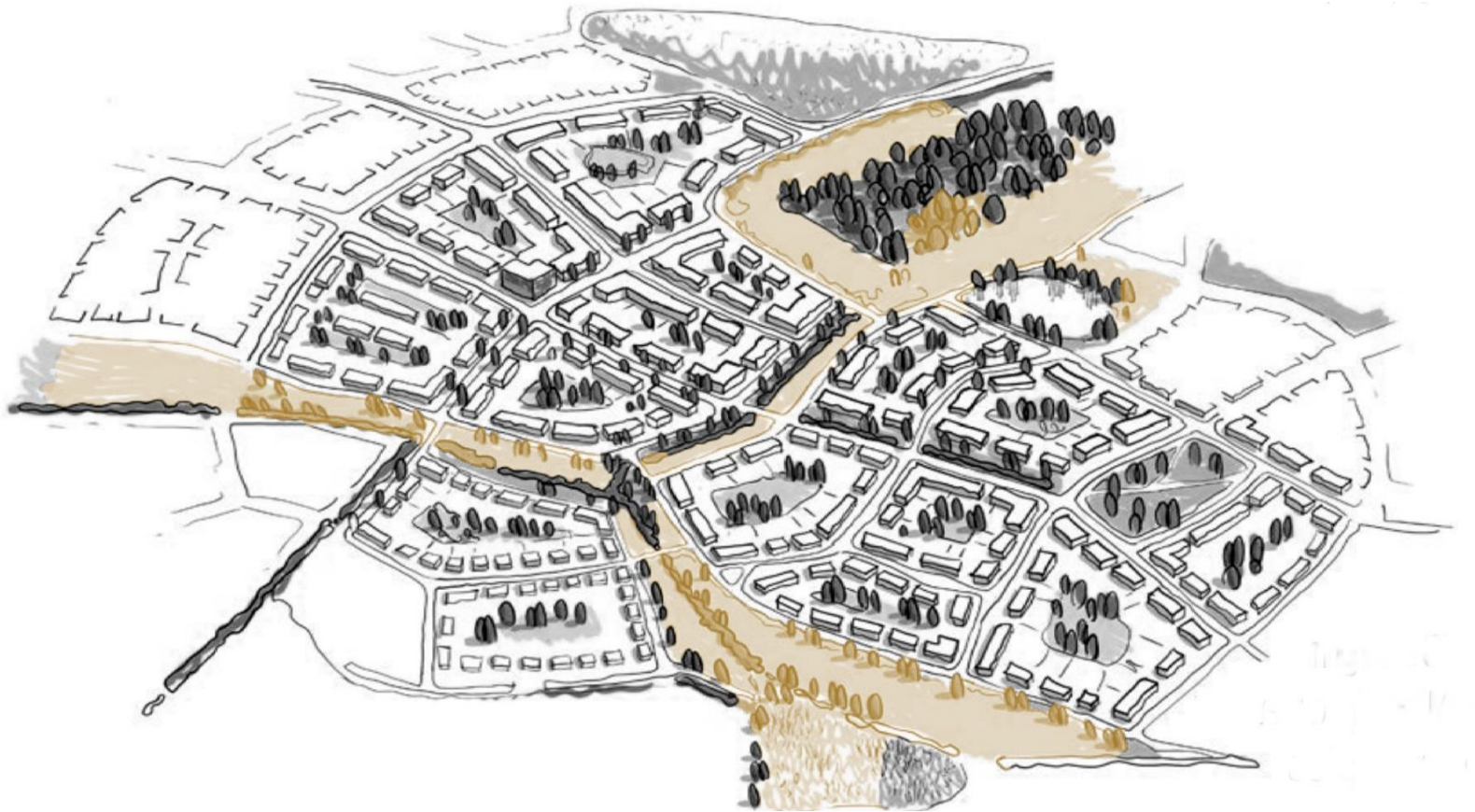


Draft Supplementary Planning Guidance (SPG) Design Code – Greater Faverdale (Burtree Garden Village).



March 2022

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0.0 What this Draft Supplementary Planning Guidance is about

The Greater Faverdale (Burtree Garden Village) Design Code contained within this Draft Supplementary Planning Document (SPD) sets out the strategic design requirements to be provided in the future site development masterplan.

After the adoption of the Darlington Local Plan 2016 – 2036 (Darlington Local Plan) the context of the approved Local Plan asks the Council to progress with creating Supplementary Planning Policy Documents based on Design Codes for both Garden Communities - in this case at Greater Faverdale to be known as Burtree Garden Village. This is expected to be achieved according to the final Inspectors report and issues regarding to Policy H11 Greater Faverdale Site Allocation and section 6.11.7 in the adopted Local Plan within 6 months from adoption of the Local Plan. The Draft SPD Design Code for Greater Faverdale is also to reflect the requirements of the NPPF 2021, and the National Model Design Code produced by DLUHC July 2021.

This design code (DC) has been commissioned by Darlington Borough Council (DBC) to assist the Council in its statutory planning role to secure and maintain the highest standards of design for the proposed development of Greater Faverdale as identified in the adopted Local Plan.

AMBITION

The ambition for the Garden Village is to create a great place for a new community to live, work and recreate, in accordance with national planning standards and best practice. These include the DLUHC (Department for Levelling Up, Housing and Communities) “National Design Guide” - featuring the 10 characteristics of a well-designed place together with meeting the 12 criteria of the recent Building for a Healthy Life (formerly known as BfL12); and also, the DLUHC new national Garden Village Principles. It also reflects the emerging Design Council: “A Public Vision for the Home of 2030” which is supported by the government.

HEALTHY LIVING

Putting Health into Place must be the ‘Golden Thread’ running through the Statutory approvals process, development, delivery and subsequent occupation and use of the new Greater Faverdale Garden Village.

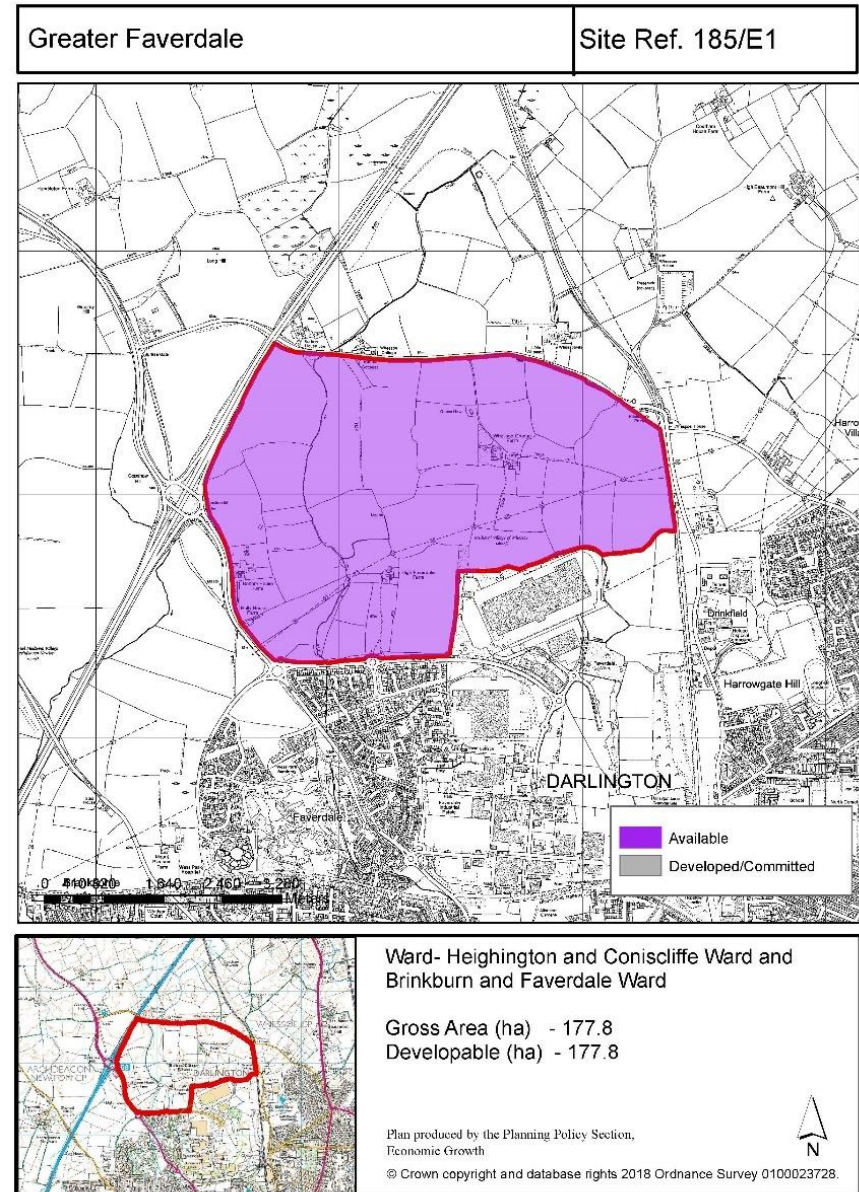
Darlington was successful in being selected as a Healthy New Towns (HNT) Pilot (The only one in the Northeast) and has contributed much to the innovative thinking that has informed the learning from the programme. Darlington has now adopted 6 principles that will further influence and contribute to improved health and well-being in the Borough. The proposed Garden Village presents the first large scale opportunity to embed the learning from the HNT programme, **Putting Health into Place**, with innovative solutions to and delivery of health care and a healthy built environment. **This opportunity must not be wasted.**

Building for a Healthy Life, the latest edition of and new name for Building for Life 12 integrates the findings of the Healthy New Towns Programme in which Darlington was a Pilot and is the key measure of design quality for this development. The 12 considerations **must** inform the design process and **each phase of the garden village must achieve a minimum of 9 green lights** (and **no red lights** - indicating aspects that need to be reconsidered).

INNOVATION

Why repeat what has been done before? The proposed Garden Village should move the game on. We encourage innovative thinking in ALL aspects of the planning, design, delivery and future occupation and use of the Village. The opportunities for innovative thinking extend beyond not only the expectation of the incorporation of high-speed broadband across the site, but into areas as diverse as: achieving a bio-diversity net gain from the development of the site; incorporating low- and high-density self-build plots within the overall scheme to address specific urban design requirements; reflecting the learning derived from the Darlington Healthy Living pilot; etc.

SENSE OF PLACE: The overall development should have a unique sense-of-place, that is distinctive and, through its composition, form, materials, etc also is clearly part of Darlington and grounded in the locale.



1.0 Introduction

Introduction and Vision for Greater Faverdale

Darlington Borough Council have identified in their adopted Local Plan the strategic opportunity for a new residential and business community at Greater Faverdale (Policy H11).

Homes England working in partnership with Hellens Group and the local planning authority are proposing the development of a garden village here as promoted by the Department for Levelling Up, Housing and Communities (DLUHC)

Greater Faverdale - the proposed Burtree Garden Village, as it is also being called - will be a distinctive new community providing a minimum of 2000 new homes and approx. 200,000 m² of modern business and industrial space, together with related local facilities including a primary school all set within a landscape setting retaining and enhancing much of the existing greenspace within the 178 ha site.

The Council's vision for Greater Faverdale is to create an outstanding mixed-use development which incorporates housing and commercial office space together with B1, B2 and B8 uses in an attractive new neighbourhood which is fully integrated with its surroundings as specified in Policy H11.

A good masterplan MUST...

- Offer a clear, unambiguous vision for the scheme over the development phases
- Extend beyond the site to the greater area of study in order to ensure a good fit with its environs.
- Show 3-dimensional graphics of the proposals
- Rehearse clearly the design strategy for the buildings and spaces.

A good masterplan SHOULD...

- Be aspirational
- Offer a unique and distinctive design response to the site opportunities and constraints
- Illustrate views within the scheme from human eye height
- Be clear how the development of a sustainable community will be managed.
- Create a development that is legible and makes wayfinding easy and logical.



Greater Faverdale site



This development should demonstrate the best of current design thinking and reflect the need for long-term low environmental impact and sustainability. Ultimately the success of a housing development scheme will be in its “Placemaking” ability & long-term success. Design Teams should ask themselves “Will the residents and users enjoy and care for the “place” over time and feel that they are living happy, contented, fruitful, healthy lives as a consequence of the design?”

Monocultures are bad:

A large-scale single use urban area is not a good solution. Problems arise when there is no variety of uses. As do the “dead” commercial areas of towns after office hours where there is no extended evening activity to provide a sense of safety and security, never mind the cost of large expensive-to-run buildings sitting idle.

Multi-cultures are good:

A mixed-use development ensures that there is more likely to be activity across the area throughout the day. The mix of live, work, recreation makes for a sustainable economy and develops the communities.

The development of the site should be holistic and integrated so that the designs of residential, commercial and support facilities all blend into a homogenous, mutually supportive whole.



Derwenthorpe Phase 1, Osbaldwick, York – award winning design solution.

The Site & Context

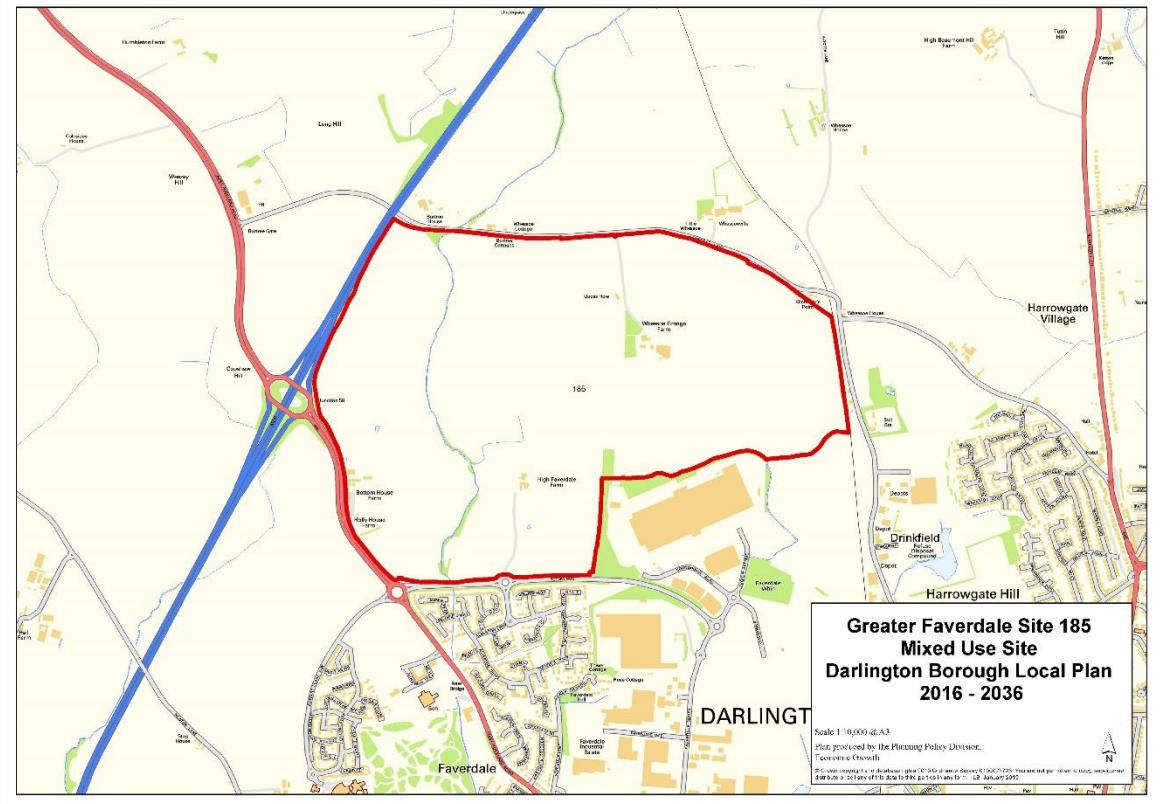
Located on the north-western edge of the existing Darlington settlement - immediately to the north of Faverdale Industrial Estate and the High Grange residential estate both providing a pre-dominantly urban edge - the site is presently in agricultural use.

It already has large distribution centres in the south east corner located off Rotary Way with some of the land set aside for further business and industrial use.

The site is bounded to the west by the West Auckland Road (A68) – with the new West Park community immediately to the southeast – and by the A1 (M) running along the north-western edge.

The northern edge is formed by Burtree Lane – a country lane presently functioning as an alternative east-west link or relief road with further rural farmland beyond.

The Bishop Line (Darlington to Bishop Auckland Community Rail line) provides a distinct eastern edge to the site.



The Site (Outlined in red)

Planning Context

Following an Examination in Public during 2021 a Government Inspector found the Darlington Local Plan to be sound, saying it was justified, effective and consistent with national policy. The Local Plan was adopted by Darlington Borough Council in February 2022 and included a policy H11 below which identifies Greater Faverdale as a location to facilitate the delivery of a high-quality mixed-use community with education, employment, housing, and open space. This is intended to provide the right economic and environmental conditions to support a sustainable new community to the west of Darlington. As required in the final Inspectors report regarding Policy H11 Greater Faverdale Site Allocation this related Draft SPD Design Code is to be produced within 6 months from adoption of the Local Plan and also reflect the requirements of the NPPF 2021 and the National Model Design Code produced by DLUHC July 2021.

See below Greater Faverdale - Site Allocation (Strategic Policy) Extract from Local Plan: Local Plan Policy H11:

A site allocation is identified at Greater Faverdale (Site Reference: 185) to support a development of approximately 2,000 homes and approximately 200,000 square metres of employment space on a 177.8-hectare site in North West Darlington.

Development at Greater Faverdale will be permitted in accordance with the principles set out below and other relevant policies in the Local Plan.

A comprehensive masterplan and infrastructure phasing plan that informs the mix of uses, layout, scale, design, provision of local and strategic infrastructure including social and community facilities and phasing of the proposed development, and which incorporates the key principles for the development as set out in points a-j below, shall be prepared prior to the submission of any planning application relating to this site. The masterplan shall be led by the applicant(s), informed by community consultation and should be based on a strong understanding of the characteristics of the site and its surrounds. It should also have regard to the strategic design requirements established in the Greater Faverdale Design Code.

To ensure that a cohesive development is delivered at Greater Faverdale, the Council will only approve planning applications that adhere to the comprehensive masterplan or any updated masterplan agreed with the Council and deliver the necessary local and strategic infrastructure identified in points a-j below including social and community facilities at the appropriate phase of the development identified in the infrastructure phasing plan to support the coordinated provision of infrastructure and development.

The key principles for development of the Greater Faverdale site are shown on the illustrative Masterplan Framework (Figure 6.2), including broad locations for land uses and facilities. The site will provide:

- a. A mix of housing types, tenures and sizes, including 20% affordable housing and self/custom build housing, informed by up-to-date evidence of the housing needs of the Borough and Policies H 4 and H 5, with higher densities being incorporated close to public transport routes and the neighbourhood centre;
- b. Approximately 70 hectares (gross) / 49 hectares (net) of employment land for E(g), B2 and B8 use classes;
- c. Space for a well located and connected neighbourhood centre providing community facilities, including the potential for a health hub, primary school and local retail and food and drink facilities of a scale and type proportionate to the nature and scale of the development and should be provided at appropriate phases of the development identified in the infrastructure phasing plan. Policies TC1, TC4 and TC5 will not apply to proposals in accordance with these requirements. The requirement and timetable for the provision of the primary school shall be agreed with the Council as part of the comprehensive masterplan, infrastructure phasing plan and any future planning applications for the site subject to the capacity of existing local schools (see Policy IN10);
- d. An appropriate buffer zone alongside the A1(M) for noise attenuation which is to be informed by a noise assessment;
- e. Principal vehicular accesses from Rotary Way and Burtree Lane;
- f. A link road between Rotary Way and Burtree Lane the precise details of which including development access points, together with a timetable for its implementation, shall be agreed with the Council as part of the comprehensive masterplan, infrastructure phasing plan and any future planning applications for the site;
- g. Further enhancements to the local road network of Burtree Lane, to include the:

- I. western connection to the A68; and
- II. improvements to Burtree Lane, including a new or improved pedestrian and cycleway over the Bishop Line to connect the site to the Harrowgate Hill area or provide a suitable alternative route.

The implementation of these enhancements to the local road network of Burtree Lane will be linked to appropriate phases of development with the exact details to be agreed with the Council as part of the comprehensive masterplan, infrastructure phasing plan and any future planning applications for the site;

- h. Other necessary infrastructure as required by the Infrastructure Delivery Plan and identified at the time of submitting a planning application;
- i. An integrated transport network focused on sustainable transport modes; including public transport, walking and cycling with strong links to established networks, adjoining communities, employment locations and Darlington town centre, which should be provided at the appropriate phases of the development identified in the infrastructure phasing plan;
- j. A network of connected and good quality green and blue infrastructure, the phasing of which is to be agreed with the Council as part of the comprehensive masterplan and infrastructure phasing plan, that:
 - I. retains and enhances the network of safe, attractive and accessible public rights of way, footpaths and cycle routes across the site;
 - II. provides a pattern of well-integrated and inter-connected green spaces (along with their long term maintenance) across the site providing for the recreation needs of the local community, including nature friendly natural spaces, in accordance with Policies ENV 4, ENV 5 and ENV9;
 - III. protects the amenity of existing residential properties (see Policy DC 3);
 - IV. retains and enhances hedgerows and trees (see Policy ENV 7);
 - V. mitigates the impact on biodiversity (see Policy ENV 7);
 - VI. incorporates sustainable drainage systems; and
 - VII. incorporates improved pedestrian access and interpretation alongside the Stockton and Darlington Railway (see Policy ENV 2).

The site design and layout will be required to conserve, and where appropriate enhance designated and non-designated heritage assets, within and in the vicinity of the site including their setting in accordance with policies ENV1 and ENV 2 and the recommendations of the Darlington Local Plan Heritage Impact Assessment (2019)

Development should be located outside of areas of flood risk, and should be planned sequentially (Policy DC2), placing the most vulnerable development in the lowest areas of flood risk, and proposals should be supported by a Flood Risk Assessment.

As the development is expected to extend beyond the plan period, in line with national policy infrastructure requirements, the infrastructure phasing plan will be kept under review. Any proposal, in advance of a plan review, which exceeds 750 dwellings or 24 hectares (net) of employment land would need to carry out a review of all associated infrastructure requirements. If significant additional infrastructure is required the council will seek to update the policy as part of a review of the plan.

Garden Village Ethos & Principles

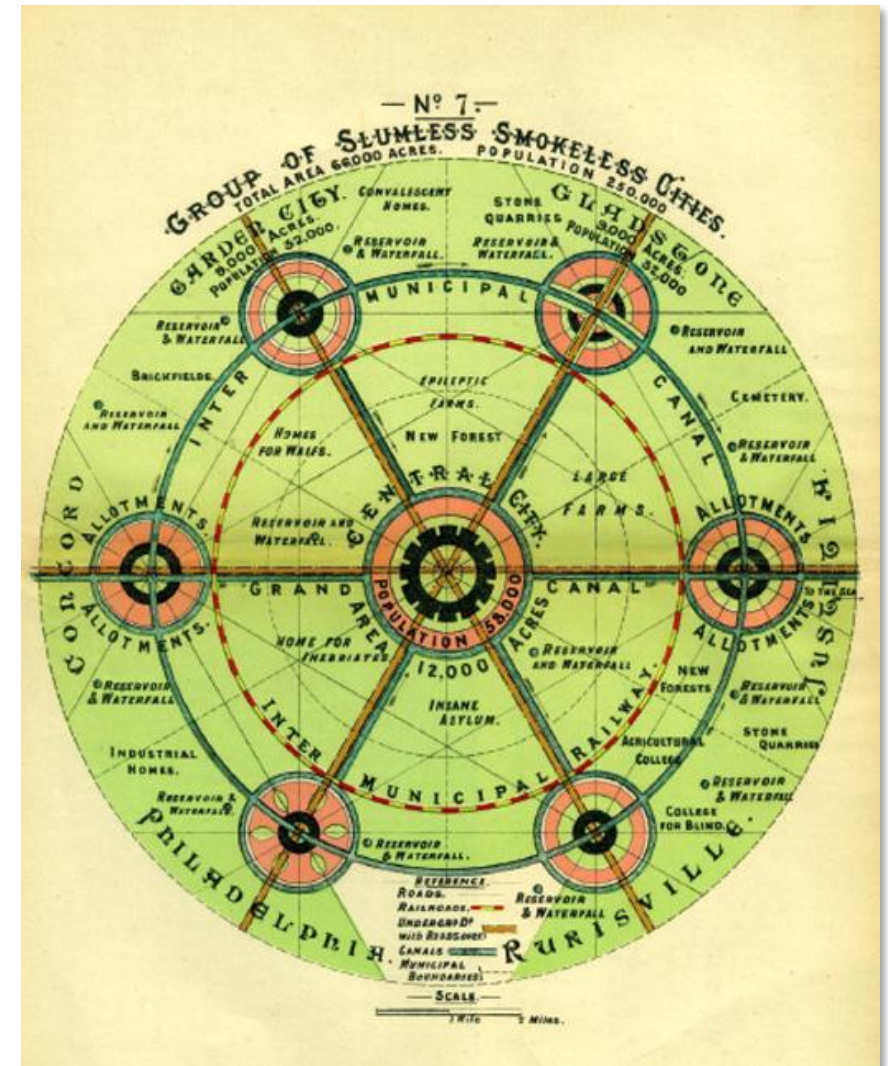
The promotion of new garden villages across England has been led by the DLUHC reflecting the desire to draw upon the successes of the original early 20th Century settlements in providing sustainable, enduring and popular places to live and work whilst enjoying a community lifestyle focussed on personal wellbeing within an attractive natural environment setting.

Much of the recent interest in this form of settlement expansion is based on the work of the Town and Country Planning Association (TCPA) now a charity and originally founded by Sir Ebenezer Howard who is considered to be the leading pioneer of the garden villages movement. He is celebrated for his influential publication "Tomorrow: A Peaceful Path to Real Reform" with its description of a utopian city in which people live harmoniously together with nature. This led to the creation of amongst others Letchworth and Welwyn Garden Cities in Hertfordshire

The TCPA has led the promotion of new garden villages believing that a new generation of 21st century garden cities could help to solve a range of problems such as the acute shortage of housing in the UK and the need to respond to climate change. This was set out in their influential 2011 publication "Re-imagining Garden Cities for the 21st Century: Benefits and Lessons in Bringing forward Comprehensively Planned New Communities".

DLUHC has developed this and have encouraged the development of new garden settlements by endorsing this status for a number of locations across England including two in Darlington – known as Burtree (aka Greater Faverdale) and Skerningham Garden Villages respectively.

The principal features of a successful garden village as envisaged by the TCPA are to be:
A holistically planned new settlement which enhances the natural environment and offers high-quality affordable housing and locally accessible work in beautiful, healthy and sociable communities.



The related Principles for a Garden Village – based on the wider TCPA Garden City vision - are intended to be an indivisible and interlocking framework for their delivery, and include: -

- Land value capture for the benefit of the community,
- Strong vision, leadership and community engagement,
- Community ownership of land and long-term stewardship of assets,
- Mixed-tenure homes and housing types that are genuinely affordable,
- A wide range of local jobs in the Garden Village within easy commuting distance of homes,
- Beautifully and imaginatively designed homes with gardens, combining the best of town and country to create healthy communities, and including opportunities to grow food,
- Development that enhances the natural environment, providing a comprehensive green infrastructure network and net biodiversity gains, and that uses zero-carbon and energy-positive technology to ensure climate resilience,
- Strong cultural, recreational and shopping facilities in walkable, vibrant, sociable neighbourhoods,
- Integrated and accessible transport systems, with walking, cycling and public transport designed to be the most attractive forms of local transport,
- A critical aspect of ensuring the success of the Garden Village will be securing the legacy and long-term management of the community once it has been built.

Purpose and Status of this draft SPD document

The Design Code (DC) for Greater Faverdale is intended to provide a ‘traffic light’ type checklist for assessing the proposals brought forward - following the now completed statutory local planning process – and particularly for evaluating subsequent outline and related reserved matter submissions.

A ‘traffic light’ approach to appraising the respective components of what makes a successful place is a simple way to establish what is well designed and can go ahead (green); what is not yet fully resolved and requires a pause in order to undertake further improvement (amber); and what is not working at all and requires this aspect to stop whilst there is further time for a re-think before bringing forward an alternative response (red).

The draft SPD DC will be further considered by the Council following a period of formal public consultation and related feedback. When finally approved it will thereafter be used as a development management tool to check that the proposals brought forward for the new garden village meet the very high design quality thresholds before granting consent for the initial strategic masterplan and the subsequent detailed elements within it. As the DC is intended to be used throughout the implementation period for the garden village it will be periodically reviewed and where appropriate updated.

The use of design codes is promoted within the DLUHC’s National Design Guide and the related National Model Design Code which provides best practice advice on the use and content of such design codes. As a point of principle, the Council will listen to any case put forward, on any matter dealt with by the Strategic Design Code, which after evaluation and in the opinion of the Council, either matches or betters the aspirations/targets/outputs required by the Design Code.

Garden Village-wide Structure

In order to fulfil the ambitions for the new garden village a comprehensive strategic masterplan is required that responds to the wider context beyond the notional site boundary in order to embed the ensuing development into the neighbouring locale.

The strategic masterplan must therefore provide a clear landscape and urban design structure together with an integral movement framework for the proposed garden village taking full account of the national guidance and good practice.

It is important that this structure should be conceived as a ‘four-dimensional’ spatial vision fully factoring in the ‘timeline’ dimension as each component of the place is implemented rather than solely seen as a diagram.

The integration with and enhancement of the existing neighbouring infrastructure and landscape setting together with respecting the present residential and business amenities will be a key factor in ensuring the long-term sustainability of this new community.

Landscape, Nature & Open Space

Landscape, nature and open space is a fundamental driver to the design response in order for Greater Faverdale to become a successful Garden Village.

Overall requirements include:

- A truly landscape led development, with design responses in tune with the landscape context
- Creation of well-connected and enjoyable public open spaces with appeal to all ages and abilities.
- Retention and protection of key landscape and ecological features with careful attention to levels designs to achieve this.
- Use of native species and a net gain in biodiversity.
- A truly integrated approach to the design of blue-green infrastructure with ecologists, landscape architects and SuDS engineers working together
- Design for all ages to encourage active and healthy living and play through the layout, features and landscape design
- A realistic, costed and managed approach to long term management of the blue-green infrastructure, with involvement by residents
- Identification of a mandatory landscape structure to be retained and protected
- Demonstration at each sign-off stage that key design elements especially the mandatory landscape structure are being carried through to future design teams and contractors in the detailed design and construction and management stages
- A creative approach to celebrate and capitalize on the existing landscape and ecology features

Biodiversity Net Gains:

- The purpose of the principle of Biodiversity Net Gain is an approach to development that leaves biodiversity in a better state than before. The aim of Biodiversity Net Gain is to minimise losses of biodiversity and help to preserve and restore ecological networks and this is particularly relevant at Burtree Garden Village which is a greenfield site on old farmland and hence it is critical at the earliest design stage to recognise and protect the key elements of existing landscape structure.
- Biodiversity Net Gain already features in the National Planning Policy Framework (NPPF) and the Environment Bill (Nov 2021) now includes a mandatory requirement for all future schemes including the development of land to deliver at least 10 % Biodiversity Net Gain to be maintained for a period of at least 30 years.
- Developers should bring forward schemes which can be evidenced to provide an overall increase in natural habitat and ecological features and meets the targets of the adopted Local Plan as well as the requirements set out in the Environment Bill.

Garden Village Urban Form

Garden Villages as a concept date back to the very end of the 19th C. and span a range of developments, from industrial model villages and co-partnership suburbs, to villages designed by the Garden City pioneers themselves. Although each is unique, there are common characteristics that made historic Garden Villages successful. Historic Garden Villages were holistically planned, i.e. through a masterplan that included jobs, community facilities and local services alongside homes, and attempted to create a balanced, socially mixed communities.

Historic Garden Villages were small in scale, usually no more than a few hundred homes. When they were built, many more people lived within a single household, so a few hundred homes accommodated more people than they would today. They were planned for healthy living with residents being provided with easy access to green space, nature, fresh air, walking and cycling, sports and outdoor leisure activities, and opportunities to grow local food.

Historic Garden Villages also provided for a vibrant social life, featured active community societies, and their stewardship organisation would organise local sports, arts and community events.

The general urban form was for a low density, low-rise village development arranged around a more urban core which usually included shops, pubs, community venues/hall, places of worship and cultural buildings such as art galleries/museum facilities. Modern Urban Villages are intended to follow this latter model with generous garden provision and be, low density, low-rise developments overall. However, for the design of the village to be grounded in the locale, this “standard” development form needs to be informed by the traditional village layouts prevalent in the local area and, for Darlington and North Yorkshire, these are particularly distinctive, and the key characteristics are rehearsed in Appendix 2. Most often the village centres are lined by terraced development - some of it physically quite substantial - with detached dwellings being the exception.

Movement - Introduction

Darlington is a relatively compact town with about one fifth of journeys made by residents no further than 1 kilometre, nearly one half less than 3 kilometres and three quarters of all journeys begin and end in the town. **Darlington is a town of short journeys.**

The overarching vision is to create an integrated, forward looking, accessible movement framework (network of routes for all modes of transport) that supports the economic prosperity and well-being of the garden village community and is robust to accommodate change.

The message the garden village will demonstrate from the first to last phases is one that cycling, and walking are at the heart of this place and an instinctive choice for all ages from 8 to 80 undertaking everyday short journeys

The design of Greater Faverdale as a Garden Village will embrace `Gear Change` the Governments bold future vision for cycling and walking in England. The design of the movement networks and routes for those travelling by cycle or on foot will incorporate the five core principles and will be Coherent, Direct, Safe, Comfortable and Attractive catering for the broadest range of people. **Active Travel England** now builds on this commitment to boost cycling and walking and deliver a healthy, safe and carbon-neutral transport system. It will be a statutory consultee on major planning applications to ensure that the largest new developments such as Greater Faverdale properly cater for pedestrians and cyclists.

The movement network both within the garden village and its immediate connections will encourage **low traffic speeds**.

This is a relatively small development, there is no reason to encourage traffic movement entirely through the site and there is no reason why most of the village network development should not be designed for a maximum 20 mph speed limit. There are plenty of examples of the effective use of 20mph limits. Developers need to make a clear and robust case for speed limits beyond that.

(Note-whilest GB speed compliance surveys show that most drivers in 20 mph areas exceed the speed limit the vast majority still travel at under 30 mph).

The role, function, and character of Burtree Lane must be reviewed if the village is to have a connection (or connections) to the north as currently proposed. The village is essentially (in the words of the Garden Communities guidance) a transformational development of an existing settlement. The village and its connection to the north effectively means that Burtree Lane becomes part of the town network and how it functions needs to change. Pedestrian and cycle access will only be permitted to the north (i.e. onto Burtree Lane) if it is to recognised bus stops or onto part of an existing (or proposed as part of the development) Town Strategic pedestrian and cycle route.

A frequent (minimum every 20 minutes) local bus service linking the site to the town centre and other key destinations must be available as the first houses are occupied in Phase 1. All houses to be within 5minutes walking distance from a bus stop.

The provision of a new Rail Station on the adjacent Bishop Line accessible to the Garden Village communities remains an ambition of the Council and its partners. The Garden Village proposals will ensure that a site and key pedestrian and cycle routes are identified and protected.

Building for a Healthy Life - Overview

Building for a Healthy Life is the key measure of design quality for this development and the 12 considerations must be the basis of developing the detailed designs. Neighbourhoods including a range of homes that meet local needs will be well integrated into the site and their wider natural and built surroundings creating and connected places that are easy places to move through and around. The norm will be that short trips to key services are made on foot or bicycle within and beyond the site on the right infrastructure helping to improve health and air quality.

Places will be distinctive and memorable and based on a legible network of streets and spaces that are well enclosed by buildings and structural landscaping with front doors and main facades of buildings facing streets and public spaces.

The Tertiary streets are where there must be a balance between the need to accommodate the movement of motor vehicle alongside the need for people of all ages to move along and cross streets with ease and encourage activity, an essential part of a successful public realm.

Streets for a Healthy Life a companion guide to Building for a Healthy Life illustrates and explains what good residential streets look like, and how they function. This document will help to achieve the healthy streets envisaged by the BHL toolkit. A revised **Manual for Streets** is in the course of preparation (Feb 2022) and will be informed by Streets for a Healthy Life.



Each phase of the garden village must achieve a minimum of 9 green lights (and no red lights).

2.0 “Design Quality Coding” checklist

Introduction

This following site-wide checklist applies to the strategic masterplan for the entire garden village and identifies the key ‘must have’ components required to create the special distinctiveness that will ensure that this new community becomes a great place.

The checklist is drawn from the National Design Guide and specifically the 10 characteristics of a well-designed place.

See adjacent related extract from the NDG

This draft SPD is broadly cross referenced to key sections of the NDG:

e.g. **Context** [NDG ref C1,2] etc

Introducing the ten characteristics

Well-designed places have individual characteristics which work together to create its physical **Character**. The ten characteristics help to nurture and sustain a sense of **Community**. They work to positively address environmental issues affecting **Climate**. They all contribute towards the cross-cutting themes for good design set out in the National Planning Policy Framework.

The ten characteristics are:

- **Context** – enhances the surroundings.
- **Identity** – attractive and distinctive.
- **Built form** – a coherent pattern of development.
- **Movement** – accessible and easy to move around.
- **Nature** – enhanced and optimised.
- **Public spaces** – safe, social and inclusive.
- **Uses** – mixed and integrated.
- **Homes and buildings** – functional, healthy and sustainable.
- **Resources** – efficient and resilient.
- **Lifespan** – made to last.



The ten characteristics of well-designed places

Similarly this draft SPD also draws upon the accompanying report to the NDG - the National Model Design Code (NMDC) guidance - which also follows the same 10 characteristics.

See adjacent related extract from the NMDC

This draft SPD is also broadly cross referenced to key sections of the NMDC: e.g. **Context [NMDC ref C1.]** etc

| If the design code covers... | | URBAN EXTN. | INFILL SITE | SMALL SITES |
|------------------------------|----------------------|-------------|-------------|-------------|
| Context | | | | |
| C.1.i | Character Types | * | * | * |
| C.1.ii | Site Context | * | * | * |
| C.1.iii | Site Assessment | * | * | * |
| C.2.i | Historic Assessment | * | * | * |
| C.2.ii | Heritage Assets | * | * | * |
| Movement | | | | |
| M.1.i | Street Network | * | * | * |
| M.1.ii | Public Transport | * | * | * |
| M.1.iii | Street Hierarchy | * | * | * |
| M.2.i | Walking + Cycling | * | * | * |
| M.2.ii | Junction+Crossings | * | * | * |
| M.2.iii | Inclusive Streets | * | * | * |
| M.3.i | Car Parking | * | * | * |
| M.3.ii | Cycle Parking | * | * | * |
| M.3.iii | Services + Utilities | * | * | * |
| Nature | | | | |
| N.1.i | Network of Spaces | * | * | * |
| N.1.ii | OS Provision | * | * | * |
| N.1.iii | Design | * | * | * |
| N.2.i | Working with Water | * | * | * |
| N.2.ii | SUDS | * | * | * |
| N.2.iii | Flood Risk | * | * | * |
| N.3.i | Net Gain | * | * | * |
| N.3.ii | Biodiversity | * | * | * |
| N.3.iii | Street Trees | * | * | * |

| If the design code covers... | | URBAN EXTN. | INFILL SITE | SMALL SITES |
|------------------------------|---------------------|-------------|-------------|-------------|
| Built Form | | | | |
| B.1.i | Density | * | * | * |
| B.1.ii | Party Wall | * | * | * |
| B.1.iii | Types and Forms | * | * | * |
| B.2.i | Blocks | * | * | * |
| B.2.ii | Building Line | * | * | * |
| B.2.iii | Height | * | * | * |
| Identity | | | | |
| I.1.i | Local Character | * | * | * |
| I.1.ii | Legibility | * | * | * |
| I.1.iii | Masterplanning | * | * | * |
| I.2.i | Design of buildings | * | * | * |
| Public Space | | | | |
| P.1.i | Primary | * | * | * |
| P.1.ii | Local+Secondary | * | * | * |
| P.1.iii | Tertiary | * | * | * |
| P.2.i | Meeting Places | * | * | * |
| P.2.ii | Multi-functional | * | * | * |
| P.2.iii | Home Zones | * | * | * |
| P.3.i | Secured by Design | * | * | * |
| P.3.ii | Counter Terrorism | * | * | * |
| Uses | | | | |
| U.1.i | Efficient Land Use | + | + | + |
| U.1.ii | Mix | * | * | * |
| U.1.iii | Active Frontage | * | * | * |
| U.2.i | Housing for All | + | + | + |

| If the design code covers... | | URBAN EXTN. | INFILL SITE | SMALL SITES |
|------------------------------|----------------------|-------------|-------------|-------------|
| U.2.ii | Type | + | + | + |
| U.3.i | Schools | * | + | + |
| U.3.ii | Community Facilities | * | + | + |
| U.3.iii | Local Services | * | + | + |
| Homes and Buildings | | | | |
| H.1.i | Space Standards | + | + | + |
| H.1.ii | Accessibility | + | + | + |
| H.2.i | Light, Aspect, Priv. | + | + | + |
| H.2.ii | Security | + | + | + |
| H.2.iii | Gardens+Balconies | + | + | + |
| Resources | | | | |
| R.1.i | Energy Hierarchy | + | + | + |
| R.1.ii | Energy Efficiency | + | + | + |
| R.1.iii | Nhood Energy | + | + | + |
| R.2.i | Embodied Energy | + | + | + |
| R.2.ii | Construction | + | + | + |
| R.2.iii | MMC | + | + | + |
| R.2.iv | Water | + | + | + |
| Lifespan | | | | |
| L.1.i | Management Plan | + | + | + |
| L.1.ii | Participation | + | + | + |
| L.1.iii | Community | + | + | + |

- * Issues that you would expect to be covered in a code
- ⊕ Issues that may be covered elsewhere and so not included in the code

Character & Urban Design: Context; Identity; Built Form; Uses

Context [NDG ref C1,2 : NMDC ref C1]

Firstly, any new development should respond to and relate to its surroundings. This is called “context” and historically contextual architecture evolved based upon the locally available materials, microclimate, and skillsets of the local populace. As the mass production of standardised construction materials developed, along with affordable transportation systems, these new materials infiltrated local development and “standardised” the look of the end product, and in the process diluted the unique local architectural character.

The context should drive the scale, orientation and detailing of the new developments, with the localism adding the visual “flavour” and identifiable character to the proposals.

The site is bounded on 2 sides by busy highways and on the third (northern) side by a relatively well trafficked country road and the development within parcels fronting these roads should incorporate attenuation measures to reduce the aural impact of vehicular traffic.

Identity [NDG I 1-3 : NMDC I 1-3]

The clear aspiration of the Council and “designe” is for the choice of building uses, forms and materials to help create a sense of uniqueness in the final development – indicating that it is located in Darlington and nowhere else – and stands out clearly from other developments in the north east through a unique mix of architecture, layout including public spaces and choice of materials palette.

Development on the Greater Faverdale site should reflect and celebrate local themes in terms of materials, colours, form and style, not in a pastiche manner, but in a modern interpretation of the local vernacular, making development on the site distinctive and unique. This project will have failed if it does not achieve that goal. The architectural solutions developed for this site should show strong links to the local materials and building forms. (see Appendix 2)

This DOES NOT mean slavishly copying and replicating “historic” building forms. This will inevitably look wrong and be in danger of being a grotesque pastiche of the past. Consider a design philosophy approach, such as:

- Replicating traditional forms but constructed from overtly modern materials, or
- Using traditional materials/colours but in a non-traditional building form, or
- A creative and intelligent mix of both of the above.

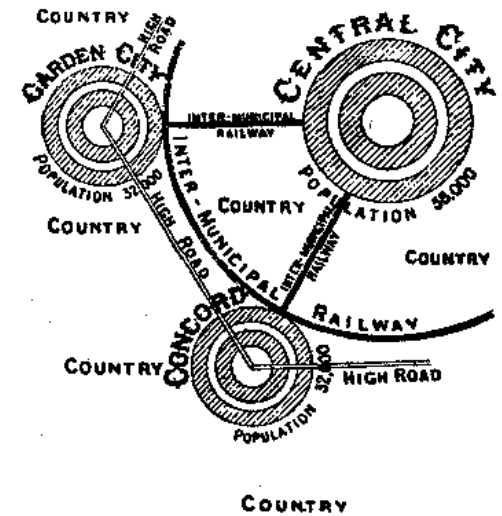
Uses [NDG U1 : NMDC U1]

A fundamental principle of the Garden Villages is for them to be a mixed-use development – not a residential “ghetto” - but offer local employment opportunities for the residents. So, the inclusion of commercial and light industrial uses within the village is expected and development plans should indicate how the cross-benefits of these mixed uses will maximise the potential and efficiency of the development in the long-term.

Built Form [NDG B1-3 : NMDC B1-3]

The clear aspiration of the Council and “designe” is for the choice of building uses, forms and materials to help create a sense of uniqueness in the final development – indicating that it is located in Darlington and nowhere else – and stands out clearly from other developments in the north east through a unique mix of architecture, layout including public spaces and choice of materials palette. Development on the Greater Faverdale site should reflect and celebrate local themes in terms of materials, colours, form and style, not in a pastiche manner, but in a modern interpretation of the local vernacular, making development on the site distinctive and unique. This project will have failed if it does not achieve that goal.

Nº 5.
DIAGRAM
ILLUSTRATING CORRECT PRINCIPLE
OF A CITY'S GROWTH - OPEN COUNTRY
EVER NEAR AT HAND, AND RAPID
COMMUNICATION BETWEEN OFF-SHOOTS.



Poor



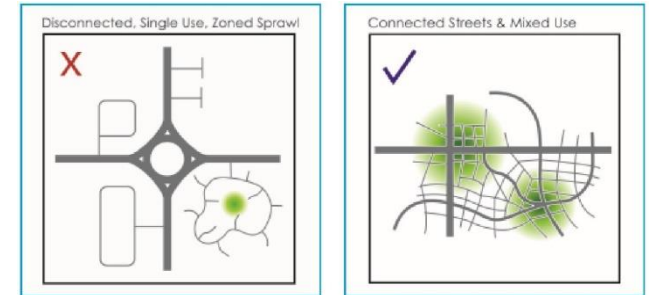
Good

Movement, Public Space & Street Typologies: Orientation/Wayfinding [NDG M1,2 : NMDC M 1,2]

The movement network will provide a comprehensive network of routes for pedestrians, cyclists, and vehicular traffic.

It will be a legible and permeable network of streets with a clear street hierarchy, including a network of tertiary streets of varying character that create walkable and cycle-able routes.

The aim will be to move from main and secondary streets to tertiary streets as quickly as possible.



The Main Village Streets [NDG M1,2 : NMDC M 1,2]

These are the strategic vehicular routes that link the site to wider town and surrounding areas. The North South route is likely to be the only Main Village Street. The main Streets will be consistent in width but vary in character to relate to specific areas such as the Village centre. Main Streets must be designed to accommodate local buses, including bus stops.

If a 20mph speed limit is not considered appropriate on the main street(s) they can still be designed to 20mph with appropriate physical and perceptual measures to keep speeds low.

These streets will be a maximum width of 6.7 metres and consideration should be given to a maximum width of 5 metres. Manual for Streets 2 - where HGVs and buses make up only a small proportion of traffic flow 2-2.5m wide lanes would be sufficient for most vehicles and would reduce carriageway width requirements, making it much easier for pedestrians to cross.



Secondary Village Streets. [NDG M1,2 : NMDC M 1,2]

Secondary Streets are mostly residential streets connecting the Main Streets. These streets have a clear distinction between vehicular, cycle and pedestrian space and vary in their typology according to their specific location, and they will be designed for and be limited to 20mph and be 5 metres width.

Tertiary Streets are: [NDG M1,2 : NMDC M 1,2]

Lower order streets comprising Mews and Residential Streets. their final location and type - either Mews or Residential Street - will be determined through detailed design.

The use of culs-de-sac should be minimised. Where culs-de-sac are used connectivity for pedestrians and cycles must be ensured. Filtered permeability throughout the network will design-out rat-running, create a low traffic environment around homes whilst still allowing pedestrian and cycle movement.

Cycling: [NDG1,2 : NMDC M2]

Cycling is seen as an essential mode of transport at all times of the day (for journeys of about 20 mins or 3 kilometres) and safe, overlooked, and lit routes must connect as directly as possible from the tertiary street network to key destinations both within and beyond (e.g. Local shopping and services, Secondary schools, colleges, the town centre) the Greater Faverdale Masterplan boundary.

The routes will complement and, in some cases, extend Darlington's (Tees Valley) strategic cycle network and will, where appropriate in places, follow the line of village main and secondary roads.

The network and routes cycling will incorporate the five core design principles (Coherent, Direct, Safe, Comfortable, and Attractive) with inclusive design and accessibility running through all five to ensure the network caters for the broadest range of people of all ages. The design will adopt the guidance in **Local transport Note 1/20 Cycle Infrastructure Guidance, DfT July 2020**

There are different purposes for cycling, Therefore the network will provide a variety of lit routes and connections.

Strategic cycle routes. [NDG1,2 : NMDC M2]

These provide dedicated and direct links as described above

Leisure cycle routes. [NDG1,2 : NMDC M2]

These routes run through open space and alongside the green /blue infrastructure network. They are traffic free and provide safe environments for cycling for all ages and abilities.



Shared surface village centre environments. [NDG1,2 : NMDC M2]

The area of the village centres must be designed to be shared between pedestrians and cyclists.

On-Street cycle routes. The network of Tertiary Streets provides a network of additional cycle routes along the residential streets, which are also safe for use by cyclists.

However not all cyclists will use the separate routes, and some will choose to use the main and secondary road network. Advice suggests that carriageway widths should be either below 3m or over 4.5m. Carriageways widths between 3m and 4.5m encourage drivers to overtake cyclists where there is not enough room to pass safely and cyclists can be squeezed by passing traffic. Carriageway widths below 3m encourage cyclists to take up the 'primary' position in the middle of the carriageway, making it more difficult for vehicles to overtake cyclists.

Walking [NDG1,2 : NMDC M2]

Streets and paths must connect people to places and public transport services in the most direct way, making car-free travel more attractive, safe, and convenient. As with cycling discussed above the aim is to ensure access for all and help make walking feel like an instinctive choice for everyone undertaking short journeys (such as the school run or older generations accessing local facilities and services). A reasonable walking distance is 650 metres-average (18-20 mins) via safe pedestrian routes measured by the route. **The five core principles (Coherent, Direct, Safe, Comfortable and Attractive) will inform the walking network** ensuring it is inclusive and accessible for all ages and capabilities. The routes must feel direct, logical and understandable by all road users.

- Everyone should be able to cross the road safely, directly, and without delay. Safe and convenient pedestrian and cycle crossings must be provided at regular intervals including informal and formal provision. Any signalised crossings should allow for appropriate crossing times and uncontrolled crossings main and secondary roads will be pinched to create short crossing widths.
- There will be places to sit, space to chat or play within the street.
- Pavements and cycleways will continue across side streets.
- Private drives which frustrate pedestrian and cycle movement will be discouraged.

Public Space [NDG P 1-3 : NMDC P 1-3]

Public spaces are streets, squares, and other spaces open to all and the quality of the spaces between buildings is as important as the buildings themselves.

Greater Faverdale GV will include well-located public spaces that support a wide variety of activities and encourage social interaction, to promote health, well-being, social and civic inclusion.

There will be a hierarchy of formal and informal spaces that range from large and strategic to small and local spaces, including parks, squares, greens, and pocket parks. They will feel safe, secure, and attractive for adjacent residents and users. They will have trees and other planting within public spaces for people to enjoy, whilst also providing shading, and air quality and climate change mitigation.

All streets and routes will pass in front of people’s homes rather than to the back of them – creating a well overlooked public realm. In areas where the design of shared space removes or reduces the distinction between the pavement and carriageway the needs of people with disabilities particularly visually impairment will be addressed.

Orientation/Wayfinding [NDG I, B : NMDC I1]

Greater Faverdale will be designed for legibility. It will be easy to find your way around with a simple connected street pattern, with streets that are straight and as direct as possible. Designers will consider **what you will actually see** and experience walking along the streets and frame views or features on or beyond a site. Street types, buildings typologies, building to street relationships, spaces, non-residential uses, landscape, water, boundary treatments and other legible features will be used to help people create a ‘mental map’ of a place. Street and space character will be varied to help people find their way around. Those with visual, mobility or other limitations will benefit from the provision of navigable features



Landscape Nature & Open Space [NDG N1-3 : NMDC N1-3]

Creating a Critical Landscape Structure

- The Environment Bill (2021) and the adopted Darlington Local Plan (2022) introduce mandatory requirements for Biodiversity Net Gain in the planning system, to ensure that new developments enhance biodiversity and create new green spaces for local communities to enjoy. Developers must therefore find new mechanisms to ensure successful completion of net gain requirements, which means placing greater priority on the landscape structure of new developments.
- It will also be important to communicate these measures to all parts of the design and delivery chain including contractors on the ground, and in particular to new residents to ensure good levels of acceptance of natural landscapes, and to increase the chances of long term sustainable improvement in biodiversity.
- The best elements of existing landscape and ecological features should be integrated into a well- designed strategic green infrastructure. It is all too common for early good intentions to become diluted over the lifetime of bringing a development to fruition, therefore It is suggested that developers treat this green framework from the outset as a critical landscape structure that will form a key parameter to development.
- Because the Greater Faverdale (Burtree Garden Village) site is old farmland, the baseline landscape and ecological context includes a range of important elements such as veteran trees, old hedges and ecological features It is essential that the best and most important of these features are identified, agreed, captured accurately in the correct locations on the masterplan with any required buffer strips, and preserved through the life of the scheme from concept design to completion on site.
- The mature landscape and ecological features retained within the critical landscape structure should be treated as an asset not a constraint, providing maturity, diversity and immediate stature and bringing highly desirable leafy character to the development.
- All developers must demonstrate how biodiversity net gain will be achieved and explain how this is to be delivered through the design of a critical landscape structure

- **All developers must be able to evidence that the critical landscape structure has been retained in the scheme design at each gateway stage from concept to completion, both spatially and through site levels.**
- The **critical landscape structure** must be further broken down into distinct landscape and ecological typologies. There is flexibility on precisely how this is achieved, but it should be rooted in the principles in section Site-Wide Landscape Character.
 - Water management to be designed at an early stage to ensure a sustainable and successful approach to site drainage integrated into Blue Green Infrastructure.
 - New attenuation ponds and swale features designed also to include an element of permanent water for aesthetic function, and with gently shelved margins capable of supporting marginal species to improve biodiversity.
 - Overhead utility corridor can provide an opportunity for connectivity, creative design, green links and long vistas joined to other open spaces to break up linearity.
 - Design of surrounding housing to provide natural surveillance by fronting onto open spaces and service corridors where possible,

‘Landscape-Led’ Design [NDG N1-3 : NMDC N1-3]

‘Landscape-led’ is a term too often used without foundation and commitment.

Landscape proposals for Greater Faverdale to become a Garden Village, in order to be accepted as genuinely ‘landscape led’, must be evidenced to be rooted in the landscape character and ecology of the site, informing a layout and levels strategy that slots into this old farmland landscape, preserving as many of the old field boundaries, mature trees and ecologically sensitive areas as possible by identifying and protecting a mandatory landscape structure.

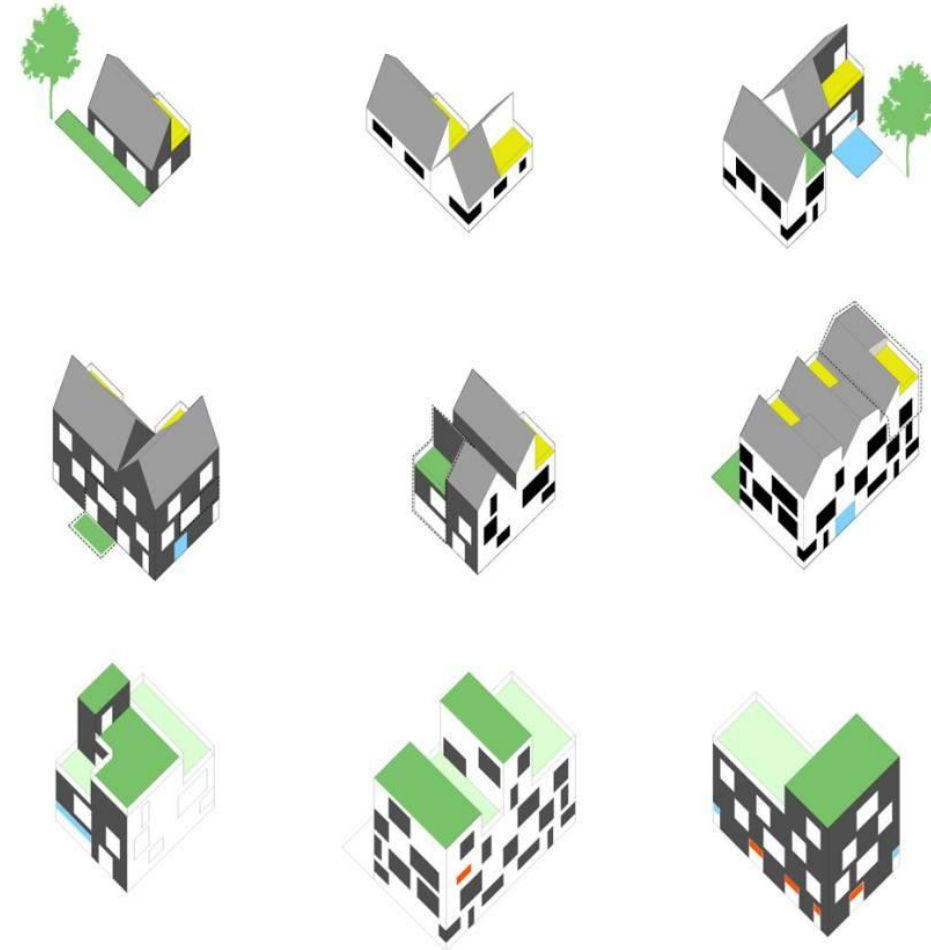
- **Developers must demonstrate an understanding of the landscape character and ecology baseline, and to use surveys and professional advice from ecologists, arborists and landscape architects to inform their design proposals.**



Homes & Buildings [NDG H1,2 : NMDC H1,2]

Key Principle: The design of the buildings must be contextual and take influence from the local vernacular represented in a contemporary way. Building on the past and combining this with current best practice and sustainable architecture.

- The aspiration for this scheme is to be exemplar from its inception. This is laudable and should be encouraged, however this ambition can be watered down during the design, procurement and building process and it is important the principles of the scheme as being exemplar is engrained into project and all involved have this collective buy. Objectives and quantifiable exemplar outcomes are to be identify early on and assessed throughout the process in order for the aspirations to become reality.
- Existing buildings on site are to be retained and utilised as much as possible. Even if it is more cost effective to demolish the existing buildings, they help bring heritage and context to the overall development and as such be seen as a positive constraint. The mix of commercial and housing is to be justified and should help to bring a sustainable and locally focused development. Retail, leisure and food offer are to be positioned where one would intuitively expect these to be – central to the village.
- The detailed design code should include all buildings new and old and all uses, not just residential. This will help to retain the quality of the whole garden village and help provide a holistic approach to the architecture and create a more sustainable scheme.
- The homes and buildings are to consider the existing features and topology of the site and have design solutions that work with the existing constraints and not use standard house types that require the flattening of the site.
- Scale is important to consider and should be determined by the context, spatial hierarchy and building type. Scale should be used to create attractive places using variations, landmarks, and creating a strong sense of enclosure around public spaces. The scheme will need to demonstrate that massing and scale have been carefully considered in terms of how the character areas, blocks and streets are viewed and experienced by foot.



BUILDING TYPOLOGIES

- Buildings should be used as wayfinding, to frame views, and aid in the legibility of the development. Serial vision (the concept pioneered by Gordon Cullen, 1961) is to be used – the streetscape is to be experienced as a series of revelations, with delight and interest being stimulated by contrasts. This experience is to be designed from the perspective of the pedestrian rather than the car driver.
- Corner buildings should have elevations that face the ‘street’ on both sides. These are to be considered primary facades and active frontages are to be used. The house is to actively turn the corner with the use of entrances, windows and architectural cues to create a welcoming frontage. Contrived or pastiche architectural features are to be avoided. The corner buildings should be tailored to the context in which they sit making use of views, sightlines and how these fit in the Serial Vision.



Good



Poor



Indifferent

Employment Areas [NDG U1 : NMDC U1]

The new employment areas within Greater Faverdale should be developed in a coordinated manner so that they are well connected, legible, provide amenity space for its workforce and visitors alike, and have a coherent character and layout in accordance with contemporary precedents. In particular the following is required:-

- The buildings are to be grouped into a defined development zone that ensures that where they front onto a street or amenity space they have an ‘enhanced frontage’ design. This would include elements of glazing, entrance features, office ‘pods’ or a change in material specification. All other elevations to have a consistent standard construction treatment.
- In addition, the employment sites will provide a focal shared space for all related units in order to create a defined amenity area for employees.
- The creation of a coordinated ‘branding style’ of units within a defined development parcel will also help create a discernible character and identity. This would focus on the material specification, colour palette and form of units.
- The employment sites will have a landscape buffer around their perimeter to provide tree planting for screening and habitat creation.

- Safe and convenient pedestrian and cycle links are to be incorporated into employment sites through segregated routes with only minimal use of on-street cycle lanes where it is unavoidable.
- Employment sites must fully utilise sustainable design, promoting energy efficient buildings, green energy from PV's and localised wind turbines.
- In addition, these employment areas will attenuate as much surface water run off within the site through swales and balancing ponds. Such features are to be designed into the site so that they can be accessible for the amenity of employees as well as being part of the wider green infrastructure network, so they provide habitat value. Grey water harvesting and recycling is to be prioritised.
- The boundary treatment of each building are to be carefully considered to ensure that whilst meeting the necessary security and safety needs of each business this is compatible with the wider landscape and street setting of the employment area.
- Wherever possible the employment areas are to have a more open parkland character with boundary treatments avoided to the front of units together with the use of more informal measures to deter vehicular access such as knee rails; feature low walling; and tree planting. Service yards are to be secured with boundary treatment linking between and behind the main building line of the frontage units.
- There is an opportunity to bring forward a co-ordinated branding of the main employment areas within Greater Faverdale that are considered as part of a wider celebration of the rich industrial heritage of Darlington

It is acknowledged that these high-quality ambitions will evolve and change over time which will be reflected in updated detailed design quality code requirements.

Resources & Lifespan

Resources: [NDG R1-3 : NMDC R1,2]

Well-designed homes and buildings:

- provide good quality internal and external environments for their users, promoting health and well-being.
- relate positively to the private, shared, and public spaces around them, contributing to social interaction and inclusion; and
- resolve the details of operation and servicing so that they are unobtrusive and well-integrated into their neighbourhoods.
- Sources of renewable power can help us manage our future energy needs, and they can be easily availed of in many types of development. When introducing renewable energy generation into a design scheme, a number of key points need to be considered, including emissions, energy security, preservation, ecology, longevity and climate. Therefore, sustainable design requires a careful and context-appropriate choice of renewable energy systems, including wind power, biomass, solar PV or water heating, geothermal power, hydroelectric power and wave or tidal power schemes. However, a practical approach should be taken towards any renewable scheme. Choosing appropriate renewable energy sources for a scheme is key to the efficiency and viability of the system. Considerations should include economies of scale, payback time, green tariffs, lifecycle, local climate, reliability, complexity, usability, efficiency, infrastructure, location and cost.

Well-designed places:

- have a layout, form and mix of uses that reduces their resource requirement, including for land, energy and water;
- are fit for purpose and adaptable over time, reducing the need for redevelopment and unnecessary waste;
- use materials and adopt technologies to minimise their environmental impact.

Consider how buildings and spaces can be designed to take account of prevailing and forecast environmental conditions. temperature extremes in summer and winter, increased flood risk, and more intense weather events such as rainstorms.

Aspects to be considered include:

- the layout and aspect of internal spaces;
- insulation of the external envelope and thermal mass;
- management of solar gain; and
- natural ventilation.

Following the **energy hierarchy**: the sequence should be:

- reducing the need for energy.
- ensuring energy efficiency.
- maximising the potential for energy supply from decentralised, low carbon and renewable energy sources,
- and when all else is not possible - efficiently using fossil fuels from clean technologies.

There is an opportunity here to underground the electricity transmission lines which traverse the site. Whilst the undergrounding will not necessarily eliminate or substantially reduce the width of the wayleave, the elimination of the visual intrusion would be a significant benefit to the site development and can be seen as a strategic intervention as part of the development enabling works.

Lifespan: made to last [NDG L1-3 : NMDC L1]

Well-designed places, buildings and spaces are:

- designed and planned for long-term stewardship by landowners, communities and local authorities from the earliest stages;
- robust, easy to use and look after, and enable their users to establish a sense of ownership and belonging, ensuring places and buildings age gracefully; That means thinking about these issues as part of the design process, not as an afterthought.
- We also need to consider how major long-term maintenance tasks, such as the replacement of cladding, will be managed (or whether they can be avoided).
- adaptable to their users' changing needs and evolving technologies; and

- well-managed and maintained by their users, owners, landlords and public agencies.
- We want places to last so we do not have to redevelop them within a short time period with all the physical, economic and social disruption that involves.
- The construction process and servicing of building is responsible for 50% of the UK total carbon emissions currently thought responsible for global warming. Energy efficiency over the entire life cycle of a building is the most important goal of sustainable architecture
- If we can plan to involve communities in the management and maintenance, there is more chance it will be successful
- There are different cycles of change – the use of a building is often the easiest thing to change. That can happen more easily and more often. A good example is the slightly larger nineteenth century houses often found just on the edge of town and city centre. [picture left not from the Guide] Probably originally built as family houses for the better off – they are capable of providing offices for professionals such as accountants and solicitors, sometimes they are converted into bed-sits or flats and can often end up becoming gentrified and returning to their original use. These buildings allow the town centre (the central business district) to expand and contract without the need for massive redevelopment.
- Utilizing a sustainable design philosophy encourages decisions at each phase of the design process that will reduce negative impacts on the environment and the health of the occupants, without compromising the bottom line. It is an integrated, holistic approach that encourages compromise and tradeoffs. Such an integrated approach positively impacts all phases of a building's lifecycle, including design, construction, operation and decommissioning.

Implementation: Phasing; Delivery; Social Value

How will social value be secured at all stages of the project lifecycle from inception to and including subsequent occupation and management? 'Social Value' can be described as "anything we do to make a positive impact over and above the requirements of the contract", this includes the wider financial and non-financial impacts of projects including the wellbeing of individuals and communities, social capital and the environment.

Legacy.

Creating long-term maintenance and management arrangements is vital. The Garden Communities toolkit provides important guidance about making provision at an early stage in the planning process for ensuring that a garden community's assets are properly maintained and managed for the benefit of the community and this and any successor provision(s) and good practice must be utilised.



3.0 Character Areas

3.1 Introduction

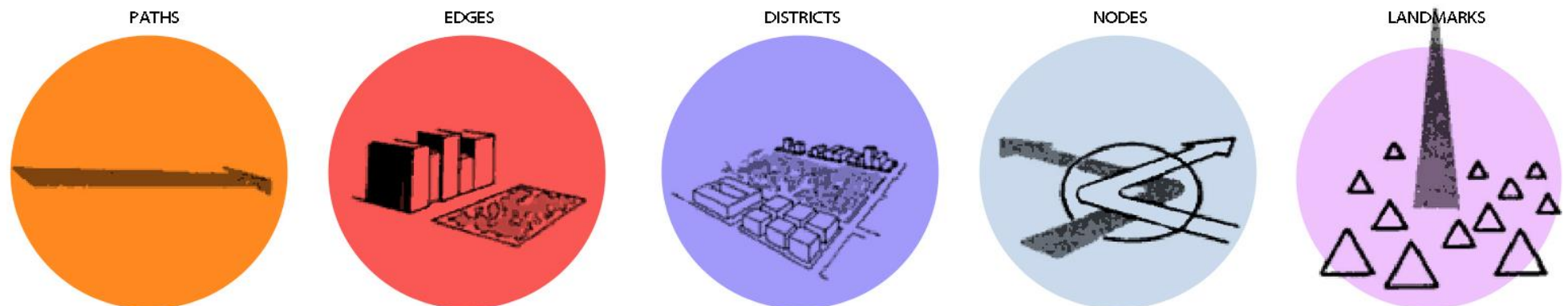
Identifying and providing distinct character areas with the new garden village is an important part of creating an easily understood place for residents and visitors alike to use.

The creation of memorable and different character areas within the site also contributes to a sense of wellbeing by reinforcing a feeling of belonging to a recognisable local place. Additionally, it provides variety in the spatial transitions between the interlinking streets and public spaces that together are the basis of how we perceive our local environments when moving through them during our daily activities.

Apply the principles of Kevin Lynch (Image of the City) to the overall development: paths, nodes, districts, edges, landmarks, plus additionally gateways. There are important urban design tools that help us create and define these special character areas. These include the recommended approaches of 'Lynchian Analysis' - pioneered by the influential American urban planner Kevin Lynch notably in his book 'The Image of the City' - with its focus on identifying paths, nodes, districts, edges, landmarks, plus additionally gateways. Also, the celebrated British urban designer Gordon Cullen whose book 'Townscape' highlighted the way our local environment is structured in terms of the built form and the external spaces in between.

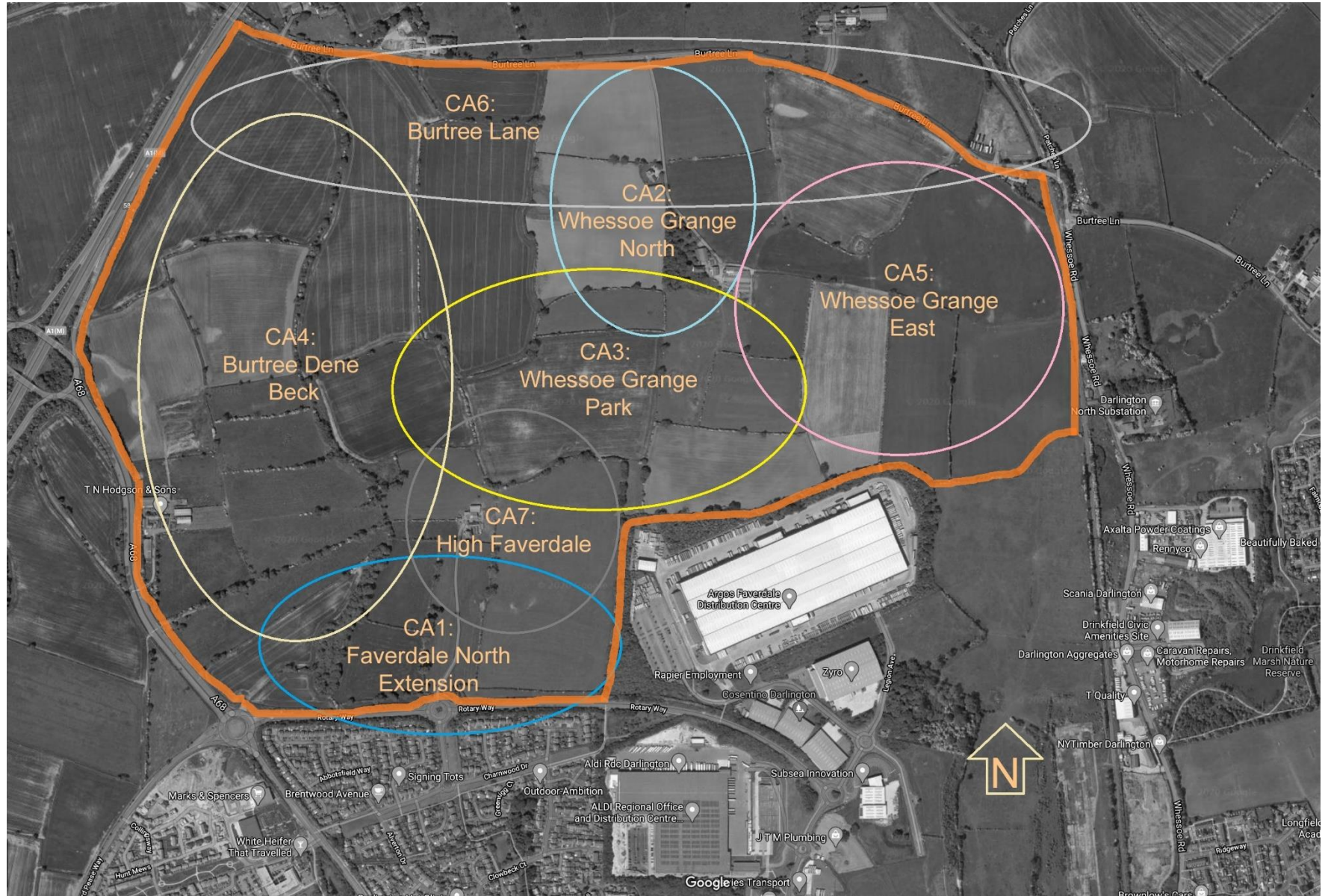
Define a coherent design strategy for the area as a whole.

Consider all buildings as important elements and ensure that they work as a whole, in terms of alignment, massing and architectural approach.



.... plus "Gateways".

Character Areas
Indicative only.



Character Areas

The site is divided into character areas which will be required to show distinctiveness and functions such as amenity and recreation, in order to develop a legible and coherent overarching landscape matrix for Greater Faverdale Garden Village an easily accessible and coordinated design code will be required for the various development teams particularly on infrastructure linking and gateway elements.

Within an overarching landscape matrix for Greater Faverdale Garden Village, the landscape and open spaces and their edges will be considered within the following site areas which will be required to develop within the following character considerations:

- A. Wider Settlement Character
- B. Site boundary interfaces and Gateway points

- CA1 Faverdale North Extension
- CA2 Whessoe Grange North
- CA3 Whessoe Grange Park
- CA4 Whessoe Grange West
- CA5 Burtree Dene Beck
- CA6 Burtree Lane
- CA7 High Faverdale

Structure & Role of this Chapter

The intention is to provide a strategic overview of the character areas that will provide the defining identity for the garden village based on evident existing features notably the local landscape; overlapping geographic areas to enable orientation; together with the existing groups of farm buildings.

Each of the 7 **identified character areas** will highlight the principal existing features that contribute to the essential structure of the respective areas that will help provide a distinct sense of place enhanced and further shaped by the new streets, development groups and public landscape spaces.

3.2 Wider Settlement Character [NDG C1,2 : NMDC C1,2]

Darlington as a town has a number of distinctive character traits, perhaps visually most noticeable being the large number of towers and spires in the town centre, and also its leafy character due to a mature tree canopy seen in large parts of the town particularly the older residential parts.

Greater Faverdale, while destined to have its own garden village character, should also bear some relationship to Darlington. Old English villages are often seen to have a church spire set on elevated ground or surrounded by open space, a useful device in terms of character, navigation and legibility.

- Developers should aim to achieve a leafy character and consider use of a spire/ tower

3.3 Site Boundary Interfaces and Gateway Points

Northern Boundary

Burtree Lane along the northern site boundary has a semi-rural character, being a relatively narrow winding road without footpaths, and lined with farmland and hedgerows. This road will form the new interface between Greater Faverdale as a new garden village/ Darlington and the open countryside to the north of the site and will also provide the new main point of access to the site into the Whessoe Grange North; Burtree Dene Beck and Whessoe Grange East character areas.

- Minimise urbanisation of Burtree Lane
- Retain the country lane character as far as possible with deep planted buffers and hedgerow retention and treat the northern entry points as the arrival to a rural village

Southern Boundary

Rotary Way forms the current northern limit to the Faverdale area of Darlington and has a semi urban character, the road being wider and straighter with a footway on one side, substantial housing areas to the south of the road largely hidden by tree belts, and the very large Argos depot which lies along part of the eastern site boundary screened by a deep belt of maturing buffer woodland.

- Provide a distinctive southern gateway arrival with houses fronting on.

Western Boundary

The western site boundary is bounded by the A68 to the southwest which is dualled at this location, and further north west has a boundary with the A1 (M). There are some open views into the site from the A68, and long-distance views over the site and open countryside beyond from the A1(M) on the approach to the Darlington A68 Turning.

- Consider the journey to Darlington and range of visual experiences from the A1(M) and A68 as the driver passes the whole road segment parallel to Darlington
- Consider the site appearance from the A68 and A1(M) and loss of views
- Carefully consider the design of acoustic measures and buffer treatments from the A1(M) perspective
- The western boundary with the A1 Motorway is an opportunity for a creative design response. The motorway is largely level with the site therefore acoustic solutions are needed but these should not be constructed as engineered bunds as this would not only create a negative visual impact but would be a missed opportunity for a positive landscape feature. Any acoustic bund should be designed using organic shapes and planted to form a strong linear green edge to the development.
- Consider views from the Greater Faverdale new garden village outwards towards moving vehicles.

Eastern Boundary

The eastern boundary has an interface with the Bishop Line/Tees Valley Rail Line which runs parallel to Whessoe Road. There are long views over the site and the countryside beyond from both the rail line and Whessoe Road.

- The visual interface with both Whessoe Road and also vehicles travelling west towards the site from Burtree Lane should be carefully handled to minimise negative visual impacts and to give the development a village edge rather than a simplistic buffer as would be found around an industrial development.

3.4 (Character Area) CA 1 - 'Faverdale North Extension'

- This will be part of the first phase of development and must set the quality benchmark for the garden Village as a whole.
- The access into the Garden Village from Rotary Way and therefore the first views up the new North-South Village Street must shout out that this is somewhere different. A new place where quality is evident in buildings and landscape, where pedestrians and cyclists are seen as more important than vehicles and the health and well-being of its communities is important.
- It must embed the qualities and principles of Garden Communities and Building for a Healthy Life in a way that demonstrates a distinctive local identity, a rich mix of high-quality homes accessible, and good quality and blue and green infrastructure.
- The residential areas will be compact and permeable,
- A well- connected street and path networks will provide opportunities for these to be extended into future adjacent character areas.
- Initially this area is likely to have a greater dependence on facilities and services outwith the masterplan and it is essential that safe and direct walking and cycling links are available to encourage active travel behaviour from the outset.
- The employment zone must face inwards towards the Village and connect both visually and physically. The buildings must complement the quality of the residential development. The opportunity presented by the greenspace to the west of the employment area to have high quality commercial development in a parkland setting must be taken. Whilst vehicular access will be from Rotary Way pedestrian and cycle access routes into the village must be provided on the north and west sides.
- This area offers several key opportunities to create and strengthen Green/ blue infrastructure. In particular the Central North South Green Corridor must be established at the earliest stage in the site's development. . The southern section of the existing woodland belt will be integrated with the streets and the opportunity to provide a footway/cycleway access to (and safe crossing of) Rotary Way at this point must be investigated. Similarly the early development of green and blue infrastructure proposals along with the North South Street (see below) will shape the garden village SuDS (Sustainable Urban Drainage Systems) strategy.
- `Play on the Way` features will be provided on pedestrian and cycle routes to the new primary school to encourage active travel.
- The proposals for the initial stages of development -relating to the North-South Village Street - must relate to the SuDS strategy for the GV as a whole. The highway drainage arrangements will be a key theme which shapes the form of the SuDS.

3.5 CA 2 - 'Whessoe Grange North'

- **Functional character**
 - This is the principal entry to the site from the north and the space the highway, footpaths and related landscaping occupies should be generously proportioned.
 - The route leads to the core of the village which should be recognisably the heart of the greater development.

- **Development Character**
 - Keep gaps in the building line a minimum (approximately under 80% of frontage) – the aim is to create as continuous a building frontage as possible, to contrast effectively with less continuous frontages in other parts of the character area.
 - Properties in the character area should avoid turning their backs towards the primary access route.
 - Ensure the focal point space at the heart of the character area has a visually strong and robust development backdrop to signify its importance. Tree planting with the canopy beyond 2m high will allow views into this space. Low level planting which obscures the view of the site from the northern approach should be avoided. Slightly more urban feel than the rest of the development.
 - Build-up development density on units facing the main street .

- **Street typology**
 - Primary purpose is as a route into/out of the greater development carrying through traffic and being the main distributor route off which all access to development parcels is gained. Effectively functioning as 'Main Street'
 - Development parcels should not "back-on" to the route
 - Orientation markers on way out from core – to give confidence to the traveller

- **Public realm**
 - Strong public realm character & designs
 - Sets the scene for quality for the remainder of the Greater Faverdale site
 - Entry markers/signifiers should be incorporated to confirm arrival to the core of the garden village site and
 - Signifier that you have arrived at the village "centre"
 - Street furniture design choice should emphasise this is the core, though the materials and fonts being less rural in character.

- **Landscape character**
 - Opportunity of a high-quality tree lined linear space, potentially with the n/s footpaths setback from the carriageway by a planting margin.
 - Opportunity to boulevard – bold tree planting leading the eye to the focal point village green – drawing on other local village precedents.
 - Make it a positive space with bold, definitive, potentially formal hard & soft landscape statements.
 - Build-up of scale in spaces and buildings with housing fronting onto the space.

3.6 CA 3 - 'Whessoe Grange Park'

- Landscape and Infrastructure Requirements
- Sub-divide Whessoe Grange Park located at the heart of the new garden village into sub character areas for example:
 - Park gateways and connections
 - Tranquil/ Natural/ ecology/ponds
 - Active/ managed/ semi ornamental/play/sport
 - Whessoe Wood
 - Open Green Space with Veteran Trees
 - Medieval Village
 - Blue green infrastructure in accordance with the site-wide mandatory landscape structure strategy
- Deliver legible links and connections for example to:
 - All parts of Greater Faverdale new garden village
 - The Argos site
 - The Dene Beck PROW
 - The PROW bridleway to the north east
 - The Whessoeville PROW to the north
 - Links to the cycleway network
- Retain, protect and correctly manage the Greater Crested Newt breeding pond and its surrounding terrestrial habitat in accordance with ecology advice and in liaison with SuDS engineers to ensure water source/ discharge is not altered
- Provide interpretation and play opportunities for children linked to items of local interest such as the Darlington Greater Crested Newts and Whessoe Medieval Village
- Provide an events area suitable to host a variety of events including larger functions
- Provide well-placed robust and rustic street seating and picnic benches in keeping with the natural setting
- Provide a separate and signed 'dog off lead' space in a relaxed natural setting where people and ecology disturbance can be avoided

3.7 CA 4 - 'Burtree Dene Beck '

- This area is broadly defined by the perimeter boundaries of the West Auckland Road (A68) and the A1(M); together with the adjacent character areas of Burtree Lane; Faverdale North; High Faverdale; and Whessoe Grange North.
- The principal existing landscape feature is the treed Dene Beck watercourse running north-south through the character area with a patchwork of fields with hedged enclosures radiating out east and west from the stream.
- The Dene Beck also coincides with a public right of way (PROW) footpath running from the Burtree Lane character area to the Faverdale North character area which will provide key viewpoints looking out within the Burtree Dene Beck character area.

- The relationship to the motorway and main trunk road on the west side provides an opportunity for a new strong landscape screening edge to the character area which can also promote a neighbouring lower density residential typology. This can also include promoting self-build plots with larger gardens which in turn will create a more varied streetscape for this part of the garden village.
- It is worth noting that at present the motorway is effectively at the same level as the site so any related effective noise mitigation strategy must include a distinctive edge treatment. Only a short stretch of the slip road to the A68 interchange is at a lower level than the site. There is also a requirement for the provision of formal community allotment space within the garden village and this would also be an appropriate further buffer next to the motorway.
- The existing Bottom House and Holly House farm group buildings provide ‘fixes’ to develop the immediate local character at the western edge and also as examples of traditional building typologies that can influence the emerging built form of this part of the new garden village.
- In relation to the neighbouring Burtree Lane character area to the north it is important that Burtree Dene Beck positively addresses this orientation facing towards the rural landscape beyond the present lane. This north west corner of the site will be the first impression when approaching from the west under the motorway and is required to provide a strong building edge to highlight the garden village’s relationship with its rural hinterland to the north.
- The new eastern edge of this character area where it meets the Whessoe Grange North character area will respond by increasing in density towards the street interface of these two areas in order to provide a clear transition.

3.8 CA 5 - ' Whessoe Grange East

- This area is largely defined at the existing eastern edge by the Bishop Line - Bishop Auckland/Shildon to Darlington railway - and the southern treed screen planting of the adjacent Argos Faverdale distribution centre. It abuts the northern Burtree Lane character area and to the west are the prospective Whessoe Grange North character area and Whessoe Grange Park character area respectively.
- The most notable existing landscape feature is the central mature woodland adjacent to Whessoe Grange Farm with its farmhouse and related farm building group. There is also a known heritage asset here with a remnant of the former historic manor house.
- Further south running diagonally east – west across this character area is an overhead low voltage power line which is a prominent visual feature in this immediate locality although not a positive one which needs to be re-located underground throughout the garden village .
- The field pattern is largely intact with retained hedging although at a relatively large scale so not with a discernible finer grain at present.
- This together with the proximity to the existing railway line with the potential for a future new Garden Village station means that the provision of some employment land on the eastern part of this character area will require a different sub area character compared to the western residential parcels. In any case the larger scale field boundary towards the railway line lends itself to the proposed business uses.
- The retained Whessoe Grange farmhouse and related woodland will be the focus for a distinctive destination that provides local community facilities with related footpath and cycleway links to the wider garden village and also onwards to any prospective new station via the employment area as well as to the prospective new Darlington-Stockton Heritage Railway Walk route
- Similar to Burtree Dene Beck where this character area abuts the Whessoe Grange North character area it will respond by increasing in density towards the street interface of these two areas in order to provide a clear transition.
- For the other residential development sites within the Whessoe Grange East it is required that a distinctive building typology is established to make it legible as a place in its own right – effectively a new neighbourhood .

- The proposed location of employment land at the eastern side of the character area requires a new landscape feature to be established to act as a buffer between the new housing groups. At the points where housing and businesses are directly abutting each other a new mixed use spatial street typology needs to be established potentially drawing on similar traditional village relationships to make this a positive and distinctive feature of this part of the character area – for example by the use of alternatively procured housing like a co-operative self-build group or further self-build and or live work plots. Alternatively an additional allocation of allotments/community gardens would equally assist with the transition between residential and business activity.

3.9 CA 6 – ‘Burtree Lane’:

- The present Burtree Lane forming the northern edge of the proposed garden village retains much of its original character as literally a rural lane linking from east to west the Beaumont Hill Durham Road (A167) and onto the West Auckland Road (A68) providing access to the respect hamlets and farms on either side.
- As the town of Darlington expanded northwards in recent times it has increasingly been used as effectively a default vehicular by-pass but with none of the highway standards usually associated with such a function. Nevertheless, it presently has a national speed limit of 60m.p.h. whereas the A68 is restricted to 50 mph at its western junction with Burtree Lane.
- In the context of establishing the new garden village Burtree Lane will now effectively be literally the northern edge of Darlington separating this new urban place to the south - albeit conceived as a garden village - from the retained rural landscape to the north.
- In this context it is important that the Burtree Lane character area is not viewed solely as functioning as an upgraded main road highway albeit with a reduced speed limit.
- Instead it needs to perform as a visual transition from the garden village to its wider northern rural hinterland. Just as Burtree Lane as it enters Harrowgate Hill neighbourhood further to the east is restricted to 30 m.p.h. then for the entire length of the new garden village northern edge abutting the present lane this should also have a similar local maximum speed limit.
- This will ensure that much of the existing grass verge and hedged lane can be retained with a similar width carriageway as at present to maintain this pleasant rural character and provide a positive transition to the neighbouring new character areas of the garden village along the entirety of the lane.
- This requirement to maintain a positive rural character for the lane will have implications for the key north-south crossing points of the lane including the present PROW running by the Dene Beck; the existing accesses to the retained farms and related properties to the north; together with the prospective new cycle route envisaged to link northwards towards Newton Aycliffe – a potential key employment destination for some of the new residents.
- In addition, the new junctions into the garden village accessing into the adjacent Burtree Dene Beck; Whessoe Grange North; & Whessoe Grange East character areas respectively need to be conceived as genuinely public spaces for use by pedestrians, cyclists as well as local vehicular traffic.
- As Burtree Lane has no footpath on either side at present it is also a priority to establish new east - west pedestrian and cycle routes in relative proximity to the lane.

3.10 CA 7 - 'High Faverdale '

- The development of this character area will be informed by the existing features of the area both, natural and manmade.
- The existing landscape and topographical features of the site are to be retained, and the built form should respect this. For example, existing site levels will be adhered to and not flattened to fit standard building types. Hedging and existing boundaries are to be intertwined into the design. Likewise, the existing buildings on the site – notably High Faverdale Farm group - will provide focal points and be integral to the masterplan celebrating the old alongside the new. It is important that one can distinguish what is old and what is new and gives an honesty to the scheme.
- This southern gateway is to provide orientation and a sense of arrival. Visual cues such as landmarks, short and long views are to be used. The creation of an entrance 'village green' space and the buildings that front this must provide the uses that allow activity to this 'centre.' Cafés, shops and other public facing buildings will enliven this area and help in the sustainability of the overall scheme. Buildings should provide enclosure around the green to enhance the place making of the space.
- Throughout this character area the pedestrian and cyclist will be given priority. Parking is to be kept to a minimum to encourage sustainable travel. Parking in residential areas will be carefully considered so cars are not dominant in the street scape.
- An experiential 'story board' through the character area is encouraged and this should be from a pedestrian or cyclist perspective. This would include the approaches to this area from the adjacent character areas of Faverdale North Extension; Whessoe Grange North; and Whessoe Grange Park. This is a key area to the overall masterplan when approached from the south and its connection with its adjacent character areas are crucial to the success of the overall scheme and future phases.
- Communities are developed over time and it is important that the character of this area is not forced, and elements are allowed to flourish over time. The 'foundations' should be set out by the detailed design code and there should be an amount of flexibility within the masterplan to futureproof the scheme and allow it to grow organically. This flexibility would however need to have set parameters agreed in the design code in order to maintain the rigour of the scheme.
- The pioneering ethos of the original Garden Villages should be continued and brought into the 21st century. It is important that this starts with the first developments to come online and that these set the benchmark. Innovation should be encouraged and some development pockets within this area will be set aside for innovative and exemplar housing that pushes the boundaries in energy efficient, low/zero carbon usage and Modern Methods of Construction.
- The gateway can effectively be considered a village centre and therefore density of the street must take its cues from this. There are also needs to be a diversity in scale and form to add character and aid with place making.



Modern Methods of Construction

4.0 Detailed Design Quality Coding Checklist

Sustainable Design Principles [NDG R1-3 : NMDC R1,2]

- Sustainable design can be made unnecessarily complex – a simple approach to sustainable architecture will best help take the steps needed to preserve the planet now and for the future.
- Sustainable residential design should aim to future-proof homes and protect the planet while facilitating a good quality of life.
- Safety, simplicity, reliability, affordability and running costs all need to be considered when designing high-quality residential schemes.
- The integrated sustainability measures should be intuitive, logical and easy to run to maximise efficiency and benefits. Passive design and attention to context and materials are areas where substantial gains can be made in sustainability and energy efficiency without introducing unnecessary complexity. Finding the right balance of outdoor space, private space and shared space is also vital to the success of a residential project,
- Buildings and places need to adapt to the changing needs of users over time.
- There are different cycles of change – the use of a building is often the easiest thing to change. That can happen more easily and more often. A good example is the slightly larger nineteenth century houses often found just on the edge of town and city centres. Usually originally built as family houses for the better off – they are capable of providing offices for professionals such as accountants and solicitors, sometimes they are converted into bed-sits or flats and can often end up becoming gentrified and returning to their original use. These buildings allow the village centre to expand and contract without the need for large scale redevelopment.
- The 1970s mantra of “Loose Fit – Long Life – Low Energy” still has merit as a design principle. Robust flexible building fabric and structures, which can easily be reconfigured and absorb the least possible energy in the manufacture, construction and in-use phases throughout the building’s life.

Innovative take on the traditional terrace



Designing Good Buildings [NDG B1.2 H1,2 : NMDC B1 H1,2]

Design Approaches

Successful residential design can be aided by thoroughly understanding the distinctiveness of the local area. Using these studies to inform the design and can help develop high quality contemporary design grounded in the vernacular - giving both a sense of renewal and belonging.

Poorly executed pastiche version of the traditional are to be avoided as are a pick and mix of different architectural styles or periods

Form of buildings [NDG B1,2 : NMDC B1,2]

Well-crafted simple forms. Drawing from the vernacular of the area with contemporary interpretation. Form factor to be considered. The form, scale and layout are to contribute to the sense of place and help create a community feel. Ornamental add-ons should be avoided, and any 'addition' should be integral to the overall design, contributing to the character and distinctness of the place.



Building orientation – first principles [NDG R2 : NMDC R2]

The orientation and position of the dwelling within their site is crucial for place making but also for the first principles of sustainable design making the maximum of the South facing orientation for passive solar heating.

Internal layout. Space Standards [NDG H1,2 : NMDC H1,2]

The principles of the Garden City aimed to provide spacious and well-planned houses. This must be no different in its aims. To provide comfort, enhance standard of living and wellbeing all dwellings in the Garden village will have and exceed a minimum space standard. As a base level these will be in line current national space standards, and should those standards change, be updated to reflect the new national requirements. Internal volume is also important as well as floor area and the floor to ceiling height are to be a minimum of 2.4m but ideally 2.5/2.6m particularly on the principal floor.

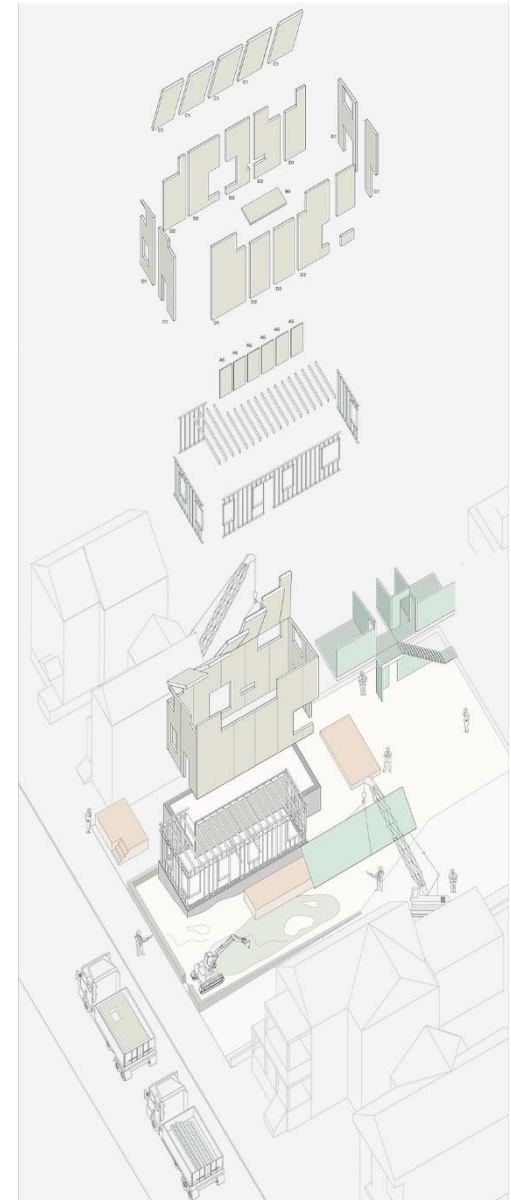
At least 90% of homes are to meet building regulation M4(2), ‘accessible and adaptable dwellings’, and at least 10% of new housing will meet building regulation M4(3), ‘wheelchair user dwellings’. As a minimum, the new Garden village is to meet this benchmark.

The ability to work from home needs to be integral to the layout of all houses to enable flexibility and futureproofing for the occupants and promote a sustainable work/life balance.

Immediate External Space [NDG H1,2 : NMDC H1,2]

Consideration to be made for bin stores, bike stores, renewables such as Photo Voltaics (PVs), Air-source heat pumps (ASHP).

So often forgotten or considered too late in the design process are storage, waste, servicing and utilities. These areas are to be integral into the initial design and carefully considered for functionality but also to contribute to the house design and the wider street scene and not detract from it. Clutter is to be avoided on the façade and in the immediate external area of the house. Renewables such as ASHP and PV which have a valuable contribution to the sustainability and energy efficiency of the homes are not to appear to be an add on.



MMC

Materials and detailing [NDG B1,2 : NMDC B1,2]

Materials are to be carefully considered to work with the building form and the local area. These can be traditional or modern materials but will be a simple high-quality palette of materials that is well crafted.

Simple detailing is to be utilised with high quality materials. The embodied carbon is to be taken into consideration for material choice as well as its durability, appearance and maintenance strategy overtime. The junctions between materials are to be carefully considered and there will be a simple hierarchy. Simple forms will aid in this rather than a complex shape.

uPVC windows and doors are acknowledged to be environmentally damaging and their use discouraged. The Council does not wish to be proscriptive and would welcome a dialogue to discuss developers' proposals and justifications for materials choice. In principle, provided the proposals perform the same or better than the Council's standards then they should be acceptable. Timber cladding can be a great addition to a housing development however detailing, weathering and ventilation need to be carefully considered.

Daylight and windows [NDG H1 : NMDC H1,2]

To promote good daylighting and thereby improve quality of life and reduce the need for energy to light the home the following are to be a minimum. Average daylight factor of at least 2% for kitchens, average daylight factor of at least 1.5% in living rooms, dining rooms and study. At least 80% of the working plane in these rooms receives natural light. The daylight factor is a comparison of the natural light levels within a room and the natural light levels in an unshaded location outside and the working plane is a nominal surface positioned 0.85m above the floor. Further information on natural lighting can be found in BS 8206-2:2008 Lighting for Buildings – Part 2: Code of practice for daylighting.

Designing for Climate Resilience

All dwellings should strive to be substantially better than present building regulations. To only aim for current building regulations means that the dwellings are only just legally acceptable. This is not good enough for this aspirational development.

As a minimum the development will adhere to the RIBA Climate Challenge 2030 and the local Darlington Climate Emergency targets corresponding to the years 2025 and 2030 whilst also anticipating the prospective 2025 Future Homes and Buildings Standard.

To be truly exemplar as a Garden Village development it must strive to showcase the very best in design and also construction. Modern Methods of Construction (MMC) are to be used to aid in quality assurance and achieving consistent performance of the dwellings.

A percentage of the dwellings will additionally be showcasing Certified Passivhaus standards, the exemplar in low energy standards, with a larger percentage utilising the Low Energy PH standard which is easier to attain and a substantial step up from the present building regulations.

Checklist:

- Do the local character studies inform the design to create a sympathetic yet contemporary scheme?
- Is the building form and orientation driven by context both historical and environmental?
- Are Minimum Space Standards met?
- Has external spaces and storage been integrated into the design?
- Is there adequate daylight to habitable rooms?
- Is RIBA Climate Challenge 2030 & the 2025 Future Homes and Buildings Standard met?
- Have innovative construction techniques been implemented. MMC etc.?
- Have a mix of housing such as Self build, Custom Build been incorporated into the scheme?

Cycle Parking: Standards and Design Requirements [NDG M3 : NMDC M3]

To deliver the vision for Burtree as a place that actively encourages cycling and walking suitable cycle parking infrastructure must be provided to allow residents to own and conveniently use cycles for everyday journeys.

Cycle parking must be designed as an essential component of the development and located in both key public spaces, outside destinations, such as schools and within private residences. Visitor spaces must be provided separately.

At least storage for one cycle where it is as easy to access as the car.

Secure and overlooked cycle parking that is as close to (if not closer) than car parking spaces (or car drop off bays) to the entrances of schools, shops, rail station and other services and facilities.

Provide scooter and cycle parking at schools. Scooters can encourage younger children to get active on the way to school.

Vehicular Parking: Standards and design Requirements [NDG M3 : NMDC M3]

Remember encouraging active travel is not about preventing people from buying/owning cars and other vehicles. It's about usage. It is about creating the conditions to encourage short journeys to be made on foot or on bike within and beyond the boundary of the garden village.

The design must therefore anticipate realistic levels of car parking demand, guarding against displaced and anti-social parking .



Parking within the new garden village will include private dedicated parking for residential homes, public parking spaces for visitors and shared parking for residents, employees, and visitors within village centres.

Poor

Good



The following parking restrictions apply to the street hierarchy:

- Main Village Streets: There will be no allocated parking, but in key locations a few clearly demarcated visitors parking spaces may be provided, where they do not negatively impact onto traffic flows. There will be no access to private parking areas, drives or garages.
- Secondary Village Streets: Direct access to private on plot parking areas, drives and garages are to be avoided. Where access drives are unavoidable, they must serve a number of properties and must not affect the continuity of tree planting and cycle way. Apart from this restriction, there may be some visitor non-dedicated parking, as well as on-street parking for residents; and
- Tertiary streets -In the residential areas car parking will be integrated into the street environment, convenient and provide a positive environment with generous landscaping to settle frontage parking in the street (e.g. providing green relief equivalent to one parking bay every 4-5 bays). Small and overlooked lit parking courtyards are only to be permitted where properties are in a courtyard and with ground floor habitable rooms. Garages will not be relied on for everyday car parking.

There will be active and passive Electric Vehicle Charging (see utilities)

The National Design Guide provides further helpful advice on achieving well designed streets and spaces that are not dominated by the private car and which are accessible by all.

Waste, Recycling & Utilities [NDG M3 : NMDC M3]

Well integrated refuse stores, recycling facilities, meter boxes, pipes, flues and vent must be considered early in the design process and integrated into the overall scheme.

High speed (Ultrafast gigabyte) broadband connectivity must be a feature of the development to encourage a 'live/work' balance. All homes must have access.

Electric Vehicle Charging points. Active: 20% charge point provision for residential parking bays Passive: 40% of parking bays Definition of "active" and "passive" provision of charge points: Active - A socket connected to the electrical supply system that vehicle owners can plug their vehicle into. Passive - The network of cables and power supply necessary so that at a future date a socket can be added easily.



Really?

Play and Youth Facilities - 'Active Play and Sports for All Ages' [NDG N1 P1-3 : NMDC N1 P1-3]

Consider how to use the natural landscape for play opportunities such as stepping-stones through shallow water, play in woodland areas (also link to the new Primary School)

Play areas and minor play interventions including creative and natural play solutions with high play value

Include micro play items with fun/ surprise elements such as discovery trails

Active/ sports solutions demonstrating clear focus on health and active lifestyles

Provide a relaxed area suitable for informal ball sports

Path and cycle network designed to be legible, safe and enticing to encourage active uses

Activities aimed at older residents including provision of sufficient seating to encourage less confident walkers

Teen provision including group seating in appropriate locations

Provide suitable spaces for boot camps, Tai Chi etc

Consider how to ensure non-threatening spaces for less confident users (for example skate parks are popular but some people can find them intimidating)

Hard Landscape

- Site Wide- Identify an appropriate hard landscape palette to achieve coherence and an appropriate design language for a garden village
- Consider appropriate feature materials for each character area, within an overall Greater Faverdale new garden village design matrix
- Avoid over-engineered or urbanised solutions at the northern boundary; with the new entrances designed to retain rural character
- Coordinate with arts provision to incorporate integrated and locally inspired art works
- Avoid overly engineered, urban or formal hard detailing not suitable for a Garden Village
- Provide accurate information on the following:

- Feature hard landscape areas (such as at gateways and key points)
- Signage strategy linked to active lifestyle network
- Coordinated seating and landscape furniture palette
- Lighting to be as minimal as possible and coordinated with ecology
- Creative interpretation solutions
- Coordinated and appropriate surfacing to a hierarchy of paths and recreational routes,
- Bridges, rocks to swales and SuDS ponds water features.

Soft Landscape & Bio-diversity Strategy [NDG N1-3 : NMDC N1-3]

- From an early stage develop a communications strategy, in consultation with sales and marketing departments from housebuilders, for informing residents what to expect with the provision and management of new natural habitats and the protection of existing trees, hedgerows and natural habitats such as newt ponds
- Provide creative interpretation solutions to inform residents about the wildlife and ecology they are sharing the site with
- Mandatory Landscape Structure to be rooted in the ecological principles for the site and to achieve net bio-diversity gain as advised in the NDG.
- Map on masterplan important ecological links and connections for example hedgerows used by bats as navigation routes
- Demonstrate creative and attractive ways to integrate biodiversity solutions
- Evidence that the masterplan is based on accurate locations of trees, hedgerow and ecological features identified for retention (and their buffer zones)
- Proposed tree sizes and locations to be shown with forest scale species identified
- System of checking to be evidenced to demonstrate approved planting has been installed correctly and retained planting correctly protected
- Species lists, sizes and densities to be provided for all typologies
- Long term landscape management arrangements to be considered from outset and enshrined
- Provide the precise location and arrangement of all landscape typologies including:
 - Vegetated swale corridors
 - Edible landscapes
 - Native marginal and emergent plants to Ponds
 - ecological protection/ enhancement areas,
 - Trees: existing, removed and proposed
 - Woodlands old and new (including safety for public access and management considerations)
 - Planted areas
 - Grasslands including amenity/ species rich/ wildflower meadows /newt habitat/ mown grass paths



Private Gardens and Edible landscapes [NDG H : NMDC H]

*'81% of English adults think that it's important that their future homes have quality private or shared gardens'.
Design Council: A Public Vision for the Home of 2030*

Historically, garden Villages provided access to open air and the chance to grow flowers, fruit and vegetables. The 2020 COVID-19 pandemic triggered a renewed interest in gardens and growing with increased value placed on private, semi-private and public spaces.

- Demonstrate awareness of health and wellbeing and access to healthy food within the new community and make provision for designated allotments space.
- Demonstrate how edible landscapes can be successfully delivered in gardens and community spaces at Greater Faverdale Garden Village
- Refer to guidance such as TCPA Guide 10 Edible Garden Cities
- Extract from TCPA Guide 10 Edible Garden Cities:
 - *Local food systems as part of a landscape-led approach*
 - *Local food systems are to form an integral part of a landscape-led masterplan or strategic framework, in which at least 50% of a new Garden City's total area will be allocated to green infrastructure (of which at least half is to be public), consisting of a network of multi-functional, well-managed, high-quality open spaces linked to the wider countryside.*
 - *This figure is deliberately ambitious but includes architectural green infrastructure elements such as green roofs and green walls. Where it is not possible or desirable to provide a private garden with each home, homes must have easy access to shared or community gardens.*



Allotments

Allotments [NDG H : NMDC H]

- Historically allotments date back as far as Anglo-Saxon times, but the plot system we recognise today started in the C19, when rapid industrialisation and poor public health forced measures to provide land for urban dwellers to grow fresh food. In 1908 the Small Holdings and Allotments Act came into force, and many subsequent Allotments Acts over time have continued to strengthen the legislation surrounding the provision and protection and rental arrangements of allotments.
- The concept of allotments sits well with the ethos of a Garden Village, with the recognition that locally grown produce triggers a range of benefits including health, well-being, education, relaxation and community.
- While theoretically Garden Villages provide garden space per home which would allow home based vegetable growing, not all residents wish to devote their garden space to produce. Allotments also provide excellent opportunities for development of community spirit which is critical to the successful growth of a new Garden Village. Participants are able to learn skills from each other, to hold annual competitions, and also to share and distribute surplus produce.
- Darlington has a good spread of allotments throughout the borough, both council and privately managed. There is a tradition of aiming to provide around 20 allotments per 1000 population and the typical size for a full plot is 250m², typically 25m x 10m however half plots are also popular. Non-standard arrangements can also work well where this is acceptable through local policy, for example community vegetable gardens using raised beds, placed next to community buildings or sometimes in schools.
- The location of allotments should be carefully considered to ensure good levels of natural surveillance, sunshine, water and ground conditions, and placing allotments at the heart of community activity
- Consider the appearance and design of the allotments, for example as attractive community gardens and associated orchards incorporating a central community hub space and well considered gateways and boundary treatments, also consider non- standard plot types or half plots, and whether to allow hens, bees etc through consultation with DBC and relevant stakeholders
- The developer's allotment strategy should be developed in consultation with Darlington Borough Council, to understand current demand, policy requirements and optimum models of sustainable management with an emphasis on local engagement and involvement

Principles for success:

- Secure capital and revenue funding through Section 106 agreements for the new communities.
- Consider how opportunities for green infrastructure funding can be used to fund local food-growing initiatives.
- Use business development funds for food-related businesses and co-operatives.
- Consider applying natural capital accounting processes to local food systems.

Precedents:

- Northstowe (Cambridgeshire):
The phase 2 development strategy for the 10,000 homes new town of Northstowe, created by Homes England, is centred around a Healthy Living and Youth & Play Strategy. A key requirement is the provision of fruit trees in private gardens and a community orchard, in a nod to the original Garden Cities. Housebuilders must also provide adequate depth and quality of soil within private garden areas to enable residents to grow fruit and vegetables. Community growing opportunities, such as fruiting espaliers on boundary walls, foraging food trails, herb walls, commercial roof terraces and communal courtyard areas, are to be included throughout. Furthermore, additional potential measures include market-stall spaces within the town centre square and retail floor space for a locally produced food outlet.

Farmland, Hedgerows and Trees Overview

The local farmland including the site, is a mixture of arable and pastoral land. Fields are relatively small, lined with old hedgerows and hedgerow trees and irregular in shape, very typical of old English farmland. These features increase the value and sensitivity of the landscape.

There are few substantial woodlands in this landscape character area, instead shelterbelts and farm woodlands are more common with the largest being around Whessoe Grange Farm and the buffer woodland around the Argos site, as well as semi-natural riparian woodland along the Dene Beck.

Hedgerows Requirements

Countryside hedgerows are protected by law, meaning you cannot remove them if they meet certain criteria set out in the Hedgerow Regulations 1997. Examples of the criteria are; being more than 20m long, set in land used for agriculture, at least 30 years old, and part of a field system that existed before 1845.

It is most likely that some of the hedgerows on the site will meet these criteria, therefore developers must assess the hedgerows against the criteria in the regulations using a suitably qualified professional, and develop a layout and levels design that minimise impacts upon hedgerows by slotting development cell plateaux into the field pattern.

Developers must evidence their hedgerow strategy, aimed at retaining and protecting and best examples of hedgerows within the mandatory landscape structure.

Veteran and Rare Trees Requirements

There are believed to be veteran trees on site, and also other mature trees including examples of rare species such as native black poplar.

Ancient and veteran trees can be individual trees or groups of trees within wood pastures, historic parkland, hedgerows, orchards, parks or other areas. They are often found outside ancient woodlands. They are irreplaceable habitats.

Decisions on any removals of veteran trees must be made in accordance with paragraph 180C of the NPPF. By law planning permission is to be refused if the development will result in the loss or deterioration of veteran trees unless there are wholly exceptional reasons or there is a suitable compensation strategy in place. Developers, in addition to standard tree survey and impact assessment, must evidence how they have assessed potential veteran and rare trees using recognised assessment criteria for veteran trees by a suitably qualified and experienced arborist, and evidence how they are retaining and protecting any veteran and rare trees within the mandatory landscape structure.

This will inform the development layout, which require that the design of village greens and landscape spaces will be done in such a way as to celebrate and visually capitalise upon trees of suitable stature and good health, placing them to form vista end stops and focal points if appropriate.

Topography, Geology and Soils

The topography is undulating, in a series of broadly east-west oriented shallow valleys and low rounded ridges. The underlying geology is Magnesian Limestone, but this is overlain by glacial till resulting in clay loam soils.

Soils Strategy Requirement

‘Soil is a combination of minerals, organic matter, air, water and living organisms. We need it to sustain life. But our soils are degrading at an alarming rate. We have taken soil for granted and now one-third of the world’s arable soils are degraded. The situation becomes even more urgent when we consider that it can take a thousand years for just one centimetre of topsoil to form’. Soil Association 2020

There is currently a very poor culture of managing soils in the construction industry, allowing delicate topsoils to be crushed and damaged almost beyond use. Tracking by vehicles, dumping of heavy objects and working the soils while wet are all common problems resulting in very poor outcomes in planting schemes, with high quality plants unable to survive in wet compacted clays. Soils in the Whessoe and Dene Beck area are typically loamy or clayey, seasonally wet, and slightly acid but base-rich, consequently they are highly vulnerable to damage caused by poor handling and storage.

Greater Faverdale new garden village is set in an existing landscape of old farmland with intact topsoils that have developed over hundreds of years. This is a precious resource that must be carefully preserved and re-used on site.

Developers will be required to evidence their Soils Handling and Levels Strategy to inform the design of the site layout to minimise impacts upon levels, and to manage their sites through to completion to ensure that that they will strip, handle, store and spread the site-won topsoils correctly.

Hydrology and Blue-Green Infrastructure Requirements [NDG N1,2 : NMDC N1,2]

The main watercourse in this landscape character area is the Dene Beck, which is a key landscape character feature of the Greater Faverdale site, meandering north-south through the western part of the character area named after this feature - Burtree Dene Beck - and with a PROW footpath running alongside for much of its length.

Typically, drainage ditches within the local farmland can be found linking to the Dene Beck however some areas remain poorly drained with areas of marsh and carr remain in low-lying areas, probably due to the clayey soils. Ponds and wet areas that have established on site are a valuable element in the site ecology and must to be retained and protected within the mandatory site wide landscape structure and reflected in the site-wide drainage and storage proposals.

Developers will be required to evidence a fully integrated design approach to the blue-green strategy for the site including permanent water and swales, and to capitalize in the design proposals how the Dene Beck can offer a visual and recreational resource, linked to the PROW network.

Avoid cavernous bowl-like engineered SuDS ponds with steep sides

Allow suitable planting within the SuDS ponds

Use micro pools and low-flow channels as design opportunities for example with rocks, gravels and planting

Avoid concrete 'off the peg' outfalls with steel rails. Instead provide bespoke outfalls using gabions, rocks, etc.



Integrating Public Art [NDG P1-3 : NMDC P1-3]

Arguably there are 2 ways to successfully deal with public art within a development such as Greater Faverdale Garden Village:

- The stand-alone “signature” piece, and
- The integrated art option which entwines the work(s) of art into the fabric of the development.

The “signature” artwork can, in itself, define a development and/or raise its profile (e.g. The Angel of the North). Tall artworks can be a draw in their own right, and also double as orientation and wayfinding elements of urban fabric for the development. (e.g. exemplified by the works of Cesar Manrique throughout the Lanzarote highway network – most major junctions have a distinctive, tall artwork.)

The integrated artwork option allows for the art to be discovered in an incidental manner to reinforce the local character of an area, and enriches the experience of residents and visitors, as well as encouraging exploration of an area on foot.

Consider:

- What might be the most appropriate mix of art commissions to suit this long-term development.
- Consider appointing an artist or arts manager for the duration of the project, to develop an arts and artist procurement plan.
- Strategic partners are to take the lead and consider the potential of “signature” art.
- Encourage the developers of land parcels to adopt and deliver the arts strategy.
- Consider “localising” the relevance of the public art e.g. reflecting or being prompted by or responding to the railway heritage of the site.



Lighting Strategy [NDG M1-3, P2 : NMDC M1-3, P2]

The lighting strategy supports the project aspirations for a contemporary exemplar of sustainable living, while being responsive to the surrounding environment.

All lighting must be designed to minimise energy consumption and avoid light pollution using high quality efficient lighting systems.

The design of lighting on adoptable public highway must comply with the specifications of the Council’s adoptable standards.

Lighting must avoid adverse effects on existing and future ecological habitat areas.

Pedestrian and cycle routes must be lit to enable use at all times of the day.

Surface Water Drainage & SUDS [NDG N2 : NMDC N2]

Must be future proofed – designed to be resilient, allows for changing demographics, future growth, and the impacts of climate change including flood risk

The design process will research and respond to how water flows and nature moves across the site and the wider surroundings.

The design must ensure that creative surface water management such as rills, brooks and ponds enrich the public realm and help improve a sense of wellbeing and offer an interaction with nature.

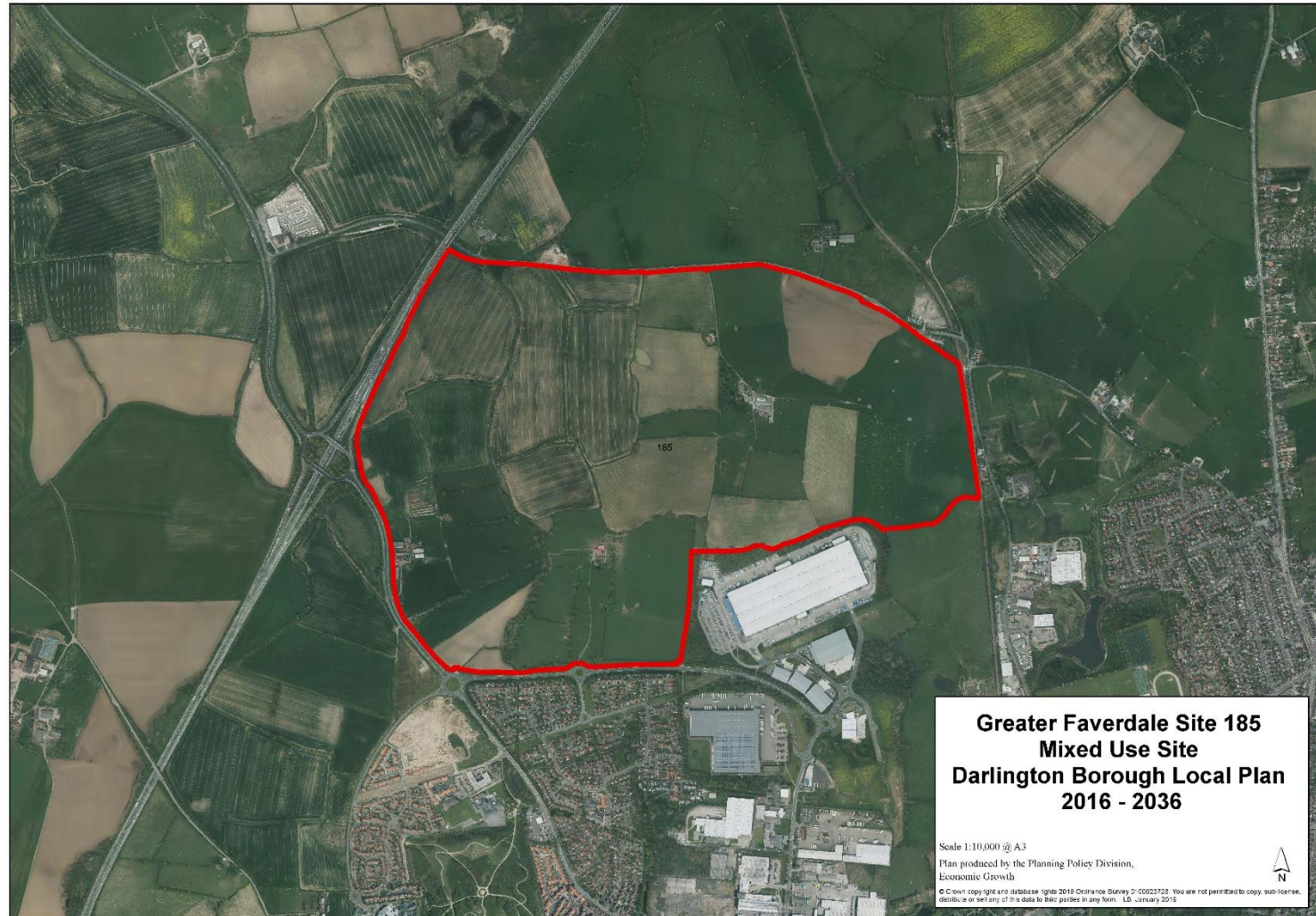
The surface water drainage strategy for the Site will be designed to meet the flood risk requirements of the Environment Agency and include proposals for a surface water drainage system based on the four key SuDS principles and will comply with best practice guidance as described in The SuDS Manual C753 CIRIA (Update 2015). The Sustainable drainage system (SuDS) will be designed to manage stormwater locally (as close its source as possible), to mimic natural drainage and encourage its infiltration, attenuation, and passive treatment.

The highway drainage arrangements will be a key theme which shapes the form of the SuDS. This is because highway run-off often forms a high percentage of the total run-off from developed areas and is also the surface water element that contains the highest level of pollutants. The proposals for the initial development including the main N-S street must relate to the SuDS strategy for the site as a whole.



Sustainable Urban Drainage

5.0 Appendices



5.1 Appendix 1: Definitions & Terminology

Alphabetical list of Terminology etc.

| | |
|---------------|---|
| ASHP | Air-sourced heat pump. Works like a refrigerator; efficiently transfers heat from outside to inside a building. |
| Biodiversity | Maximising the variety of life (plants, animals, fungi and micro-organisms) and habitats that can be found within an area. |
| BHL | Building for Healthy Living (formerly Building for Life 12 – BfL12) |
| Context | The physical surroundings, natural or man-made, within which a building or space might be created. |
| DBC | Darlington Borough Council |
| DC | Design Code – this document. |
| Design Code | A document that sets rules for the design of a new development, generally more detailed than other policy documents. |
| Design Review | A “peer review” system to maximise the design quality and sustainability of proposed schemes. Best undertaken at RIBA Stage 2. |
| EA | Environment Agency |
| GV | Garden Village |
| HE | Homes England |
| DLUHC | Department for Levelling Up, Housing and Communities (Formerly Ministry of Housing Communities and Local Government - MHCLG) |
| PROW | Public Right of Way |
| MMC | Modern Methods of Construction (low energy, sustainable, generally part factory manufactured buildings) |
| PV | Photo-voltaic panels - convert solar energy into electricity, which can then be stored/used on site or exported to the grid. |
| RAG rating | Using Red Amber Green “traffic light” system to identify compliance with assessment criteria |
| RIBA | The Royal Institute of British Architects |
| RIBA Stage 2 | The 2 nd Stage - Concept Design - of the RIBA Plan of Work which separates the design & development process into 7 stages. |
| SPD | Supplementary Planning Document - built upon and providing more detailed advice or guidance on policies in the adopted local plan |
| SuDS | Sustainable Urban Drainage |
| TCPA | Town and Country Planning Association |
| Thermal mass | The measure of a building material to maintain its heat capacity. Generally, high thermal mass stabilises internal temperatures. |
| Urban Design | The design of the spaces and places created by groups of buildings (What the public most readily think of as “planning”) |

5.2 Appendix 2: Local Contextual Character Influences

The villages of the Darlington, Stockton and the North Yorkshire area generally conform to a limited number of plan forms. These centre on a marketplace, sometimes almost circular, as if formerly a village green, or often more linear in form (e.g. Hutton Rudby), and not necessarily with parallel street sides.

Notable local exemplars include:-

Cockerton Village
Gainford Village Green, Co Durham
Great Ayton, North Yorkshire
Haughton Le Skerne
Heighington Village Green
Hurworth
Hutton Rudby, North Yorkshire
Staindrop, Co Durham
West Auckland, Co Durham

- The majority of the relevant village cores have been subsumed into expanding settlements but remain as the cores of these new settlements.
- Almost all have solid lines of terraced dwellings and other buildings throughout the length of the “green” or “marketplace”, defining the space, with detached dwellings appearing mainly at the extremities of the defined core, perhaps being the “doctors house” or similar in the past.
- Often a church is placed not centrally to the community but to one side (near the village entrance) or even behind the linear development of the village.
- They often have more than one manor house – sometimes on opposite sides of the main village green or space – or set behind the village with a landscape setting or parkland contributing to the wider setting.



Hutton Rudby

5.3 Appendix 3: References

List of reference documents.




- National Design Guide (2019)
- National Model Design Code 2021
- BHL
- TCPA Publications
- RIBA 2030 Challenge Target
- Northstowe Phase 2 Design Code
- The Art of Building a Home
- Upton Design Code
- DESIGN COUNCIL A Public Vision for the Home of 2030
- Garden Communities Prospectus DLVHC
- Architecture & Design Scotland, Typologies Series
- Homes England Garden Communities Toolkit (September 2019)
- 10 Characteristics of Places where People want to Live, RIBA, 2018

AVAILABLE VIA HYPERLINK:

- [The National Design Guide \(2019\)](#)
- [National Model Design Code - GOV.UK \(www.gov.uk\)](#)
- [Urban Design Compendium, Third Edition - HCA with studio real \(2013\)](#)
- [Safer Places: The planning system and crime prevention ODPM, \(2004\)](#)
- [The National Planning Policy Framework and relevant planning practice guidance.](#)
- [Building for Life 12: The Sign of a Good Place to Live - Design Council CABE, \(2015\)](#)
- [By Design - Urban design in the planning system: towards better practice - Commission for Architecture and the Built Environment \(CABE\), \(2000\)](#)
- [The Cool Sea \(The summary report and toolkit of the Waterfront Communities Project Interreg3b\) ISBN 0 901273 40 6 \(2007\)](#)
- [Manual for Streets - Department for Transport, and Community and Local Government, \(2007\)](#)
- [Life Between Buildings: Using Public Space – Jan Gehl \(2006\)](#)

5.4 Appendix 4: RIBA 2030 Challenge Target metrics for domestic & non-domestic buildings

RIBA 2030 Climate Challenge target metrics for domestic buildings

| RIBA Sustainable Outcome Metrics | Current Benchmarks | 2020 Targets | 2025 Targets | 2030 Targets | Notes |
|--|---|--|--|--|--|
| Operational Energy kWh/m ² /y  | 146 kWh/m ² /y (Ofgem benchmark) | < 105 kWh/m ² /y | < 70 kWh/m ² /y | < 0 to 35 kWh/m ² /y | UKGBC Net Zero Framework 1. Fabric First 2. Efficient services, and low-carbon heat 3. Maximise onsite renewables 4. Minimum offsetting using UK schemes (CCC) |
| Embodied Carbon kgCO ₂ e/m ²  | 1000 kgCO ₂ e/m ² (M4i benchmark) | < 600 kgCO ₂ e/m ² | < 450 kgCO ₂ e/m ² | < 300 kgCO ₂ e/m ² | RICS Whole Life Carbon (A-C) 1. Whole Life Carbon Analysis 2. Using circular economy Strategies 3. Minimum offsetting using UK schemes (CCC) |
| Potable Water Use Litres/person/day  | 125 l/p/day (Building Regulations England and Wales) | < 110 l/p/day | < 95 l/p/day | < 75 l/p/day | CIBSE Guide G |

RIBA 2030 Climate Challenge target metrics for non-domestic buildings

| RIBA Sustainable Outcome Metrics | Current Benchmarks | 2020 Targets | 2025 Targets | 2030 Targets | Notes |
|--|--|--|--|--|--|
| Operational Energy kWh/m ² /y  | 225 kWh/m ² /y DEC D rated (CIBSE TM46 benchmark) | < 170 kWh/m ² /y DEC C rating | < 110 kWh/m ² /y DEC B rating | < 0 to 55 kWh/m ² /y DEC A rating | UKGBC Net Zero Framework 1. Fabric First 2. Efficient services, and low-carbon heat 3. Maximise onsite renewables 4. Minimum offsetting using UK schemes (CCC) |
| Embodied Carbon kgCO ₂ e/m ²  | 1100 kgCO ₂ e/m ² (M4i benchmark) | < 800 kgCO ₂ e/m ² | < 650 kgCO ₂ e/m ² | < 500 kgCO ₂ e/m ² | RICS Whole Life Carbon (A-C) 1. Whole Life Carbon Analysis 2. Using circular economy Strategies 3. Minimum offsetting using UK schemes (CCC) |
| Potable Water Use Litres/person/day  | >16 l/p/day (CIRA W11 benchmark) | < 16 l/p/day | < 13 l/p/day | < 10 l/p/day | CIBSE Guide G |

5.5 Appendix 5: Building for a Healthy Life (formerly BfL12)

The relationship between Building for a Healthy Life, the National Planning Policy Framework and the National Design Guide.

| Integrated Neighbourhoods | National Planning Policy Framework | National Design Guide |
|---------------------------------------|---|--|
| Natural connections | 91a; 102c and e; 104d; 127b; 127f | B3; M1; M2; N1; R3 |
| Walking, cycling and public transport | 20c; 91a; 91c; 127e | B1; B3; M1; R3 |
| Facilities and services | 102; 103 | B1; B3; N1; P3; U1; U3 |
| Homes for everyone | 60-62 | B1; B2; U2; U3 |
| Distinctive Places | | |
| Making the most of what's there | 122d; 127c; 127d; 153b; 184 | C1; C2; I1; B2; R3 |
| A memorable character | 122d; 127c; 127d | C2; I1; I2; I3; B3 |
| Well defined streets and spaces | 91a | B2; M2; N2; N3; P1; P2; H2; L3 |
| Easy to find your way around | 91b; 127b | I1; M1; M2; U1 |
| Streets for All | | |
| Healthy streets | 91b; 102c and e; 110a-d | M1; M2; N3; P1; P2; P3; H1; H2 |
| Cycle and car parking | 101e; 127f; 105d | B2; M1; M3 |
| Green and blue infrastructure | 20d; 91b; 91c; 127f; 155; 170d; 174 | C1; B3; M1; N1; N2, N3; P1; P3; H1; R3; L1 |
| Back of pavement, front of home | 127a-b; d; f | M3; H3; L3 |
| Generally | 7; 8; 124; 125; 126; 127; 130 | 15; 16; 17; 20-29; 31-32 |
| Using the tool as a discussion tool | 39; 40-42; 125; 128; 129 | |

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About us:

designe is the design review and project enabling service for the north-east of England, and offers independent, impartial, objective advice to clients on issues relating to the built environment. It is a profit-for-purpose company which attempts to raise the bar on design quality and sustainability of proposed developments. In terms of sustainability we mean financial, physical, social and economic sustainability – a balanced, broad spectrum approach which acknowledges the realities of developing in the north-east of England arising from its underlying economy. designe deploys a range of tools to deliver services to clients, including Design Reviews, Project Enabling, Training, and acting as “critical friend” in supporting clients think-through and review strategic and tactical matters relating to their built environment and project viability issues. Gateway Reviews are also offered for projects, to confirm readiness to commit to the next stage of investment. We maintain a Panel of 30+ Built Environment Experts – from seasoned professionals to up-and-coming professionals at the leading edge of their disciplines - and across the spectrum of built environment professions. Our services include expertise on project & programme management, project funding and assistance in partnership negotiations. Our aim is to assist our clients successfully launch schemes and initiatives which are the best that they possibly can be and are capable of long-term sustainability. You can find out more about our services at www.designeltd.com.

