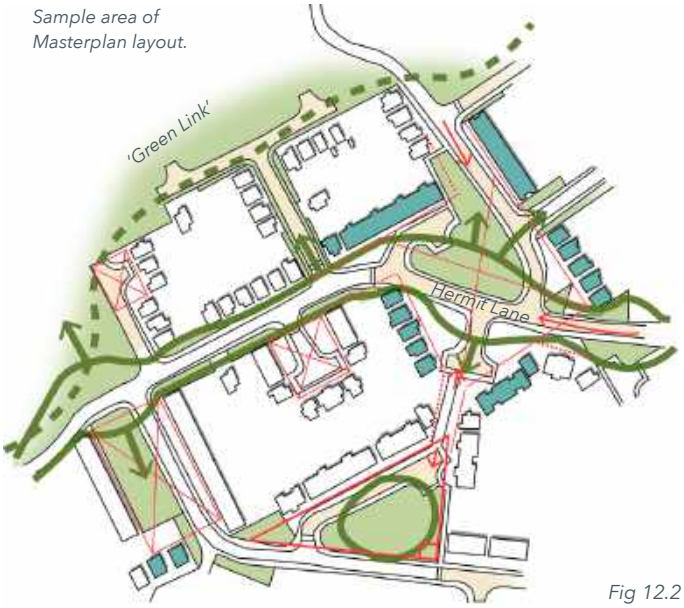


Fig 12.2

10% of area with a different layout.

Fig 12.3

10% of area with a different, alternative layout.

Fig 12.4

Key

House

'Feature' houses - height, roof form, materiality, etc

Standard road

Shared Surface/ Shared Drive. (Traffic Calming and Sense of Place)

Key urban space - sense of Place- Strong Legible Geometry Helps to 'Read' as a Distinct Place.

Green Link Space (Generally Highwalls) Edges of Urban Plots Front onto this

Hermit Lane Character Area- Greener than Usual. Many Pockets of Green Space Along Road

IMAGE REFERENCES

BOND BRYAN

BARNSLEY WEST, MASTERPLAN FRAMEWORK (MU1)

THE VISION FOR BARNSLEY WEST

Fig 13.1

THE VISION IMAGE REFERENCES

Cover Page	Aerial Photograph	Google Earth
0.1	Site Photograph	Bond Bryan
1.1	Site Photograph	Pegasus
1.2	Timeline Diagram	Gillespies
1.3	Circle Diagram	
2.1	Site Photograph	Bond Bryan
2.2	Aerial Photograph	Google Earth
2.3	Land Ownerships	Bond Bryan
2.4	Aerial Photograph	Google
2.5	Aerial Photograph	Bond Bryan
2.6	Aerial Photograph	Bond Bryan
2.7	Aerial Photograph	Sterling Capitol
2.8	Aerial Photograph	Sterling Capitol
3.1	Site Photograph	Bond Bryan
3.2	Local Plan Extract	BMBC
4.1	Site Photograph	Bond Bryan
4.2	Land Use Framework	Bond Bryan
4.3	Commercial Buildings on Barugh G Road	Google
4.4	Barnsley Hospice off Hermit Lane	Google
4.5	Local Dwellings	Google
4.6	Site Photograph	Bond Bryan
4.7	Photographic Survey of Site	Google
4.8	View from Hermit Lane looking left	Bond Bryan
4.9	View from within Site looking north	Bond Bryan
4.10	View from within Site looking west	Bond Bryan
4.11	View from within Site facing south-west	Bond Bryan
4.12	Site Photograph	Bond Bryan

THE VISION IMAGE REFERENCES

4.13	Site Photograph	Bond Bryan
4.14	Site Photograph	Bond Bryan
4.15	Site Photograph	Bond Bryan
4.16	Site Photograph	Bond Bryan
4.17	Site Photograph	Bond Bryan
4.18	Site Photograph	Bond Bryan
4.19	Site Photograph	Bond Bryan
4.20	Site Photograph	Bond Bryan
4.21	Site Photograph	Bond Bryan
4.22	Site Photograph	Bond Bryan
4.23	Site Photograph	Bond Bryan
4.24	Rights Of Way Framework	Bond Bryan
4.25	Right Of Way	Bond Bryan
4.26	Right Of Way	Bond Bryan
4.27	Existing Site Entrance	Bond Bryan
4.28	Right Of Way	Bond Bryan
4.29	Aerial Photo	Sterling Capitol
4.30	Historic Opencast Mining	Google
4.31	Opencast Mine in Leeds	Google
4.32	Historic Map	Google
4.33	Site Photograph	Bond Bryan
4.34	Site Photograph	Bond Bryan
4.35	Constraints	Bond Bryan
4.36	Opportunities	Bond Bryan
4.37	Local Amenities on Barugh Green Road	Google
4.38	Key View Out To Local Landmarks	Google
4.39	View Into Barnsley facing East	Google
4.40	Aerial Photograph	Sterling Capitol

5.1	Site Photograph	Bond Bryan
5.2	Design Evolution	Bond Bryan

5.3	Illustrative Masterplan Proposal	Bond Bryan
5.4	Sustainable Movement	Gillespies
5.5	Green and Blue Infrastructure	Gillespies
5.6	Maintenance Photographs	Gillespies
5.7	Maintenance Areas	Gillespies
5.8	Strategic Flood and Drainage Infrastructure	Gillespies
5.9	Placemaking	Bond Bryan
5.10	Example Images: Heartspace	Google
5.11	Example Images: Link Between neighbourhoods	Google
5.12	Example Images: Subtle Gateway Buildings	Google
5.13	Illustrative View: Northern Gateway	Bond Bryan
5.14	Illustrative View: Heartspaces	Bond Bryan
5.15	Illustrative View: Civic Square	Bond Bryan
5.16	Illustrative View: Entrance to Employment Zone	Bond Bryan
6.1	Site Photograph	Bond Bryan
6.2	CCG Neighbourhood Network Around MU1	BMBC
6.3	Indicative Phasing Plan	Bond Bryan
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Cover Page	Aerial Photograph	Bond Bryan
8.1	Site Photograph	Bond Bryan
8.2	Urban Design Strategy	Bond Bryan
8.3	Illustrative Masterplan	Bond Bryan
8.4	Design Code Diagram	Gillespies
9.1	Site Photograph	Bond Bryan
9.2	Photograph	Gillespies
9.3	Photograph	Google
9.4	Photograph	Google
9.5	Photograph	Google
9.6	Photograph	Google
10.1	Site Photograph	Bond Bryan
10.2	Landscape Framework	Gillespies
10.3	Cascade Arboretum	Gillespies
10.4	Gawber Forest	Gillespies
10.5	Civic Square	Gillespies
10.6	Velvet Woods	Gillespies
10.7	Meadow Park	Gillespies
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10.24	Ecology and Biodiversity Photograph	Gillespies
10.25	Ecology and Biodiversity Photograph	Gillespies
10.26	Ecology and Biodiversity Photograph	Gillespies
10.27	Play - LAP Requirements	Gillespies
10.28	Play - LAP Photograph	Gillespies
10.29	Play - LAP Photograph	Gillespies
10.30	Play - LAP Photograph	Gillespies
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10.41	Tree Framework	Gillespies
10.42	Cascade Arboretum Photograph	Gillespies
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10.47	Velvet Woods Photograph	Gillespies
10.48	Velvet Woods Photograph	Gillespies
10.49	Velvet Woods Photograph	Gillespies

10.50	Green Lanes Photograph	Gillespies
10.51	Green Lanes Photograph	Gillespies
10.52	Meadow Park Photograph	Gillespies
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10.64	Gawber Forest Photograph	Gillespies
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10.79	Material Palette	Gillespies
10.80	Cascade Arboretum Photograph	Gillespies
10.81	Cascade Arboretum Photograph	Gillespies
10.82	Cascade Arboretum Photograph	Gillespies

10.83	Greens and Glades and Squares Photograph	Gillespies
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10.88	Meadow Park and Green Lanes Photograph	Gillespies
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10.96	Greens and Squares Photograph	Gillespies
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11.54	Cascade Arboretum, Green Lanes and Meadow Park Photograph	Gillespies
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11.56	Cascade Arboretum, Green Lanes and Meadow Park Photograph	Gillespies
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12.1	Site Photograph	Bond Bryan
12.2	Sample Area of Masterplan Layout 10% of Area with a Different Layout	Gillespies
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12.4	10% of Area with a Different, Alternative Layout	Gillespies
13.1	Site Photograph	Bond Bryan

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