

# Chapelgarth, Sunderland

## Design and Access Statement



July 2016

**siglion.**

July 2016

This document has been updated in line with comments from the LPA and supersedes the document dated February 2016.

Produced on behalf of Siglion.

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Please print this document A3 Landscape short edge double sided on FSC certified paper.

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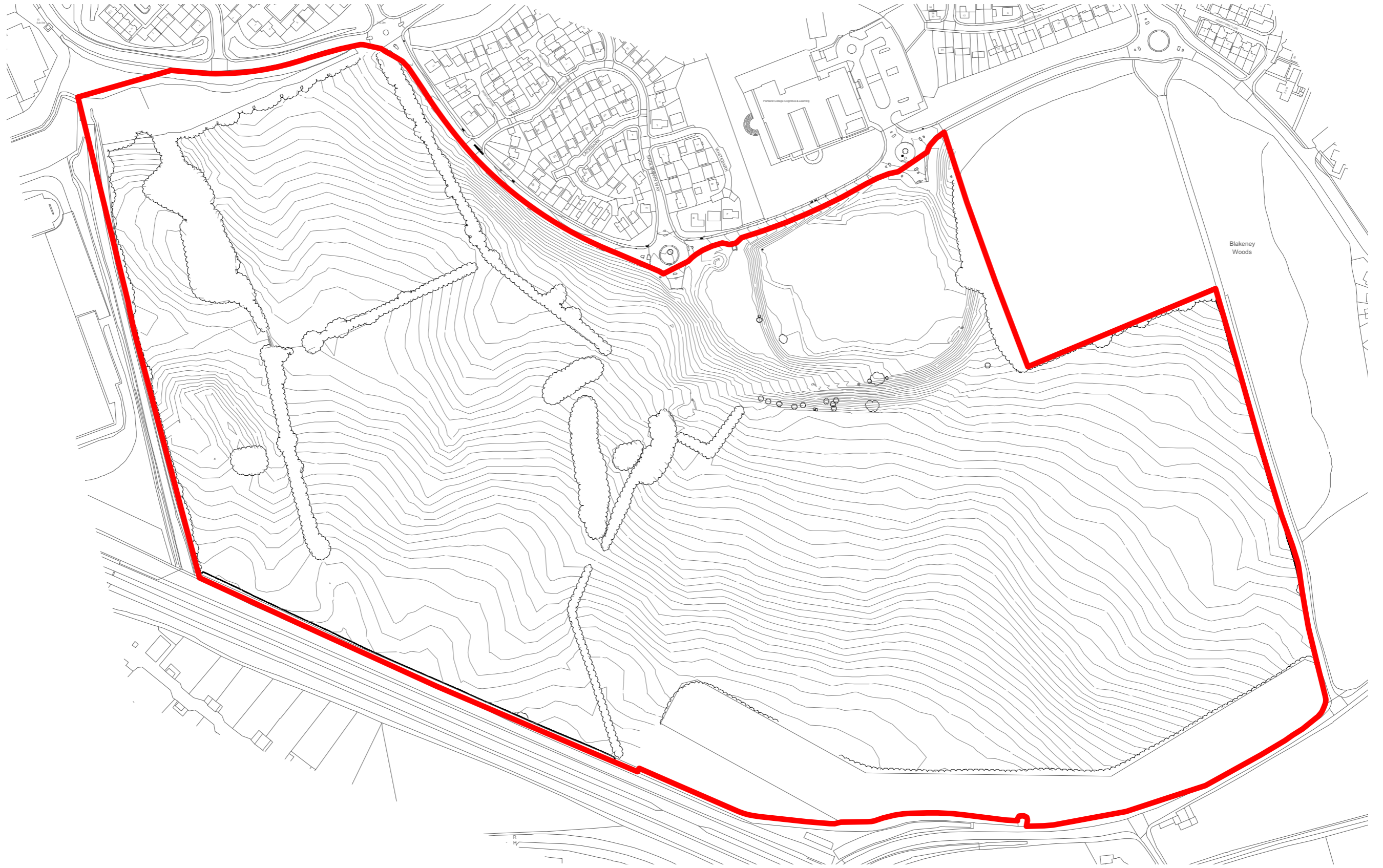
Ecologists



Quantity Surveyors

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**Red Line Boundary**

The red line boundary covers an area of 49.73 Hectares

## Introduction

**This Design and Access Statement has been prepared to support the hybrid planning application for the Chapelgarth scheme in South Sunderland. The document sets out the masterplan which has been produced for Siglion, a joint venture between Carillion Developments and Sunderland City Council, managed by property experts igloo Regeneration, who are bringing the site forward for development.**

**The application seeks outline consent for up to 750 residential units, public open space and new internal road network along with upto 1000 sq m of ancillary commercial uses including Retail (A1), Financial and Professional Services (A2), Restaurant and Cafes (A3) Offices (B1) Non Residential (D1) and Assembly and Leisure (D2), together with associated landscaping and car parking.**

The Chapelgarth site has been designated as a future housing site since its inclusion in the Unitary Development Plan for Sunderland, Adopted in 1998. More recently it has been included in the draft plans for the South Sunderland Growth Area, which seeks to allocate 227ha of land for approximately 3,000 new homes. This would meet 20% of the City's future housing need, and contribute to achieving the strategic aims of the Council's Sunderland Strategy (2008 -2025) and Economic Masterplan (2010) which seeks to encourage the retention of graduates and attract new households.

In 2014, Carillion Developments and igloo Regeneration prepared a bid to bring forward three development sites in Sunderland, including the Chapelgarth site, the former Vaux Brewery site and a site on Seaburn seafront. The bid was successfully won and a joint venture partnership was formed with Sunderland City council to bring forward planning applications for each of the three sites.

The Chapelgarth masterplan covers an area of 49.73 Hectares and has been developed by a multi-disciplinary design team including URBED, Cundall, Colour Urban Design and Argus

Ecology.

The team were appointed in 2015 to produce the masterplan, carry out public consultation and prepare material for a hybrid planning application for the site, which also includes an Environmental Impact Assessment.

This Design and Access Statement describes the masterplan which has been produced to encapsulate Siglion's vision for the Chapelgarth Site.

### Layout of this Document

This document is organised into 5 chapters. The first chapter provides the context of the site and provides a summary of relevant planning policy, the site history, the site today and the landscape features which we seek to preserve and enhance.

Chapter 2 sets out the opportunities and constraints present on the site and the impact of these on the masterplan.

Chapter 3 describes how the masterplan has been shaped and developed, following meetings with the Local Planning Authority and through the public consultation process.

Chapter 4 then describes the elements which make up the final masterplan.

### The Design Code

A Design Code has been produced to be read in conjunction with this Design and Access Statement. The Design Code provides instructions for developers to bring forward each parcel of land as intended. Siglion understand that the Local Planning Authority will only approve a planning application if they have confidence it can be delivered as intended. The Design Code fixes certain elements of the masterplan, including the landscape design to ensure the masterplan is delivered as intended.

Up to  
750 homes

New  
community  
heart

13.74 ha  
of natural  
greenspace

Connected  
recreational  
routes

Drainage  
strategy

# 1. Context





# 1.1 Sunderland Context

**The Chapelgarth site is located in the Doxford Ward which is situated in South Sunderland, adjacent to County Durham.**

The site itself is located at the edge of a residential settlement, bounded by the A19 which runs along the southern boundary of the site.

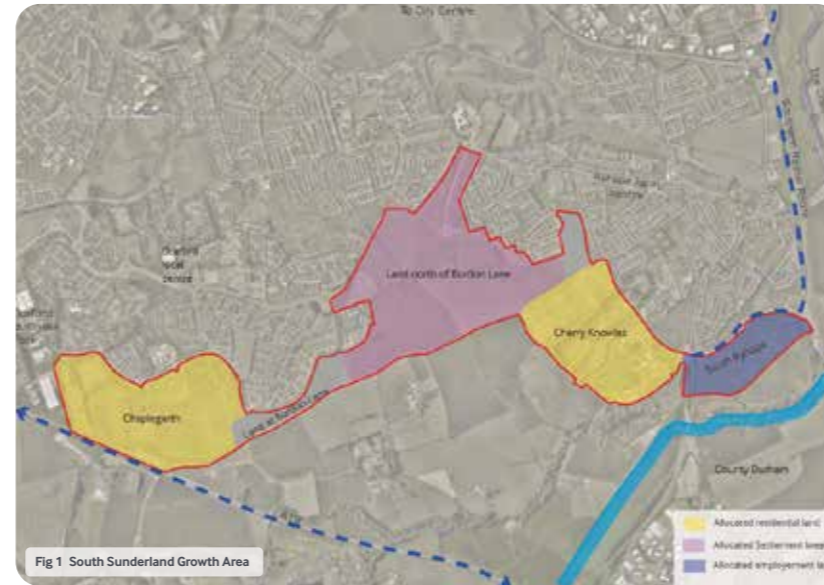
The wider area has been largely developed to accommodate planned residential growth, with accompanying schools, churches and shopping facilities since the 1970s and this has resulted in the transformation of the area from agricultural farmland to a number of residential neighbourhoods.

A Compulsory Purchase Order (CPO) was served on the site in 1971 and following this, the site was transferred into Council ownership. The site was designated for housing in the Unitary Development Plan, Adopted in 1998, which would continue to allow the expansion of the settlement up to the A19 boundary.

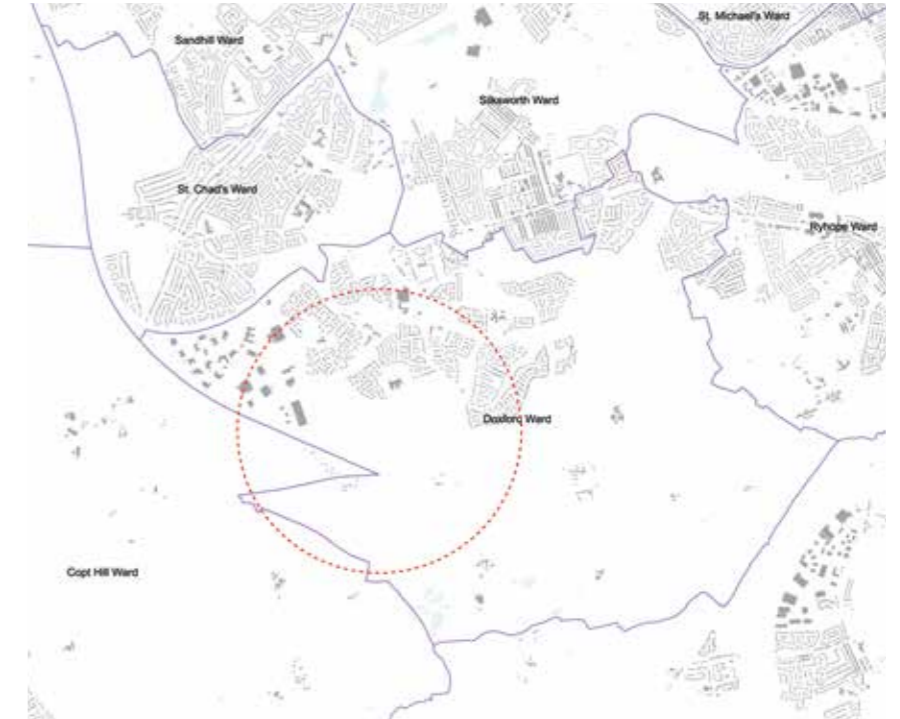
More recently, the site has been incorporated into the South Sunderland Growth Area (SSGA), which has been published in Draft form at the time of writing. The SSGA is a planning document which sets out the Council's vision for the expansion of the settlement across 5 sites, including the Chapelgarth site.

The SSGA states the need for new housing in these areas in order to achieve the aspirations of the Council's Sunderland Strategy (2008-2025) and Economic Masterplan (2010), which aim to provide significant numbers of much needed executive and larger family homes to;

- Encourage retention of graduates
- Attract new households by improving the housing choice
- Provide a greater proportion of higher value housing



Extract from the SSGA Draft (p7) identifying the growth area designations



Siglion have come forward to provide housing development on the site in line with this designation.

## Doxford Ward

The map to the right shows the ward boundaries in the local area. The site is located in the Doxford Ward. Key statistics from the 2011 Census comparing the ward to Sunderland City Council and England are provided in the table.

The Doxford Ward has a population of 9,870 people living in 4,134 households. The ward has a high percentage of economically active people in full time employment. The ward also has a lower level of unemployment compared with Sunderland as a whole.

Topic	Doxford	Sunderland	England
Population	9,870	275,506	53,012,456
Density (persons per hectare)	10.3	20	4.1
Households	4,134	119,758	22,063,368
Economically active (full time employed)	42.5	36.9	38.6
Economically active (unemployed)	4.8	5.8	4.4



# 1.2 Planning Policy Context

Sunderland City Council's current planning policy document is the Sunderland Unitary Development Plan (UDP) which was adopted in September 1998, and was amended in 2007. Chapelgarth was allocated in the 1998 UDP as a key site for residential development through Policy SA9.

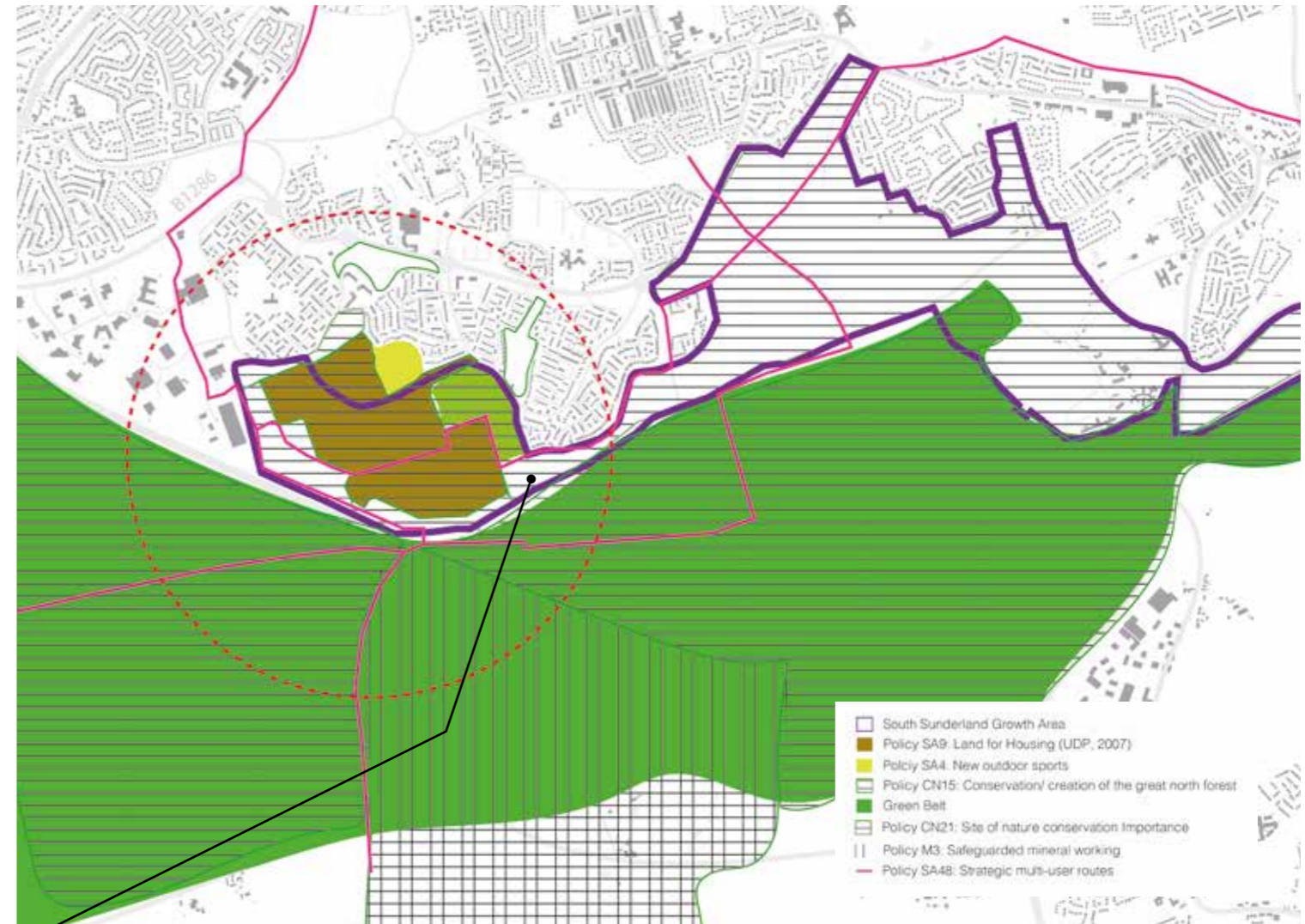
The land allocation policy had a dwelling capacity of 860 residential units for Chapelgarth in a gross area of 34.51 hectares. In 2007 the Secretary of State confirmed that the Policy remained sound, and agreed that the Policy was to remain current until such a time when Sunderland City Council adopted a new Local Plan. As this has not yet occurred, the site remains allocated for residential development.

Part of the Chapelgarth site allocation has already been developed, with planning permission secured in 1997 for Phase 1, south east of Moorside Road for 130 units. This is the existing estate north of Weymouth Road, and west of Portland Academy. This development of Phase 1 leaves a dwelling capacity on the remainder of the site at 730 residential units. The west of the site is allocated in the UDP for Open Space/Leisure use.

Sunderland City Council are producing a South Sunderland Growth Area Supplementary Planning Document which will be consulted on in the near future. This document will maintain Sunderland City Council's aspiration to develop Chapelgarth for residential development as part of a wider masterplan for the whole of South Sunderland.

## Development in the Local Area

At the time of writing, a planning application for an area of land off Burdon Lane has been submitted by Bellway Homes, planning application reference 13/00799/FUL. Bellway are proposing to build 115 new homes on the site.



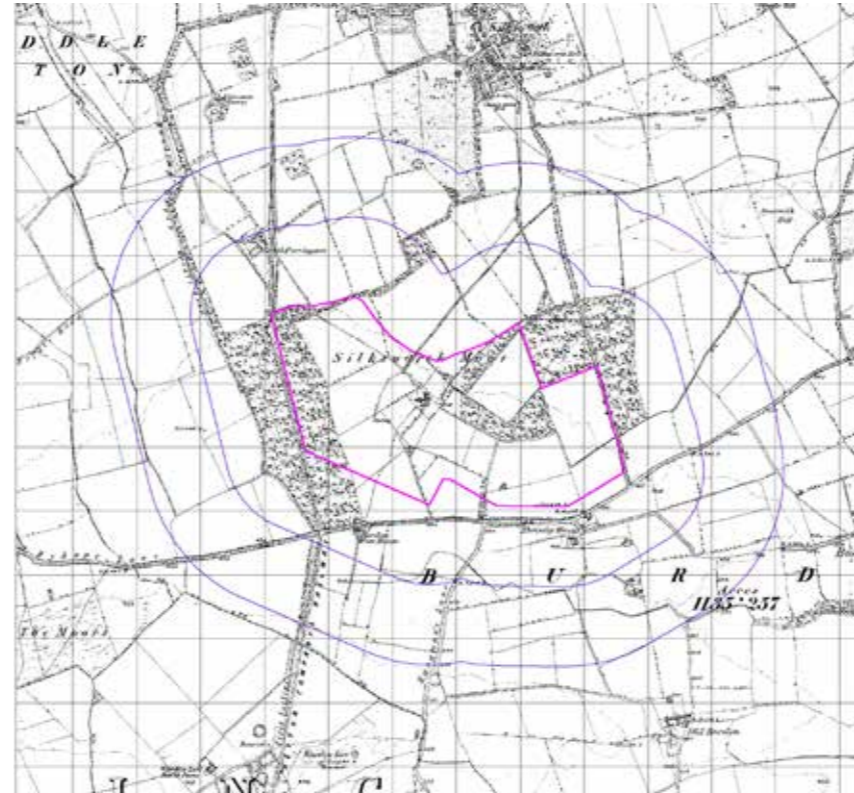
The plan above shows saved policies from the UDP, which are still current for the site but are in the process of being superseded by the South Sunderland Growth Area (SSGA) Supplementary Planning Guidance.

The SSGA area has been earmarked for many years as a site for growth in the city. The area includes Cherry Knowle Hospital, land south of Ryhope, Ryhope to Doxford Link Road along with Chapelgarth.

Planning policy identifies the site for residential development, and a strategic multi-user route is shown passing through the site. This will require an open connection through the site to be maintained to connect with the footpaths travelling south of the site.

# 1.3 The Area History

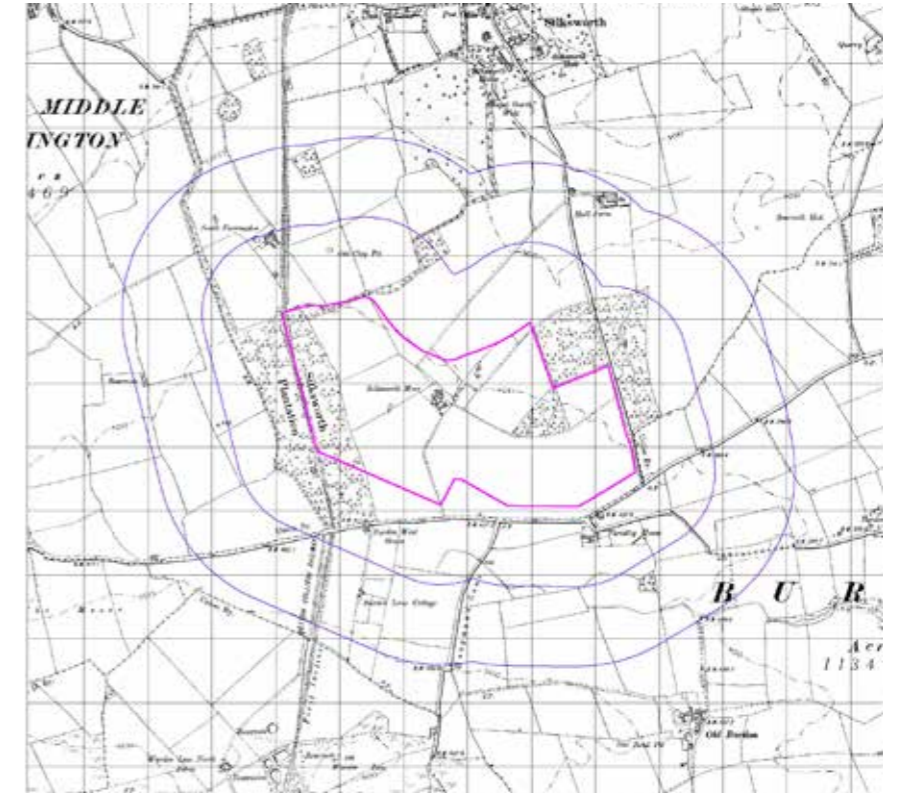
The following maps demonstrate how the area has transformed from agricultural fields into low density housing estates as Sunderland has expanded outwards.



1861

The area is made up of agricultural fields and wooded areas. This area was historically the location of a medieval village known as Silcesworth - with records of the settlement first appearing in 930AD. The area within our current site boundary is labelled Silksworth Moor, and Silksworth Hall stands to the north of the site. The Hall building (possibly Georgian in style) showing on this map pre-dates what was thought to be a Tudor Manor which existed on the site. Silksworth House, located to the west of the Hall, can also be seen on the map; the mansion was completed in 1780.

A building can be made out in the middle of our site, this might be a farm building or collection of farm buildings.

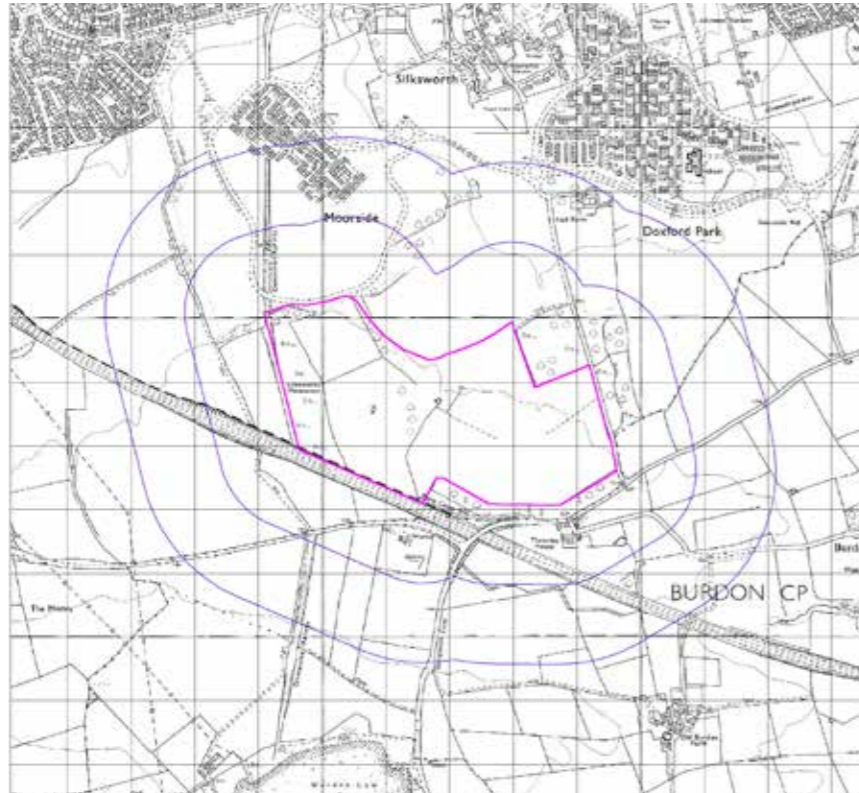


1967

The area has not changed much since the 1860s. Much of the landscaping works to Doxford Park were carried out in the early 20th century by Charles Doxford including the creation of an artificial cascade.

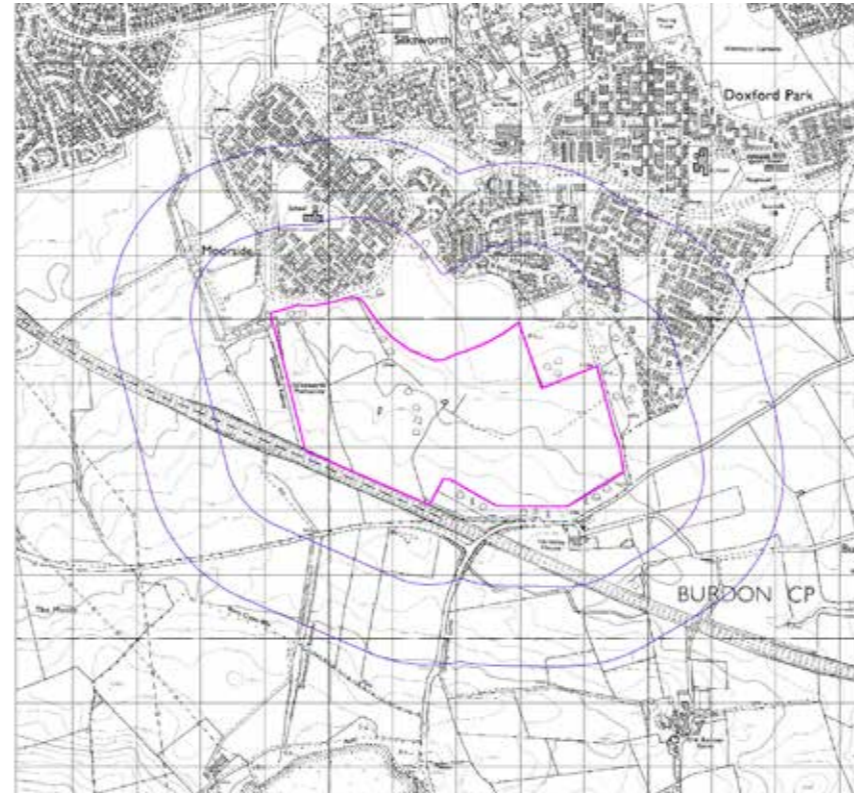
A new Silksworth Hall building is showing on the map - rebuilt in 1902. Silksworth House and Estate is about to be renamed Doxford Park after it is bequeathed to Sunderland Council in 1968. It is then opened as a public park.

# 1.3 The Area History



1976

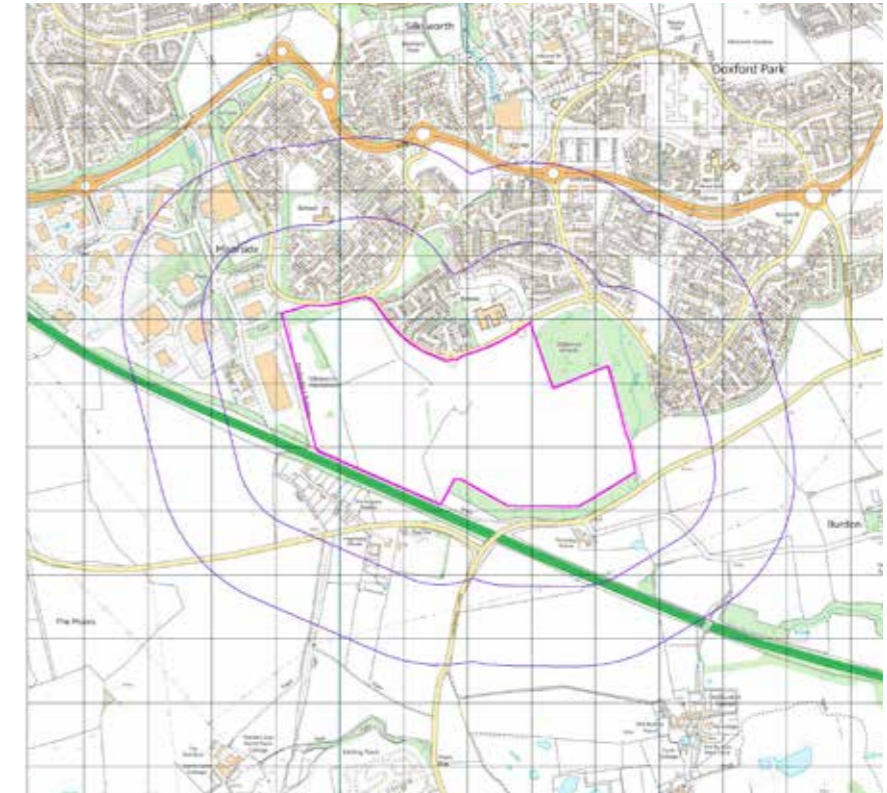
The first housing estates are entering the periphery of the area - these were probably built in the early 70s. The A19 can also be identified just south of the site. The building in the middle of the site seems to have been demolished. New housing is also appearing around the grounds of Silksworth Hall.



1989

More housing estates can be seen adjacent to the site boundary. These are predominantly based around cul-de-sac layouts, and the road network is dominated by roundabouts - suggesting these neighbourhoods have been designed for car travel.

Part of the grounds surrounding Doxford Park have also been developed with houses and the Morrisons supermarket.



2014

Present day - the Doxford Business Park has been built to the west of the site and further housing estates have been completed to the north and west of the site. The Portland Academy is also showing on the map.

Some housing areas to the north east of the site are undergoing renewal - Social Housing provider Gentoo are demolishing and replacing properties deemed unsafe and uneconomic to repair.

A new Aldi store has also since been developed close to the Morrisons supermarket.

# 1.4 The Area Today

**Today the Chapelgarth site continues to be used as farmland with parts of the site used for winter cereal production. The farmland has been classified as 3b agricultural.**

The local area is predominantly characterised by low density development which is separated by land use. The Doxford International Business Park lies to the west of the site and contains a number of offices, warehouses and associated car parking.

North of the site a number of residential estates have been developed, designed for ease of access off the local road network. These estates are interspersed by a number of local schools, churches and pubs.

A small retail area is situated north of the site, around a 15 minute walk. The retail area contains a Morrisons supermarket and small parade of shops, a new Aldi store has also recently opened close to this centre.

The nature of the farmland being open (unfenced) and close in proximity to the neighbouring residential areas means that the land is well used informally by local people, particularly for recreation and dog walking.

A multi user route skirts the southern boundary of the site, connecting into the Walney 2 Wear National Cycle Route. Routes within and around the site are used by walkers, cyclists and horse riders and provide important links through the countryside.



## Land Use

The site is on the edge of the built up area - with housing to the north and mainly agricultural fields to the south.

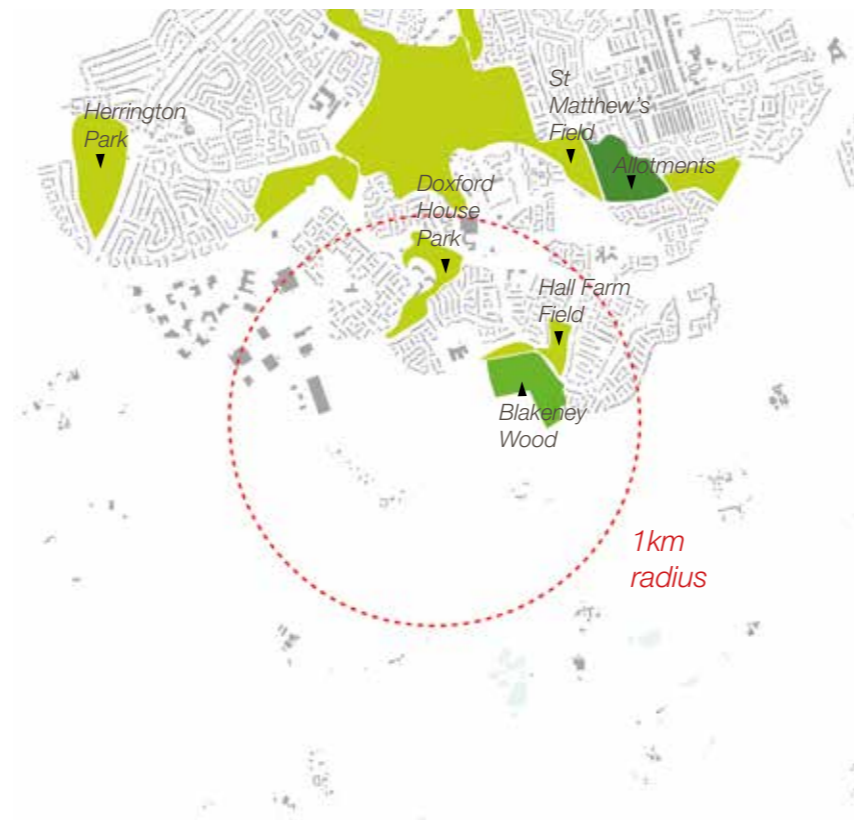
There are a number of schools within the housing areas and the Doxford Business Park lies to the west of the site.



- Educational
- Retail and Leisure
- Business Park
- Residential
- Amenity Green Space
- Open Woodland
- Allotment
- Golf Course
- Fields/ Agricultural Land

## Green Space

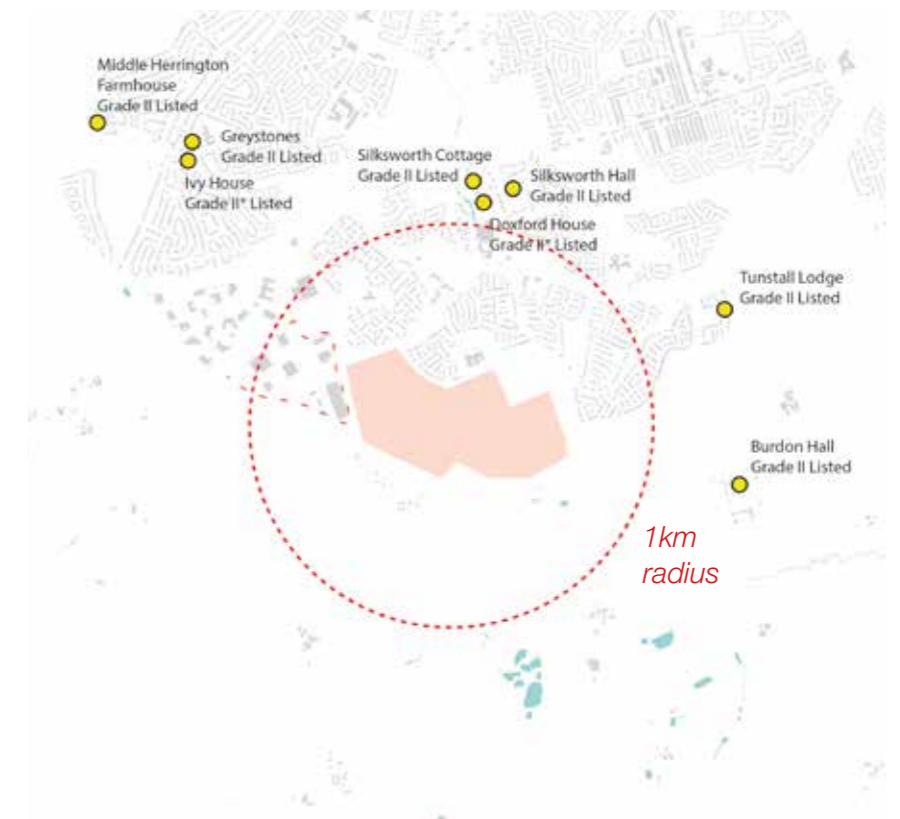
There are a number of green spaces and wooded areas in close proximity to the site which are important wildlife habitats.



- Amenity Green Space
- Open Woodland
- Allotment

## Heritage

There are a number of listed buildings within the vicinity of the site - these include Silksworth Hall and Doxford House.

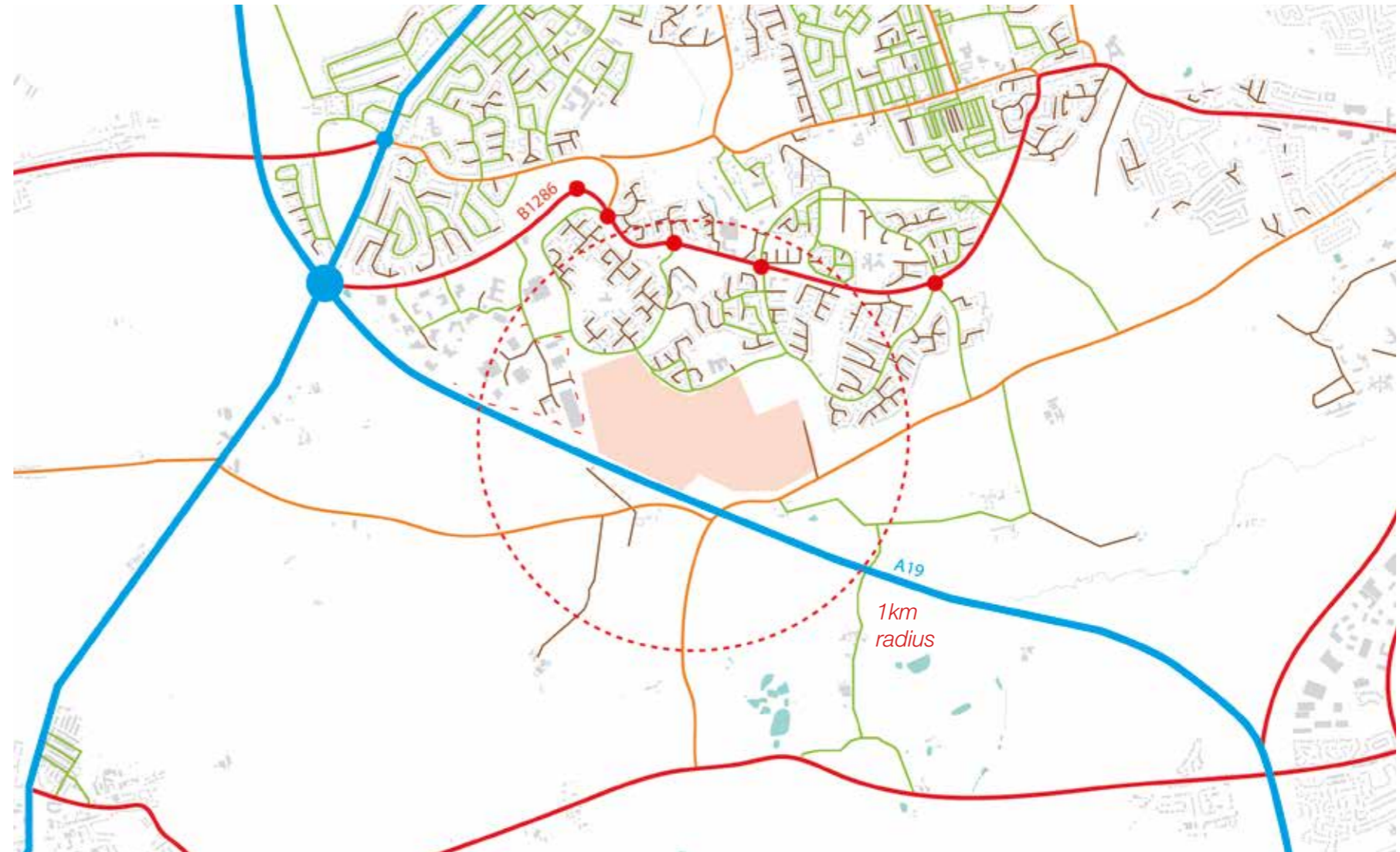


# 1.5 Road Network

## Road Hierarchy

Two incomplete roundabouts provide potential vehicle access points into the site from Weymouth Road .

The site is well served by the local road network with access to the A19 through a series of B Roads. The housing estates close to the site are dominated by cul-de-sacs which can limit pedestrian movement and are less well connected.



- Arterial Route
- Primary Route
- Secondary Route
- Tertiary Route
- Cul-de-sac

# 1.6 Public Transport and Recreation Routes

## Public Transport

The area is served by frequent bus routes:

Towards Sunderland City Centre (every 5-15 minutes)

- 11 min walk to the bus stop at Doxford Park Shops - Buses 5/5A/33A/4/13 - 25 minute journey
- 7 min walk to the bus stop at Moorside Road - Midgley Drive - Bus 39 - 23 minute journey

Towards Houghton Le Spring (every 30 mins)

- 11 min walk to the bus stop at Doxford Park Shops - Bus X35 - 14 minute journey

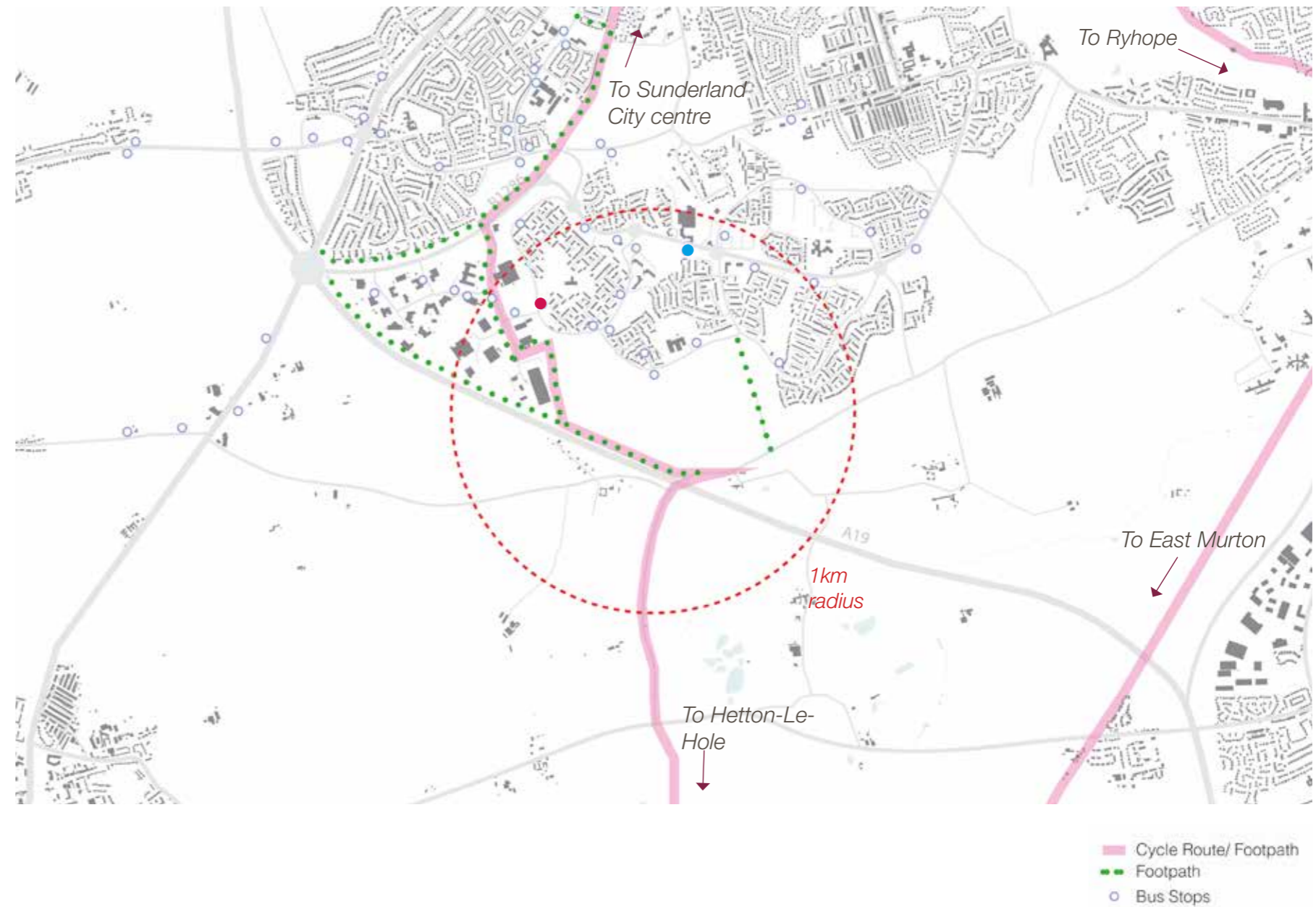
## Recreational Routes

The National Cycle Network - route 70 passes along the west periphery of the site.

A footpath/ bridleway also travels into the site from the Doxford Business Park, along the A19 and then southwards.

The nearest train station is Sunderland, 5 miles from the site (10 min drive) or Seaham, 6 miles from the site (15 min drive).

There are many well-trodden paths across the site and it is well used by dog walkers.



# 1.7 The Local Neighbourhood

## Housing Density

Housing in the area is fairly low density with homes being built to a density of around 25 per hectare.

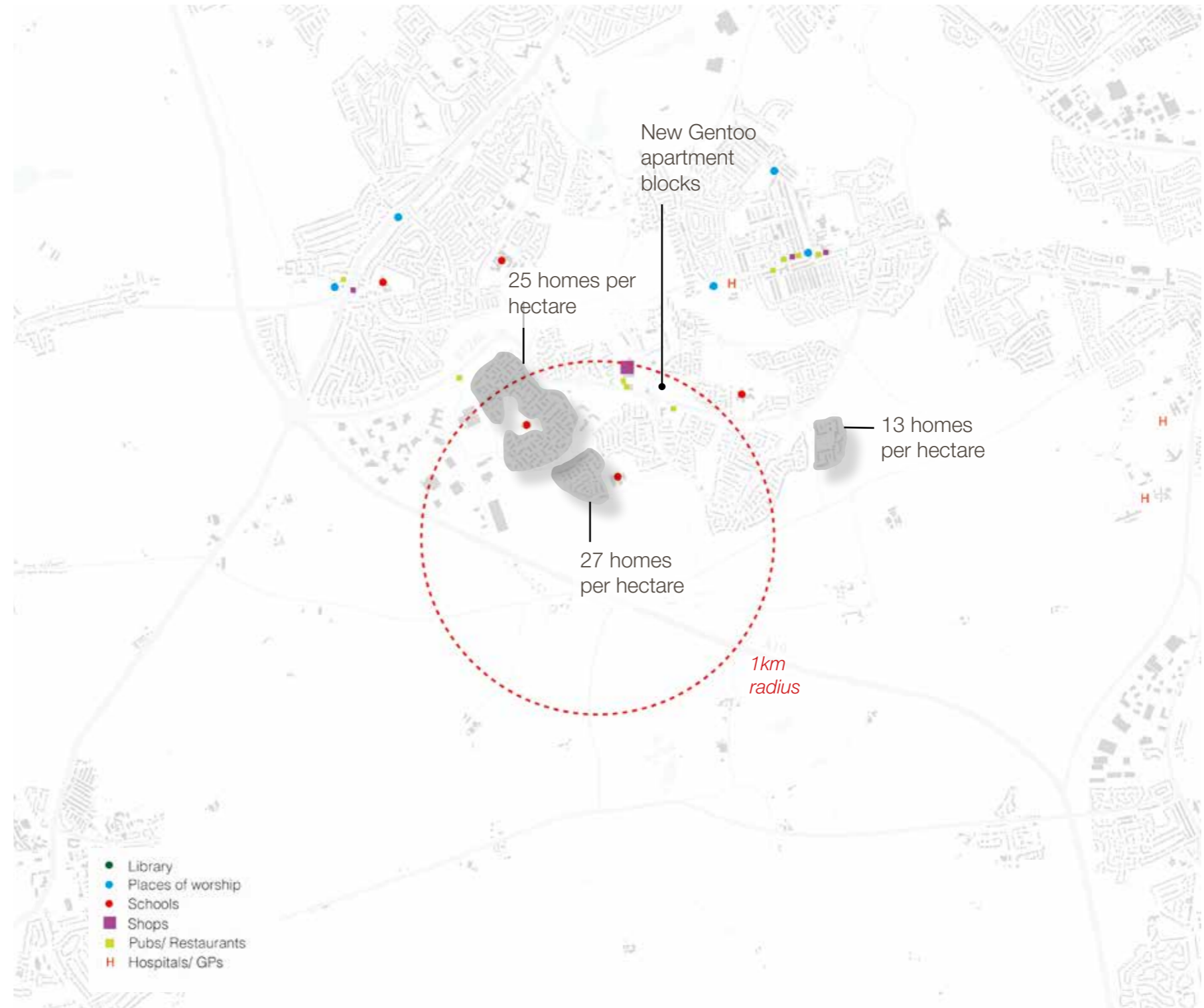
The more recent Gentoo developments are apartment blocks, so these will be much higher density of around 45-65 homes per hectare.

The housing development directly north of the site, around Engleman Way, has been measured at a density of around 27 homes per hectare.

Housing density is measured by outlining a housing area which includes roads and counting the number of homes in that area.

## Local Amenities

There are a number of local amenities in the area, including a cluster of shops around the Morrisons supermarket and the recently opened Aldi Store. These are within a 15 minute walk from Weymouth Road.





## Housing Character

The local area is dominated by residential properties built between 1970 and the early 2000s. The majority of new housing is built in estates - with groups of very similar looking properties, and most if not all properties have brick façades.

A number of council properties have also been demolished in the local area, to be replaced with newer housing stock.



- Pre 1800s
- Pre 1910s
- Pre 1980s
- Pre 1990s
- Pre 2010
- Post 2010



1. Doxford House 1750



2. The new Silksworth Hall 1902



3. Large homes built adjacent to Silksworth Hall Grounds



4. 1970s semi-detached homes



5. Higher density homes and flats built in the 1980s



6. 1980s terraced homes



7. Bungalows built 1980s



8. Early 2000s semi detached homes on land adjacent to the site



9. Gentoo homes built after 2010



10. Gentoo apartment block post 2010

# 2. The Site





# 2.1 Site Description

Google Earth Image ©Google 2016

The following chapter provides details of certain features and constraints present on the site which have influenced the design of the masterplan. The following sections provide a summary of these constraints and any recommendations to be incorporated within the design of the masterplan.

Surveys and assessments were carried out as part of the Environmental Impact Assessment, and further information on results from surveys, recommendations and any mitigation measures are detailed in the Environmental Statement, which has been submitted as part of this application.



*Residential housing estates and the A19 border the site*



*Cereal in grown on the site in the Autumn*



*The site is made up of un-ploughed and ploughed fields*



*There are a number of informal and formal paths throughout the site*



*The site is frequently used by horse riders and dog walkers*



## 2.2 Transport and Movement

**Weymouth Road has been designed to accommodate future housing growth, and two roundabouts have been provided in anticipation of a housing development on the site.**

These roundabouts locate the primary vehicular access points into the site and the siting of the first roads into the scheme.

A Transport Assessment was carried out by Cundall to assess and determine the impact of extra vehicles on the existing road network. The methodology and scope of the assessment was agreed with Sunderland City Council Highway Authority and Highways England.

The capacity of a number of junctions was assessed and traffic surveys were undertaken to obtain existing vehicle flows and to determine the peak period.

### Vehicle Trips Generated by the New Development

In order to provide a robust assessment, the modelling was based upon a maximum development size of 900 new homes being provided on the Chapelgarth site.

The modelling demonstrated that whilst the development will increase vehicle flows in the local area, the junctions will continue to operate within their theoretical design capacity. The extra trip generation resulting from the opening of a new Aldi store close to the site was also incorporated into the model.

The table to the right identifies a number of recommendations to be incorporated into the masterplan with regard to highways and the movement of vehicles around the site.

Highways Recommendations		
Topic	Recommendations	Justification
Proposed Access	The proposed development will require three access points on to Weymouth Road. New access should be provided between Moorside Road and Englemann Way and the use of the Weymouth Road/ Englemann Way roundabout and Weymouth Road/ Portland College roundabout.	The number of homes proposed will require a further access point to increase accessibility into the site, and spread trip generation across all three exits.
Weymouth Road	Our proposed development will not result in additional car parking on Moorside Road as we will be providing sufficient car parking on site to accommodate our demand.	We are aware that a number of residents have mentioned the issue of parking on Moorside Road associated with Doxford International Business Park.
Vehicle Speeds	Traffic calming measures to be incorporated along Weymouth Road.	Local residents have previously indicated that currently vehicles are not adhering to the maximum speed limit on Weymouth Road. An additional survey was undertaken on Weymouth Road between Portland College and Hall Farm Road between 2nd November 2015 and 8th November 2015. The results show that the average speeds for the week are above the maximum speed limit of 30mph.
Parking	The proposed development will provide on average 2 parking spaces per dwelling. These parking spaces will be provided within the curtilage of new properties with visitor parking provided on street.	This will ensure new residents can park within the development, and do not exasperate parking problems in neighbouring areas.
Public Transport	The primary route through the site should be designed to be able to accommodate a bus service, which would serve the new residents.	A bus route through the site would increase access to public transport for those who don't have access to a car.
Cyclist	Cyclists should have access to the majority of the masterplan site through both the proposed road network and shared pedestrian / cycle routes, linking the site to the existing National Cycle Route 70.	This will contribute to new opportunities for recreation which can better health and wellbeing, and maintain access to existing routes.
Pedestrians	Pedestrian permeability will be provided throughout the site, with provision of footways adjacent to the main vehicular routes through the site and pedestrian only routes, linking the masterplan site with the external pedestrian facilities.	Many estates in the local area have not been designed with pedestrians in mind, which can lead to an increase in car use.  This masterplan will be designed to provide maximum pedestrian permeability.

# 2.3 Open Space and Existing Character

At present, the site is predominantly in use as arable farmland with a network of informal footpaths circling and linking between the fields. The site’s agricultural use provides a strong landscape structure defined by the mature field boundaries and adjacent woodland areas.

Chapelgarth can be broken down into seven distinct spaces / character areas. These are illustrated below:



Land-use of the site is both agricultural and open space. The ‘Large Field’, ‘Middle Field’ and ‘Square Field’ are in use for agriculture and support arable crop production. The ‘Plateau’ and ‘Undulating Meadow’ are managed infrequently as semi-improved grassland.

With the site being used predominately for agriculture the landscape cover of the site is limited to hedgerows along most field boundaries, individual hedgerow trees and some small groups of trees. Some of the individual trees are prominent and create a local feature to the site area. Tree lined or

woodland edges exists to the north eastern corner of the site [Blakeney Woods], the south eastern boundary, at Burdon Lane and the north western boundaries adjacent to the disused railway and Moorside Road.

The hedgerows consist of both species-poor and species-rich types. Most are fairly well structured with machine-trimmed sides. Most have been left to grow tall although the hedge along the eastern site boundary is an exception to this. The most valuable hedgerows in terms of species composition are those hedgerows to the northern site boundary running east-west and the southern site boundary although the others are important as ecological / wildlife linkages.

Historic Ordnance Survey plans ranging from 1861 to 2014 illustrate the historic nature of the field patterns and previous vegetation cover. The field boundaries mimic those from the early map editions although some of the hedgerows may have origins that are more recent. The ‘Undulating Meadows’ is

referred to as Silksworth Plantation on Ordnance Survey plans although the ‘plantation’ was felled some time between 1921 and 1951.

The ‘Square Field’ and the northern end of the ‘Undulating Meadows’ are the two areas of the site with the greatest sense of enclosure due to established hedgerow field boundaries and tree lined edges, which reduce views out. In contrast, the ‘Large Field’ and the southern half of the ‘Middle Field’ present a far more open and exposed feel.

Due to the site’s elevated position within the surrounding landscape and the openness of some of the site’s character areas, mid to long outward views from the site are available. These are fundamental to the sense of place and discussed in section 2.11.

Open Space Recommendations		
Topic	Recommendations	Justification
Field boundaries	The existing hedgerows and individual trees are to be retained where possible with minimal sections to be removed. New planting is suggested to ‘in-fill’ older broken sections of hedgerow.	The field boundaries provide legibility to the former agricultural land use. They also provide important habitats and movement corridors for wildlife.
‘Undulating meadow’ character area “Silksworth Plantation”	To be retained as public open space and enhanced as part of the creation of the development’s SANG [Suitable alternative Natural Greenspace] allocation.	To provide natural open space facilities for use by the new and neighbouring residents.
Green Infrastructure	The proposed development should be designed so that residential streets are single sided and face onto existing green infrastructure and adhere to set-backs where possible.	To ensure the open spaces benefit from passive supervision and activation. The setbacks are proposed to protect the existing vegetation from the direct impact of the development.
Green break	The southern edge [embankment] to Weymouth Road is to remain as green open space.	To retain a green break / buffer between the existing residential area of Burdon Vale and the new development.

Existing Green Infrastructure:

- General amenity grassland
- Woodland, scrub & hedgerows
- Semi improved grassland
- Pond with common toads
- Potential Bat roost trees
- Spotted bat foraging activity
- Wildlife corridors
- Landscape Buffer



## 2.4 Recreational Routes

There are no public rights of way, however, many informal desire lines / well-trodden paths dissect the site. These follow the field boundaries, connect to off site routes and are well used by local residents.

The long distance W2W cycleway / multi-user route passes by the edge of the site following the western and southern boundaries before heading south over the Burdon Lane flyover with the A19.

Off-site footpaths pass through Blakeney Woods following a stopped up road adjacent to the eastern boundary of the site. Less formal paths connect from this and wind through the woodland plantation at Burdon Lane. Burdon Village Lane to the south east of the site provides recreational access eastwards connecting to the former Murton Mineral Line, Green link that is proposed to be upgraded as part of the South Sunderland Growth Area.

Further public rights of way; footpaths, bridleways and cycle ways exist through the rural setting to the south of the site. The diagram on the following page identifies existing formal and informal recreational routes around the site.

Recreational Route Recommendations		
Topic	Recommendations	Justification
Walney 2 Wear Cycle Route	Maintain connection to cycle route. Opportunity to enhance the W2W route by diverting it within the scheme, relocating it further away from the A19.	To maintain access and promote use of the route by the future residents - to promote good health and well-being. This would improve the regional perception of the area as experienced by users of the route.
Informal recreational networks	The proposals should aim to formalise key well loved routes and integrate them into the masterplan	The open nature of the site and the proximity to housing estates mean a number of local residents currently use the site for dog walking and a variety of different forms recreation.  The registered footpaths/ bridleways/ cycle paths are also well used and access to these should be maintained and enhanced as part of the masterplan objectives.
Weymouth Road	Opportunity to provide a new pedestrian crossing.	This will increase access to the natural open space network for the residents of neighbouring estates such as Burdon Vale and also help to calm traffic along Weymouth Road.

There are a number of informal footpaths running through the site and adjacent to the site which connect to off site paths and trails.







-  Existing desire lines across site  
[Well trodden paths]  
With 10m green buffer
-  On site desire lines  
through woodland
-  Off site footpaths
-  Public Right of Way  
- [Footpath]
-  Public Right of Way  
- [Bridleway]
-  Great North Forest Trail
-  National Route 70 /  
Walney to Wear [W2W]  
Long distance coast to coast  
cycle route
-  Country Lane
-  Existing accesses to site.  
Links and connections to surrounding  
network.  
Future gateways locations
-  Site adjacent to existing  
footpath through Blakeney  
Local Wildlife Site

# 2.5 Ecological Context

**Surveys commissioned by Sunderland City Council were undertaken across the whole of the South Sunderland Growth Area, including surveys for protected species such as badgers and bats, as well as breeding birds.**

Siglion then commissioned updated surveys to verify habitats present within the Chapelgarth site, and undertake additional bird, hedgerow, and tree surveys. The surveys highlighted the importance of Blakeney Woods, a Local Wildlife Site outside the development site.

Habitats within the site were of lower quality for wildlife, with much of the area comprising arable land used for winter cereal production, although there are a number of hedgerows.

No signs of badger or great crested newts were found, but areas around the site were used by foraging bats, and a roost was located in Blakeney Woods. Some priority species of biodiversity interest were recorded such as brown hare, song thrush, and up to two skylark territories, while common toads occupy a pond outside the Chapelgarth site.

Ecological Recommendations		
Topic	Recommendations	Justification
Blakeney Woods	Blakeney Woods will be protected by a buffer zone of open space around it of a minimum 25m in width. Other areas of woodland will also be protected by a 25m buffer.	These measures avoid any impact on trees which may be possible bat roosts, and retain the ability of the site to support foraging bats, as well as bird species associated with woodland and hedgerow habitats.
Hedgerows and Trees	Buffer zones will also be maintained around key hedgerows and trees, while the Masterplan ensures that ecological networks are maintained around the development.  10m buffer zones from centre line of hedges and trees.	
Sustainable Urban Drainage	Incorporate SUDs into the masterplan	The SUD scheme will also involve the creation and maintenance of wetland habitats of value to wildlife.
Natural Greenspace	Retain and enhance part of the site as natural greenspace.	Will retain use of the site by wildlife.



# 2.6 Trees and Wildlife Areas

A survey was carried out by Chartered Arboriculturalist, All About Trees to assess the quantum, location and value of trees and hedgerows across the site.

All About Trees has been able to ascertain with Sunderland City Council (the Local Planning Authority) on 24th June 2015 that there are no restrictions protecting the trees on the site. The site is not within a Conservation area and there are no Tree Protection Orders [TPOs] at present.

Tree root protection areas (RPA's) are identified on the tree constraints plan. Construction works [including changes in site level] should be avoided in these areas to protect the roots and ensure a sustainable future for the health of the trees.

For details of the existing trees please refer to All About Trees; Arboricultural Tree Constraints Assessment [Jan 2015].

Tree Management Recommendations		
Topic	Recommendations	Justification
Blakeney Woods - Local Wildlife Site	The development should not directly impact on the woods and a buffer between the woods and the new dwellings should be maintained.	To avoid adverse effects on the woodland and to allow the Local Wildlife Site to be maintained and enhanced.
Category 'A' Trees (High Value)	2 x woodlands & 1 x hedge were identified as cat 'A'. These trees pose a considerable constraint to development and should be retained, protected & incorporated within the design where possible.	Trees identified as category A are those of significant high quality and value in terms of arboriculture, landscape or cultural (including conservation) and are in such a condition as to make a substantial contribution (a minimum of 40 years).
Category 'B' Trees (Moderate value)	Many trees, groups, woodland & hedges were identified as cat 'B'. These trees pose a constraint to development and should be retained, protected & incorporated within the design where possible.	Trees identified as category B are those of moderate quality and value in terms of arboriculture, landscape or cultural (including conservation) and are in such a condition as to make a contribution (a minimum of 20 years).
Category 'C' Trees [Low value]	Many trees, groups & hedges were identified as cat 'C'. These trees should not be considered to pose a significant constraint to development but should be retained and protected where possible.	Trees identified as cat 'C', are those of low quality and value in terms of arboriculture, landscape or cultural (including conservation) and are in adequate condition to remain until new planting could be established.



Tree survey plan



Site Photos taken between July and September 2015

# 2.7 Topography

The topography of the site is moderately sloping downwards in a general north-to-north-eastern direction. Across the site there is a change in level in excess of 30m.

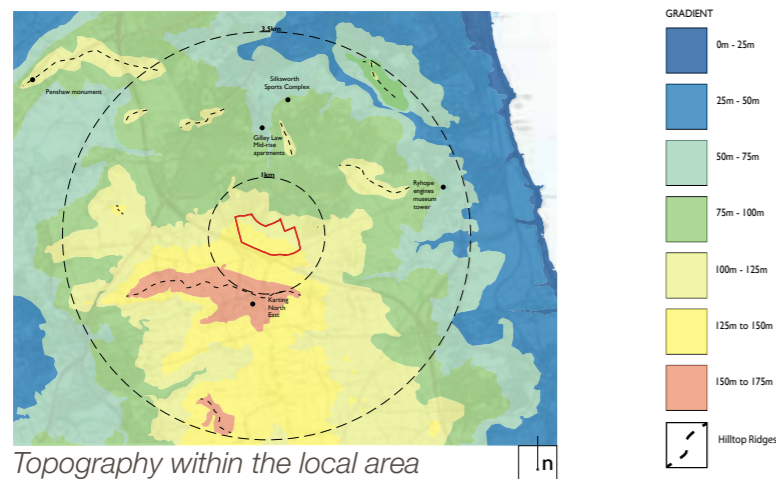
A relatively level area adjacent to Weymouth Road is present to the north eastern corner of the site. This area includes the lowest point on the site adjacent with the roundabout on Weymouth Road at 106.2m AOD.

The land rises quickly from the roundabout opposite Portland Academy to the level area and then more steeply to its southern and western boundaries. The area to the west is split in level creating a smaller level section on an upper terrace prior to rising to the ridge of the 'Embankment'.

Ground in the west of the site undulates significantly, possibly reflecting the shallow underlying solid geology which is exposed in localised cut away areas (presumably man-made).

The surrounding area rises a little further to the south beyond the A19 cutting to an elevation of 170m AOD. The land generally falls away from the site to the west, north and east towards the River Wear, Sunderland City, Ryhope and the coast. Local high points exist to the north including the Tunstall Hills.

Please refer to figures below and opposite for a diagram of the topography within the study area and a diagram of the topography of the site.



Topography Recommendations		
Topic	Recommendations	Justification
Gradients	The development should be designed with regards to access requirements for vehicles and pedestrians and avoid steep gradients where possible.	To ensure accessibility for all.
Maintenance	The landscape design should be designed to avoid gradients steeper than 1:4 for grass cutting operations.	For the safety of maintenance operatives
Existing green infrastructure	Existing levels to be retained around existing vegetation and within tree root protection areas.	To avoid root damage and or the sustainable survival of the vegetation.



## 2.8 Flood Risk and Drainage

Preliminary investigations indicate that the residual risk of flooding from or to the site is considered low from all potential sources.

Due to the site location and topography, overland (or surface) flooding poses the most risk, and there is evidence of this occurring (boggy areas of land around the site and surface water flooding around Blakeney Woods) but drainage proposals and strategies would be able mitigate this.

The site is a green field with no sewer infrastructure crossing or currently serving the site. There are separate foul and storm waters sewers within Weymouth Road flowing in an easterly direction that appear to have been designed to take the future flows (or a portion of) from the Chapelgarth development.

Northumbrian Water Limited (NWL), the sewerage undertaker, have confirmed that they can accept a flow of 10 l/s into their storm water network from the new development. This is only 13% of the existing greenfield runoff rate for the entire site (76 l/s) which the Local Authority (Sunderland City Council) would expect and require the site to discharge at in accordance with the new April 2015 LASOO (Local Authority SUDS Officer Organisation) guidance on storm water runoff.

This restriction provides major betterment compared with SCC requirements and due to the large restriction, substantial on-site Sustainable Urban Drainage Systems will be required which will include swales, retention basins and ponds. The site and storage measures will be designed in accordance with National and Local policies and standards to ensure that the correct level of protection to flood risk for the 1 in 30 and 1 in 100 year events is afforded.

Drainage and Flood Management Recommendations		
Topic	Recommendations	Justification
Sustainable Urban Drainage System	A SUDS scheme will be incorporated into the masterplan to manage water movement around site. It will include the use of swales and underground drainage pipes as well as tree planting and permeable paving.	Will incorporate best practice water management techniques to reduce the effects of any future surface water flooding and tackle the existing boggy conditions on the site.
Drainage Basins	Drainage basins will be incorporated into the masterplan.	These will store water during extreme storm events, so as not to overload the existing system following heavy rainfall.

# 2.9 Geo-Environmental Assessment

A Phase 1 Preliminary Geo-technical and Geo-environmental Assessment was carried out in May 2015 and provided the following summary:

The site is currently predominantly used as farmland with informal footpaths located around the north and western site boundaries, with land generally sloping down to the north.

Small wooded areas form field boundaries and in the west and north east of the site there is evidence of ground having been cut.

### Historic Land Use

The site has undergone only one key use as farmland. Several small buildings existed in the centre of the site before being demolished prior to 1970.

Several localised wooded areas have existed on-site which are now largely removed.

### Geology & Ground Conditions

The sequence is considered likely to comprise Glacial Till overlying the majority of the site, underlain by the Ford Formation (Magnesium Limestone / Dolostone). A small area of Glaciofluvial Deposits are anticipated in the north-eastern corner of the site and in the westernmost area of the site the solid geology of the Ford Formation is expected to outcrop at or near surface. Little made ground is expected, however a thin covering may exist in localised areas associated with the demolition of the on-site buildings along with the back filling of on-site ponds.

Groundwater is likely to be shallow and historically backfilled wells may also be present.

### Geo-Environmental Setting

The key aspects of the environmental setting of the site include:

- The site is underlain by Unproductive Strata, overlying a Principal Aquifer.
- The nearest recorded surface water feature is a small drain immediately adjacent to the site's eastern boundary.
- Potential sources of contamination / hazardous ground gasses identified during either the site inspection or desk-based research include the possibility of ponds backfilled with unknown materials and made ground surrounding the demolished farm building.
- The site's development proposals are generally considered to be of high sensitivity.

### Mineral Extraction/ Coal Mining Risk

The site is not located in an area considered at risk from shallow depth mining or mineral extraction. There is therefore no requirement in accordance with current planning policy for there to be either a coal mining risk assessment undertaken, or for the Coal Authority to be formally consulted.

### Environmental Sensitivity

The environmental sensitivity of the proposed development is considered to be high, however plausible pollutant linkages appear limited in both likelihood and magnitude. The site is situated within a Source Protection Zone III, and the southern portion of the site is within Source Protection Zone II. The western portion of the site is considered Nitrate Vulnerable.

Geo-Environmental Recommendations	
Topic	Recommendations
Geo-Environmental	The risks to the development and identified receptors from contamination are generally considered to be moderate.

# 2.10 Acoustics

To establish the existing noise levels on and around the proposed site, a detailed noise survey has been undertaken. Measurements have been conducted at various locations during the day and at night by trained acousticians (see map below).

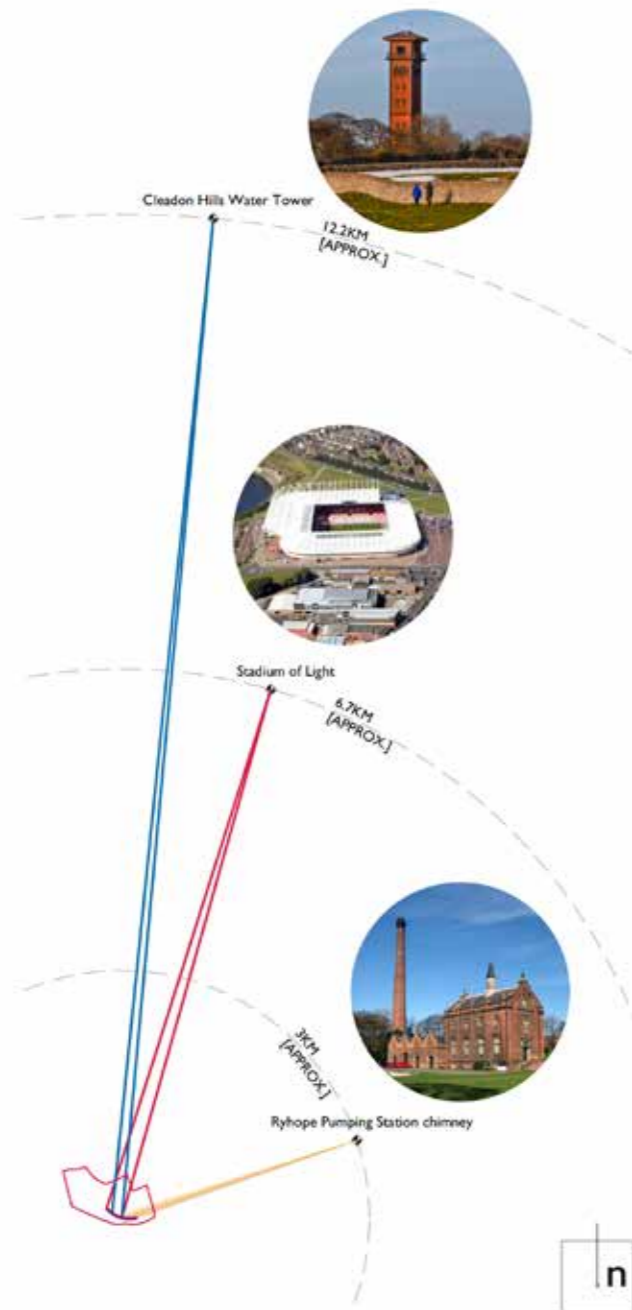


Noise Buffer Recommendations		
Topic	Recommendations	Justification
Noise from the A19	<p>Building of a bund and fence along a section of the A19.</p> <p>This will be incorporated into the Landscape Design element of the masterplan, and will involve safeguarding a strip of land up to 40m wide, along the A19 to accommodate landscaping works to reduce noise impacts.</p>	To protect the southern most dwellings from excessive road traffic noise.
Construction noise and vibrations	<p>Temporary noise screens, restricted working hours and limits to construction plant noise levels that are usually set in the planning conditions, whilst the building contractors will also need permits for their work from the City Council's Environmental Health Officers under the Control of Pollution Act.</p>	To reduce disturbance to existing residents.

# 2.11 Views

The diagram below illustrates local landmarks visible from certain view corridors within the site. The view corridors were surveyed on site by GPS and mapped so as to drive the masterplan.

The diagram on the opposite page provides the initial site survey and analysis of views and the local visual envelope of the site.



Visual Impact Recommendations		
Topic	Recommendations	Justification
Elevated land	Areas of elevated land should be incorporated into the landscape design, as part of the open space provision or parkland.	To allow both local residents and users of the multi-user trial to the south of the site to enjoy retained outward views.
Building Heights	The majority of buildings to be 2-storey with higher buildings concentrated in the areas adjacent to existing development.	To reduce the impact of outward views.
Proposed street pattern and block forms.	Street pattern and block forms to be designed to maximise view corridors across the site and onwards to local landmarks.	To ensure views are maintained and the built-form does not block these.

Due to the site's elevated position within the surrounding landscape and the openness of some of the character areas mid to long views from the site are available. These outward views are considered relevant as they are part of the enjoyment of the site, its character and place making.

As part of the Landscape and Visual Impact Assessment visits around the study area within a 8km radius from the site were made, to review where the site could be viewed from. Views into the site are very limited in many directions due to existing visual barriers including vegetation, localised land form and built areas.

Parts of the site enjoy panoramic views across Sunderland City to the north, the rooftops and landmarks of Ryhope to the east and the sea beyond in a easterly and northerly direction. From select locations, more distant views of the hills of East Boldon, Cleadon and even the Cheviots can be seen.

The open nature of the 'Large Field' provides it with the best outward views particularly from the southern and south eastern boundaries of the field. Middle distance views to the north and east are valued of the Tunstall Hills and historic Ryhope Pumping Station Chimney. Long distance views to the north and east include the Cleadon Hills and Water Tower, Sunderland City and associated landmarks including the Stadium of light and the North Sea. Long distant views of the outline of the Cheviot Hills are also visible on a clear day from some viewpoints look the north west.

The visual character seen from northern areas of the large field include short distance filtered views to the north of the adjacent residential areas. There is also a glimpsed view of the A19 from the most southern point of the site by the W2W cycleway.

From the 'Middle Field' many of the same long distant views can be experienced as per the 'Large Field.' However, they are often less clear and experienced above treetops. Mid distance, views are reduced due to the intervening field margins. Similarly, views outward to the north west are more limited and all the longest views from this area are appreciated from the southern boundary of the field.

The enclosed nature of the 'Square Field' results in very limited outward views.

Heavily filtered views are experienced of the Doxford Business Park from the 'Undulating Meadow' through the adjacent tree lined edge. Some long distance views can be experienced north eastwards between the large gap in the hedgerows to the southern edge of the area.

Views from the 'Embankment' and 'Plateau' areas are limited to near views of Weymouth Road, the neighbouring residential areas, and the back of the Portland Academy Building. Views of Blakeney Woods and up into the fields and following the site land form are also valued.





View from large field north - Chevots visible in the distance



View from large field north - Portland Academy roof in the foreground, Gilley Law mid rise apartments in the middle ground and Boldon / Cleadon Hills in distance



View from large field north east - Sunderland, Stadium of Light and coast line



View from large field east - Across fields to Burdon Lane with landmark Ryhope Engines Museum [Tower] and sea beyond.



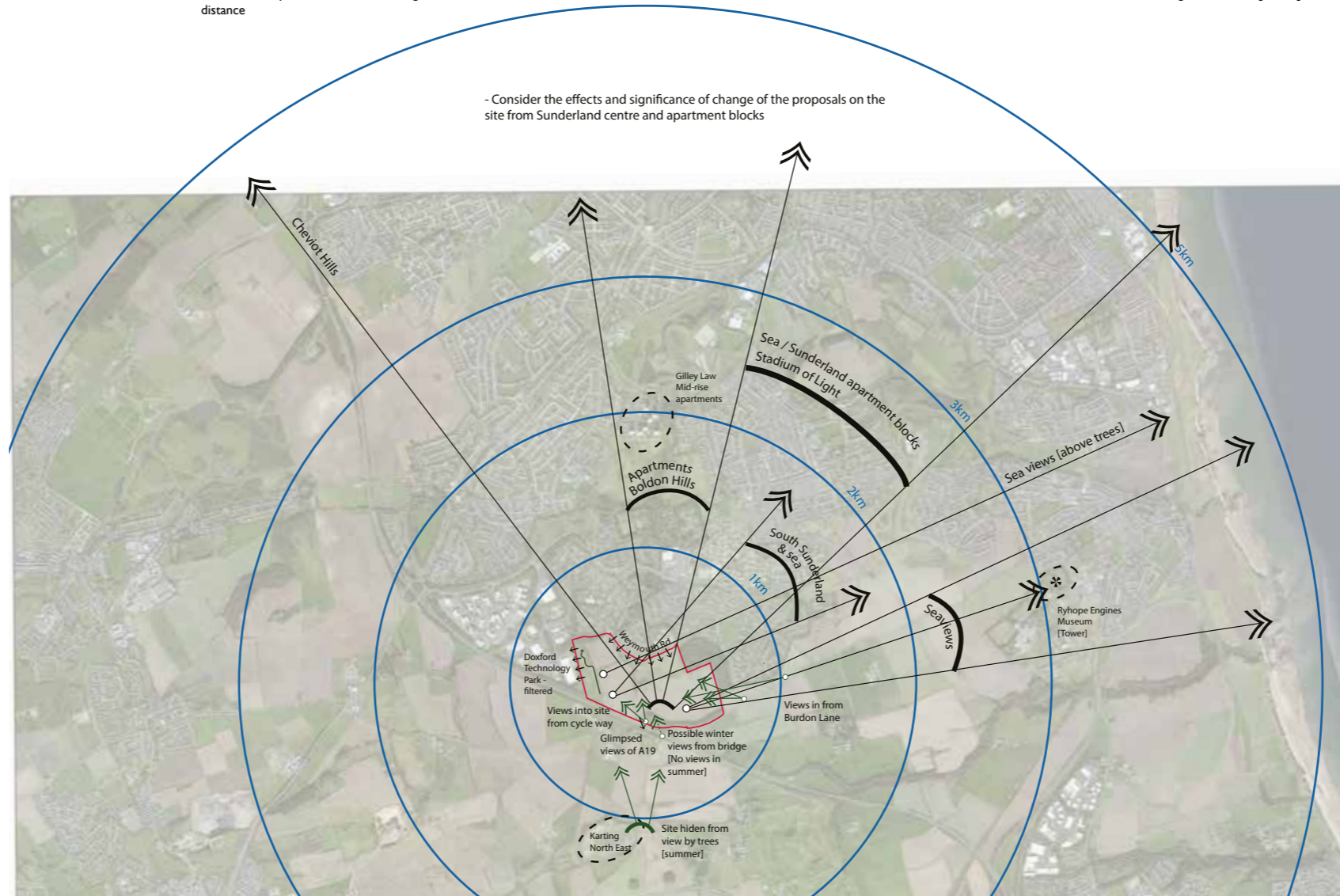
Landscape character of the 'Undulating Meadow' - looking north



Landscape character of the 'Undulating Meadow' - looking south



Specimen tree at the end of the hedgerow dividing the 'Middle Field' with the 'Undulating Meadow'



View north across the square field



View north - across the middle field



View from W2W cycle way - into 'Middle Field' and edge of 'Large Field'.



View from cycle way - and southern extent of site onto A19



# 3. Masterplan Development



# 3.1 Masterplan Origins

**The concept masterplan displayed on the following page was created as part of the initial bid for development of the site, submitted to Sunderland City Council in 2013. This masterplan initially included a school and was drawn up in more detail in order for a capacity study to be produced. The text below is taken from the bid document:**

The Chapelgarth site creates an opportunity for a distinctive suburban extension to the city. This has the potential to include more executive homes which, we believe, is essential for Sunderland to provide attractive housing for business leaders working in the city. There is however competition from surrounding areas such as Durham, Darras Hall and Wynyard; to compete with these established areas any development will need to offer the purchaser something 'special' whilst also being price sensitive. Due to the size of the site careful planning will need to be given to the phasing and release of the land.

Our masterplan is based on a master-developer process. This would involve ourselves as master developers securing a hybrid planning consent for the site, developing strategic infrastructure with possible development of an early phase, and then packaging up subsequent phases for other developers. With this type of master developer process it is important to have a clear masterplan that can 'survive' implementation by a range of house builders. It is also important to put in place a structure including the hybrid consent, design guidance and site briefs to allow the development to be coordinated and quality to be maintained over time.

As we have said, the masterplan for Chapelgarth is based on a 'master developer' model. This is based on the idea that the master developer would establish a strong masterplan for the site through a hybrid planning application but the site would be developed by a series of different house builders over time.

This requires a plan that can be divided up into discreet development parcels that can be developed with a distinctive identity to allow each of the house builders to differentiate their product. The masterplan opposite has been used to assess the yield of the site. This is based on a development made up of 6 sub neighbourhoods, each with 100-200 units, totalling just under 900 units in total. This is a plan for the site that covers just under 46ha, which includes 30ha of development land, 9.5ha of open space, a school and retail area.

*URBED's masterplan for the Millennium Village in Telford was developed in a similar way to the application for Chapelgarth. CGI of homes for the scheme below designed by Lifschutz Davidson Sandilands Architects*





Emerging Masterplan with school, June 2013



Concept masterplan for the site, October 2013

# 3.2 The Brief and Vision

**The brief for the Chapelgarth site is to create a robust masterplan, in line with Siglion's vision, to provide a distinctive suburban extension to the city. The Landscape is a vital part of this development and our Landscape Architect Colour have produced this strategy to integrate the development into the landscape and take advantage of its best features. The Strategy seeks to achieve the following elements:**

We want to create a great place to live. A new neighbourhood which has its own identity and character but which respects and enhances its context and the beautiful landscape setting in which it sits. We want to create a new neighbourhood that people want to walk and cycle round, with public green spaces which both existing and new residents can enjoy.

### 1. Maintain a Sense of Local Identity

Orientate development to retain and optimise on panoramic views and landmarks within the surrounding area, connecting the new neighbourhood with the greater landscape and cultural character of the area. Notable views and landmarks include:

- Cleadon Hills Water Tower
- Ryhope Pumping Station chimney
- Tunstall Hills
- East coast sea views
- Sunderland city skyline and Stadium of Light

Integration of historical and geological interpretation shall help promote the area's rich geology and mining heritage and associated industry.

### 2. Creation of a Sense of Place

Development of the urban grain so that each street

benefits from dual connections to either site level open space and green infrastructure or a long view of adjacent countryside, seascape or landmark. This shall provide every neighbourhood with a desirable view.

### 3. Permeable Streets

Provide a connected and accessible street network which calms traffic and encourages walking and cycling. Creating routes that are easy to navigate and increase access to green open spaces.

### 4. Distinct Character Areas

Development of character areas with their own distinct character, created by housing facing onto the street, a mix of densities, hedges, street trees and open swales.

### 5. Work with the Existing Landform and Topography

Development of circulation and access routes to take into account existing falls and reduce gradients where possible. Utilisation of cut material from excavations for foundations, utilities, roads and swales to create identity and mitigation.

### 6. Access to Open Space and Neighbourhood Assets

Provision of a variety of community focused open spaces within a short walk of all residents. Each community neighbourhood shall be developed around a unique space, setting its identity. Elevated parts of the site shall be retained as public open space so that views can be enjoyed by all.

### 7. Promotion of a Healthy Lifestyle

Creation of a residential destination where the ease of undertaking physical activity becomes a key character:

- Formalise and integrate well-loved footpaths with an enhanced network linked to each new area.

- Traffic calmed streets creating comfortable walking and cycling environment.
- Inclusion of natural play areas and green gyms.

### 8. Onward Access to Non-vehicle Recreational Networks

Connectivity of neighbourhood recreational circuits to regional networks and wider established national leisure trails.

Strengthen cycle connections and use of routes into Sunderland.

### 9. Integration of Blue Infrastructure

Sustainable Urban Drainage including permeable surfaces, swales, attenuation ponds and rain gardens shall be integrated into the design of each neighbourhood community and public open space.

### 10. Promote Ecological Networks

Retain existing green infrastructure and enhance habitat connectivity around margins with native biodiverse planting. Easements to green corridors shall be integrated within the development and public edges maintained.

### 11. Sympathetic Integration of Noise Mitigation Strategies

Provision of a suite of landscape design measures to help reduce the noise impact of the A19

### 12. Provision of Suitable Alternative Natural Greenspace [SANG]:

Reduce the likely significant effect of the development on both the Northumbria Coast Special Protection Area [SPA] and Ramsar Site and Durham Coast Special Area of Conservation [SAC]

# Executive Homes



# Sustainable Urban Drainage

# Natural Open Greenspace



# Health and Well-being



# Village Centre



# 3.3 The Draft SSGA

**At the time of writing, Sunderland City Council's Local Planning Authority are in the process of consulting on the first draft of the South Sunderland Growth Area SPD. This is a Supplementary Planning Document which seeks to designate areas of land to future housing development, and sets out the requirements to growth to be accommodated within the area. The Chapelgarth Site is incorporated into this growth area.**

### The SSGA Vision

'A new sustainable community will be created in South Sunderland which provides a choice of high quality homes in a landscaped setting, well connected to the surrounding area and new and existing local facilities.

The natural and built environment will enhance the distinctive characteristics of this unique area which borders the Sunderland Green Belt and provides views across the city and coast.'

The area of land which makes up the South Sunderland Growth Area (SSGA) has been seen as a future growth area for the city for many years now, with a number of sites allocated as development sites in the 1998 adopted Unitary Development Plan (Chapelgarth, Cherry Knowle Hospitals and land south of Ryhope, along with the Ryhope to Doxford Link Road proposal).

The Growth Area comprises 277ha of land and has the capacity to accommodate approximately 2,800-3,300 new dwellings, approximately 20% of the city's future housing need. Anticipated to be built out over a 15-20 year period.

Chapelgarth has the capacity to accommodate approximately 650 dwellings, Land North of Burdon Lane 995, Cherry Knowle 770 and South Ryhope 450.

Masterplans taken from page 94 and page 96 of the SSGA Draft document, highlighting constraints of the site and an example development layout.



Key infrastructure to be provided across the SSGA:

- Over 50ha of greenspace
- A new two form primary school
- Extension of two existing schools
- Wheeled play facility
- Four play parks
- 3g pitch
- Multi purpose playing field

- Allotments
- Small retail hub
- Extra care facility
- Extensive footpaths and cycleway
- Sections of Burdon Lane to become a multi-user route
- Completion of the Ryhope Doxford Link Road
- Affordable Housing
- Family & Executive Housing



The SSGA document provides guidelines for future development on the Chapelgarth site. In relation to the hybrid application, the table below summarises certain requirements for the scheme. The SSGA document also contains guidelines on the design of new homes including architectural styles and building sustainability, which future developers will be required to follow as they bring forward detailed proposals.



Local Planning Guidance	
Topic	Recommendations
South Sunderland Areas of Additional Natural Greenspace	<p>The creation of South Sunderland Areas of Additional Natural Greenspace (SSAANGs) will be required at a minimum of 8ha per 1000 population or 18ha per 1000 dwellings. SSAANGs should seek to provide areas of alternative natural greenspace to divert people from, in the case of SSGA, the coast. SSAANGs should be implemented by the developer and split over no more than two sites.</p> <p>Green links should be created to ensure all SSAANGs are well connected to one another, producing a network of accessible SSAANGs.</p> <p>SSAANGs should be retained and maintained in perpetuity (minimum of 75 years).</p> <p>Designated sites should not be used as SSAANGs.</p> <p>Please note, for the purpose of this document, we have called this designation SANG (Suitable alternative natural greenspace).</p>
Amenity Open Space	The amount of amenity greenspace required on site will, in part, be determined by the scale of development, the size of the proposed on-site SSAANG, the green links connecting the SSAANG, the SUDS located within the site and the extent of hedgerows, shelter belts, woodlands and associated biodiversity buffers.
Play Space	Each development site should include a formal/informal play facility. A centralised strategic play facility and a wheeled play area that serves the whole of the SSGA will be accommodated at Land North of Burdon Lane.
Allotments/ Community Orchard	Allotments will be required at 15 plots per 1000.
Corridors/Buffers	<p>All existing woodland, hedgerows and other vegetation corridors will be retained and enhanced.</p> <p>Buffers will be required around each of the corridor types- tree belts (25m), hedgerows (10m), copses and local designations (50-100m), National/European designations (buffer dependent on development proposal).</p>
Development Layout within the SSGA	<p>Proposals will be required to:</p> <ul style="list-style-type: none"> <li>• Form a perimeter block development which makes clear distinctions between public and private space.</li> <li>• Provide a variety of block sizes.</li> <li>• Arranging buildings so that they enclose and overlook streets and spaces and have a positive and direct relationship with the public realm.</li> <li>• All developments should front onto the public realm, natural features of the landscape, pedestrian/ multi-user routes, open space and ecological buffers.</li> </ul>

# 3.4 Pre-Application Meetings

**The masterplan was developed in consultation with the local planning authority (LPA) experts, and meetings were set up to present the emerging masterplan. The design team were often challenged on certain aspects of the design, which meant the masterplan improved and became more robust.**

Formal pre-application meetings were held on the following dates:

- 8th December 2014
- 3rd February 2015
- 21st May 2015
- 21st October 2015
- 27th October 2015
- 1st December 2015
- 29th January 2016
- 8th February 2016
- 22nd February 2016

Alongside these, individual meetings with members of the design team and members of each department were held throughout the project to discuss specific topics.

### Planning

The planning officer agreed the scoping response for the EIA, which was required for the scheme. This set out the methodology and the level of assessments and surveys required.

The planning officer pushed for the provision of SANG and amenity green space as identified in the Draft SSGA.

The team were keen to see a range of higher density housing, to help create a sense of place and use land more efficiently, but these were brought down to comply with the SSGA guidelines.

### Urban Design

The comments from the Urban Design team were important in order to realise the vision of creating a sense of place within each new neighbourhood. The officers were keen to see properties facing onto the open green spaces, and the layout of the masterplan was amended in line with this.

### Highways

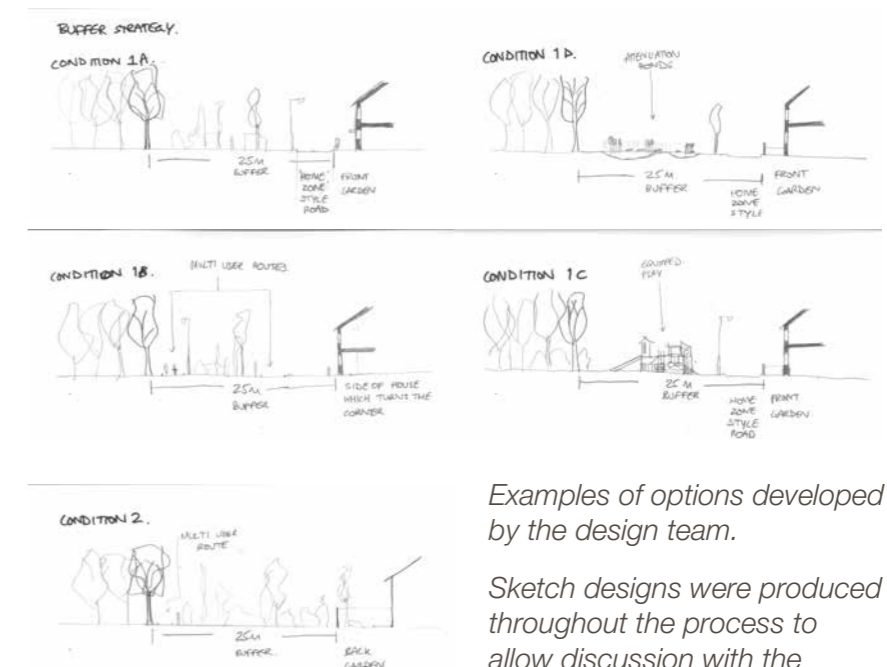
The Highways department agreed the scope of the surveys to be carried out as part of the Transport Assessment and EIA and provided comments on the emerging road layout, access and layout options.

Although the highways department were keen to see no housing accessed directly off the primary route, this was against the Urban Design principles of the masterplan and remains part of the masterplan/design code.

### Ecology and Landscape

Meeting's with the LPA's ecologists were particularly important due to the sensitive woodland areas on the boundary of the site. A buffer strategy was produced and agreed with the Ecologists as part of the masterplan development.

The Ecologists were keen to see green spaces and hedgerows enhanced and these have been picked up in the landscape strategy.



*Examples of options developed by the design team.*

*Sketch designs were produced throughout the process to allow discussion with the design team and Planning Officers.*

# 3.5 Public Engagement

### Consultation Strategy

In February 2015, a consultation strategy was devised to set out the programme of consultation events, identify the audience - including potential people and groups to be contacted - and ascertain the desired outcomes to be achieved through the process.

This strategy was then presented to cabinet members in June 2015 to agree before being put into motion. The diagram on the following page illustrates each event held to gauge feedback and thoughts on the emerging masterplan proposals for Chapelgarth.

### Online Resources and Publicity

In order to reach as wider audience as possible, a wordpress website was created to provide information about the scheme and details of upcoming consultation events. The website also provided a link to sign up to a mailing list, which allowed the team to send out email reminders before events. A total of 158 people have joined the mailing list at the time of writing. The website and the project was initially advertised in the 'vibe magazine' - Summer 2015 edition, pictured below, which was distributed to 115,000 households in the city.



### Local Perceptions

Siglion's aspirations for the site were to produce a robust masterplan for the site to create a distinctive suburban extension to the city of Sunderland. The proposals were in

line with local planning policy which designated the site for housing.

The proposals were also in line with the emerging South Sunderland Growth Area Supplementary Planning Document, which re-allocated the site for housing along with a number of sites on the South Sunderland urban periphery.

Following the first workshop at the Box Youth Project, which is a youth centre in close proximity to the site, it became apparent that a number of local residents had concerns about the principle of development on the site.

### Common Comments

The most common issues raised were the following:

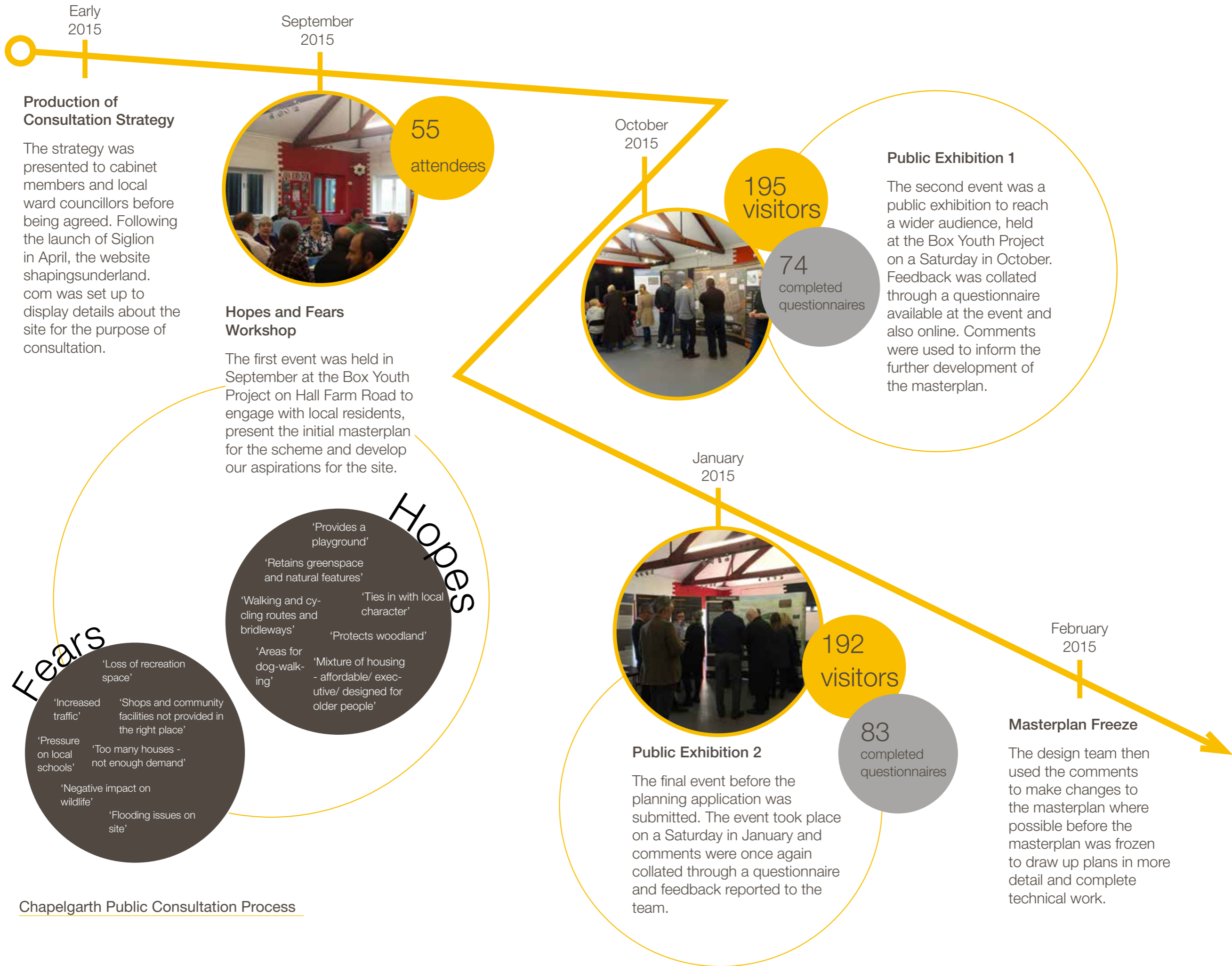
- The number of homes proposed being too high
- Concerns about extra traffic in the local area
- Location of the local centre being too close to existing properties off Weymouth Road
- New properties on Weymouth Road overlooking existing properties off Englemann Way
- Concerns about drainage and flooding, and the new development exasperating flooding problems around Weymouth Road.
- Loss of recreation networks
- Local centre and new play spaces attracting anti-social behaviour
- Loss of countryside

### Response and Changes to the Masterplan

In response to comments, the most significant changes made are detailed below:

- The number of homes was reduced from 900 to 750 and new green spaces and buffers were added.
- Transport assessments were carried out based on the previous figure of 900 homes, and these took into account the new Aldi store opening. They demonstrated whilst there would be more cars on the road, the junctions and roads would still be able to accommodate the extra volume of traffic.
- The housing along Weymouth Road was removed, and replaced by large green buffers with trees to shield views.
- The local centre was scaled down, the potential for a pub was removed and the centre was moved away from Weymouth Road.
- Large drainage ponds were located south of Weymouth Road. Further information was provided to explain the sustainable urban drainage strategy for the site and how this would reduce the risk of flooding not only for the development but for Weymouth Road.
- Recreational networks were incorporated into the masterplan so circular walks would continue to be provided around the site.
- All new housing faced onto new play spaces and public spaces to increase natural surveillance and provide 'eyes on the street'.
- Whilst the development would ultimately result in the loss of farmland, which was also frequently used by local residents due to its open nature, the proposals were in keeping with local planning policy and over a third of the site was being kept as green open space, with enhanced pathways and new tree planting.

**The timeline on pages 46-49 demonstrates the evolution of the masterplan in line with feedback and pre-application advice.**



Chapelgarth Public Consultation Process

## 3.5 Public Engagement

The consultation sessions were really important in understanding local people's views on site. Whilst around half of the people who provided feedback were against the principle of development on the site, this view was contrary to planning policy so was difficult to reconcile.

For those who accepted development on the site, they had a number of concerns about extra traffic, flooding, the amount of housing and recreation routes. We took these concerns on board and hope that further information provided in this document and the Environmental Statement will help to allay some of these concerns.

A selection of quotes taken from the questionnaire responses following the first exhibition are provided below:

In response to ideas to be included within the landscape strategy: all of them if possible. As a potential 1st time buyer around the time this site will be built its exciting to see all of these opinions being considered.

The proposed areas suffers badly with flooding and the main roads are often flooded due to run off from the field. I would prefer a greener area to be larger separating new developments.

Amount of extra traffic this will generate will be chaotic both in the building phase and on completion.

Plenty of traffic free paths and space that is easily accessible.

I would like to see houses not too close together and with plenty of trees and quiet areas. I'd like to see homes for older/retired people who are still active.

Unsure it could be very good for area but change is often scary.

Plenty of parking for residents. Community buildings use for activities and church would be great. Also a lot of dog walking areas.

Good to build a community.

As long as the wildlife is protected and plenty of trees are planted to help with noise pollution from the A19.

The housing should blend in with the area not the houses previously built and maybe have grass roofs, eco friendly and subtle.

The area has a great deal of history, use names from the past, the proposed names are not a good idea - use old ordnance survey maps e.g. old farms, historical names.

*Naming the new neighbourhoods: Following the first exhibition, we received a lot of negative comments about the names we had given to each of the Character Areas. The farmer currently cultivating the land provided us with some possible names, based on local knowledge and historic names. We have taken these on board in naming the new neighbourhoods:*



*Understanding the site: Landscape Architects Colour, in developing the landscape strategy for the site, made recreational routes a key priority. This allowed the majority of existing, well-used routes through the site to be maintained and these would then be enhanced as part of the landscape proposals.*



# 3.6 Masterplan Evolution

The time-line below shows the developing masterplan for the Chapelgarth site. Changes have been made in response to survey results, pre-application meetings and comments from the public consultation events:



April 2015:

This is the first masterplan developed for the site after Siglion was formed. Further site visits and a desktop baseline analysis helped the design team to gain a better understanding of the site context, and the masterplan was re-drawn.



May 2015:

This masterplan looked at the densities being proposed and tried to make more structure from the open space “fingers” from the south of the plan into the neighbourhoods.



**May 2015:**

Brought Clougherboy back on to the masterplan and decreased the number of one-sided streets in the masterplan. Also looked more at the contours and effect on development.



**June 2015:**

Following conversations, advice and an update to the baseline analysis from the highways engineers, civil engineers and planners we have revised the masterplan to take into account the topography, open space requirements, existing road hierarchy and desire lines as well as the requirements for houses to be a maximum of 400m from a bus route. This plan also ties in with the existing road network and aims to maximise permeability through the site with a clear street network and hierarchy.

# 3.6 Masterplan Evolution



**September 2015:**

Following consultation with the Planning Officers at the council the Clougherboy neighbourhood was removed to make space for the SANG requirement. This masterplan was drawn up and displayed at the Hopes and Fears Workshop in September and following Public Exhibition in October.



**November 2015:**

Following feedback from the public consultation, the housing onto Weymouth Road was removed, to mitigate against the impact on existing properties off Englemann Way. The amount of housing was also reduced to cater for larger buffer areas and green space.





*Plot drawing of the masterplan to identify densities.*



**January 2015:**

The 3D aerial shows 750 homes and over 14 hectares of natural greenspace and was drawn up for the second exhibition to give people an idea of the density and heights throughout the development. The properties directly off Weymouth Road have been removed to provide a green buffer and large drainage pond/basins have been drawn to capture excess rain from extreme storm events, following consultations with the Lead Flood Authority and Northumbrian Water.



**February 2015:**

The final illustrative masterplan for the scheme. The green buffer along Weymouth Road has been increased to provide further landscaping around the drainage basins.

# 4. The Masterplan





# 4.1 Illustrative Masterplan

The work carried out and detailed in the previous chapters has cumulated in the illustrative masterplan shown on the following page. The masterplan can accommodate a maximum of 750 new homes, with a local centre providing up to 1,000sq m of floorspace. Each principle of the illustrative masterplan is described in more detail on the following pages.

As the application is hybrid, and in order to fix the principles of the masterplan so future development is brought about as intended, a **Design Code** has been produced.

The Design Code is a separate document which provides instructions on how to design future elements of the masterplan, and these instructions will be conditioned as part of the planning application to require future developers to adhere to them under planning law.

This planning application seeks consent for a maximum of 750 homes on the site. The indicative figures in the table have been generated from the illustrative masterplan:

Indicative Area Schedule: Based on the illustrative masterplan

Type	Area	Area (Hectares)	Houses (Units)	Local Centre Floorspace (Square metres)
Neighbourhood	Character Area 1	3.22	91	
	Character area 2	7.16	166	
	Character Area 3	2.92	80	Up to 1,000
	Character Area 4	10.35	290	
	Character area 5	5.68	117	
	<b>Total:</b>	<b>29.33</b>	<b>744</b>	<b>1,000</b>
Landscape	SANG	13.74		
	Amenity Green Space (Parks and Pocket Parks)	5.18		
	Equipped Play Space	0.36		
	<b>Total:</b>	<b>19.28</b>		



Moorside

Moorside Road

Burdon Vale

Portland Academy

Character Area 1

Weymouth Road

Blakeney Woods

Silksworth Plantation

Character Area 3

Character Area 2

Character Area 4

Character Area 5

Proposed Bellway Scheme

A19

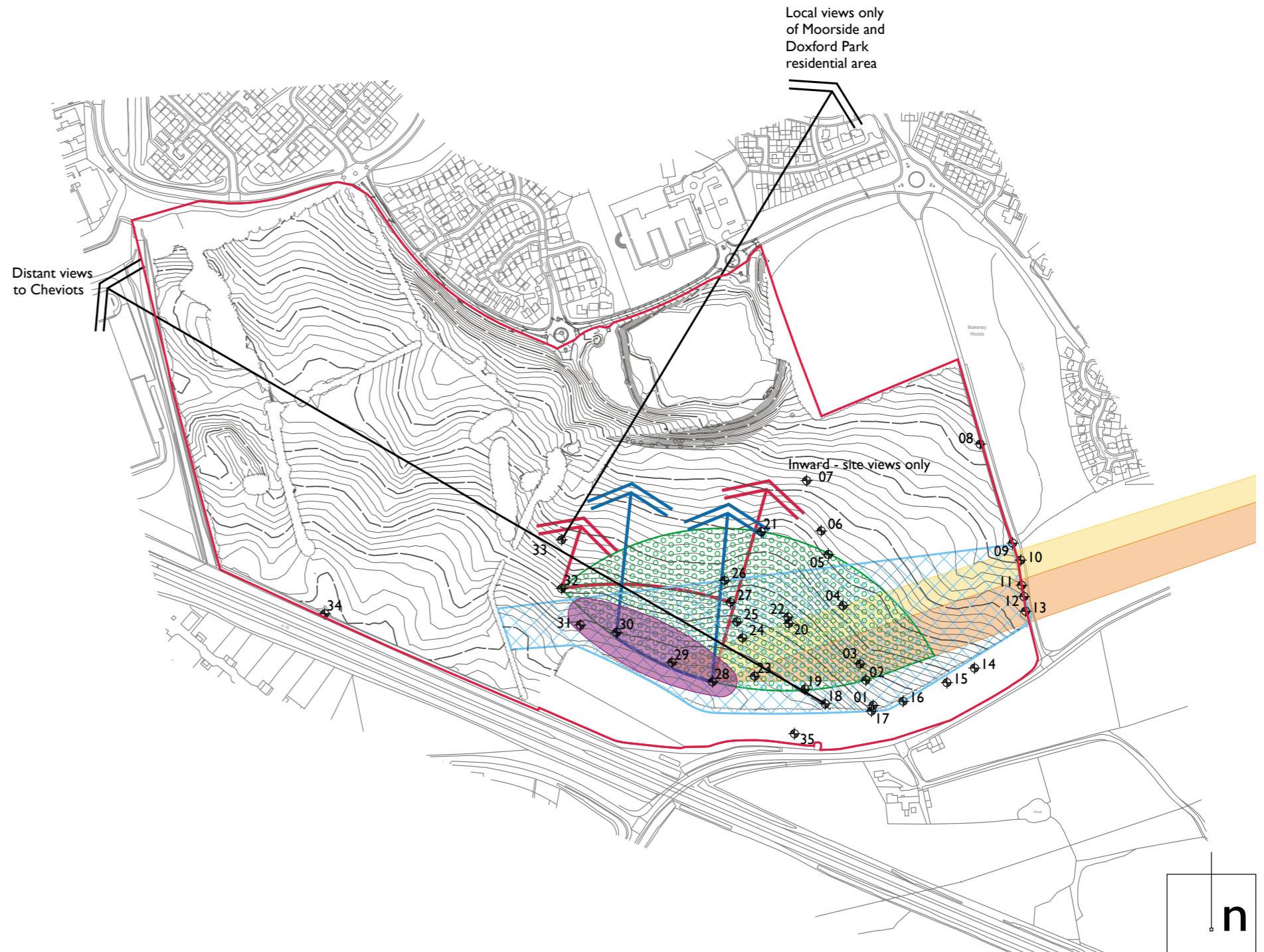
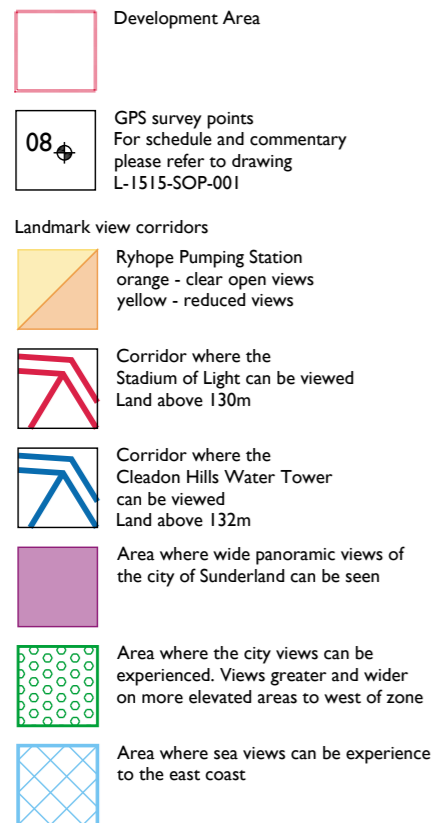
Burdon Lane

# 4.2 View Corridors

Following further detailed survey work on site using GPS, view corridors have been plotted which form important spines within the masterplan. The proposed distribution of open space and street and block patterning have been developed to maximise the character giving views and thus creating a sense of place for the new residential extension.

The vision is to create streets which have views to both ends, either of:

- City of Sunderland;
- The coast;
- The surrounding countryside;
- Existing and proposed green infrastructure on the site, or
- Ryhope pumping station chimney.



The elevated position of the site and outward views are part of the essential DNA of Chapelgarth. Maintaining these views forms part of the organisational principles of the site .



# 4.3 Landscape, Ecology and Open Space

The landscape design of Chapelgarth has been developed to promote well-being and social interaction through:

- A variety of high quality and accessible open spaces
- Interconnected movement network
- Strong landscape structure of existing and proposed green infrastructure

The landscape structure facilitates the masterplan vision by creating an established, mature, green setting for the development of the individual character areas, providing space for activity, visual amenity and social interaction.

There are six main components of the residential landscape structure, each of which has a specific purpose and is illustrated in further detail within the Design Code, identifying materials and plant species. These include:

1. SANG – Suitable Alternative Natural Greenspace
2. Green links and Amenity open spaces
3. Central Park – ‘Joe’s Paddock’
4. Panoramic Park
5. Community Square
6. Pocket Parks

## Ecological Strategy

The ecological strategy forms the basis of the proposed landscape structure to Chapelgarth as follows:

- Promotion of ecological networks through retention of existing green infrastructure and enhancements to margins with new native biodiverse planting to increase habitat connectivity.
- Easements to existing green corridors shall be integrated within the development and public edges maintained.
- Creation of new green spaces of ecological contribution such as the isolated pools within the drainage attenuation ponds, new areas of species rich grassland and new areas of native woodland planting.
- Liaison with Argus Ecology has taken place to ensure design continuity between the existing habitats on site and the proposed, with regards species mix best suited to enhance the existing provision and support local wildlife.



Early sketch illustrating thinking on ecological networks and flow of wildlife corridors

Key to be read with diagram on facing page:

-  Existing Woodland
  - 1/ Blakeney Woods
  - 2/ Woodland at Barden Lane
  - 3/ Woodland along railway cutting
  - 4/ Woodland at Moorside Road
-  SANG (Suitable Alternative Natural Greenspace)
-  Existing Trees and Hedges
-  Green Links / Amenity Open Space
-  Central Park ‘Joe’s Paddock’
-  Panoramic Park
-  Community Heart
-  Community Square
-  Pocket Parks (including doorstep play)
-  Play areas
-  Residential Blocks





Open Space Types

# 4.4 Recreational Routes

The Chapelgarth approach to recreation is to integrate a network of footpaths, cycleways and equestrian routes into the fabric of the masterplan and thus connect with the open space provision along leafy green links and the off-site network.

Part of the vision for Chapelgarth is to create an active healthy lifestyle, enhance wellbeing and greater connection with nature. The recreational provision would be provided via:-

### SANG

Provision of minimum area of 13.5Ha of Suitable Alternative Natural Greenspace [SANG], creating a dog friendly walking community. Surfaced footpaths with choice of seating will be provided along the route.

### Green links

The masterplan draws on the network existing desire lines. The proposals formalised as many of these footpaths as possible connecting them to the greater network and creating links between programmed open spaces. Opportunities for green gym equipment and fitness stations will be provided. Existing vegetation will be enhanced with further native planting. Fruit and herb type planting can be promoted creating edible edges.

### Community Streets

The lanes and the green streets of the development are to be designed to promote reduced speed, including shared surface areas to encourage informal play and neighbour interaction.

### Playable Spaces

Endless possibilities for informal and equipped play have been developed into this layout. Natural play will be encouraged along the recreational networks creating stimulating environments for all ages. Doorstep equipped play will be provided close to dwellings.

### Fitness circuits

The masterplan is very permeable to non-vehicular movement. This will allow for a series of measured fitness circuits and cycling routes to be created that link the neighbouring residential developments through the site and onwards to off-site recreational networks. Circuits can be highlighted with marker posts, to make the resource highly visible.



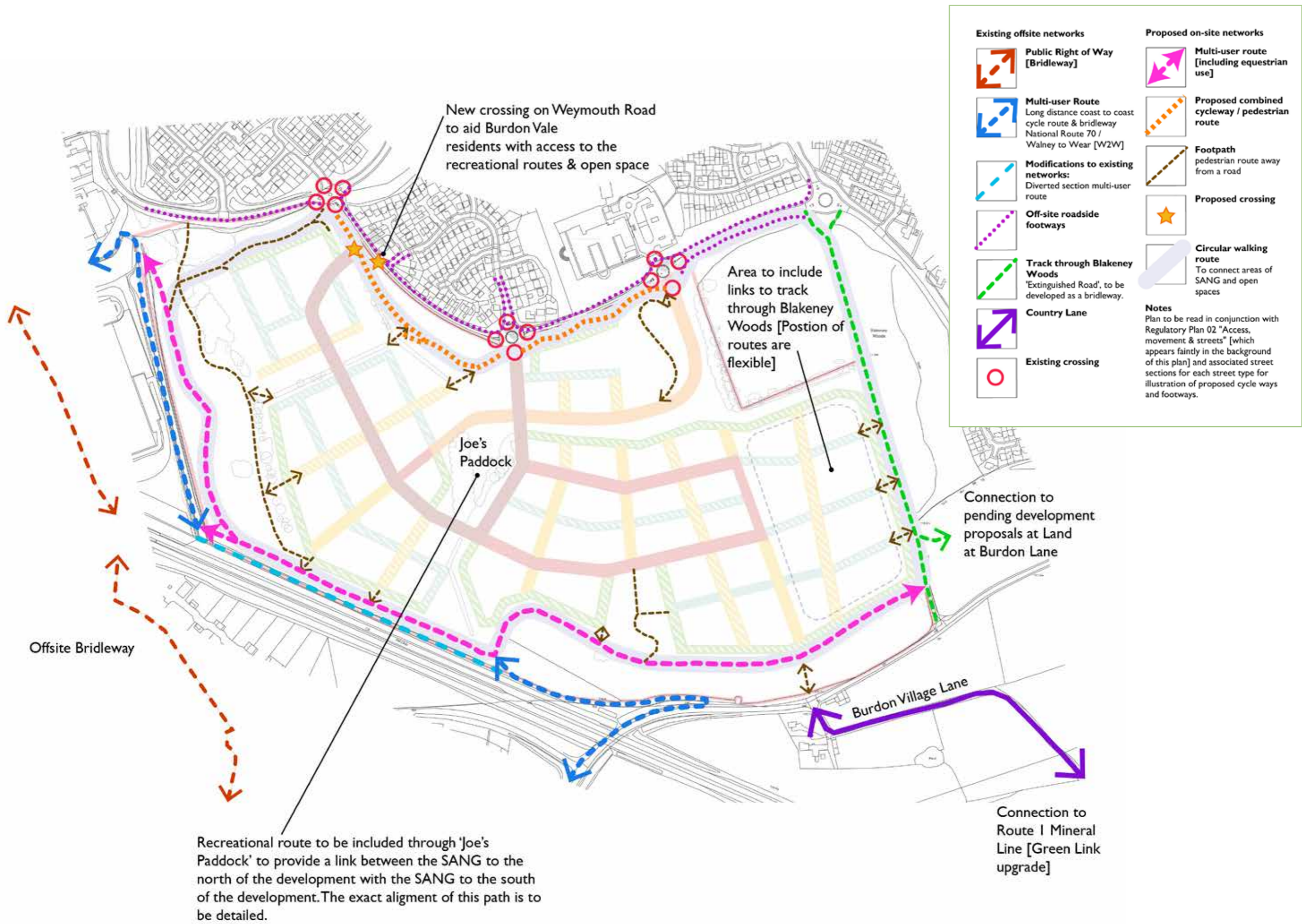
Indicative circuit around the proposed SANG provision [approx 3.1km]



Indicative 5km fitness route. [Illustrating the opportunity to create a Chapelgarth Parkrun]

The following key is to be read with the facing plan which illustrates the proposed recreational networks:

Existing offsite networks		Proposed on-site networks	
	<b>Public Right of Way [Bridleway]</b>		<b>Multi-user route [including equestrian use]</b>
	<b>Multi-user Route</b> Long distance coast to coast cycle route & bridleway National Route 70 / Walney to Wear [W2W]		<b>Proposed combined cycleway / pedestrian route</b>
	<b>Modifications to existing networks:</b> Diverted section multi-user route		<b>Footway</b> pavement beside a road
	<b>Off-site roadside footways</b>		<b>Footpath</b> pedestrian route away from a road
	<b>Track through Blakeney Woods</b> 'Extinguished Road', to be developed as a bridleway.		<b>Green Street</b> Homezone / shared surface
	<b>Country Lane</b>		<b>Proposed crossing</b>
	<b>Existing crossing</b>		<b>Gateway</b>

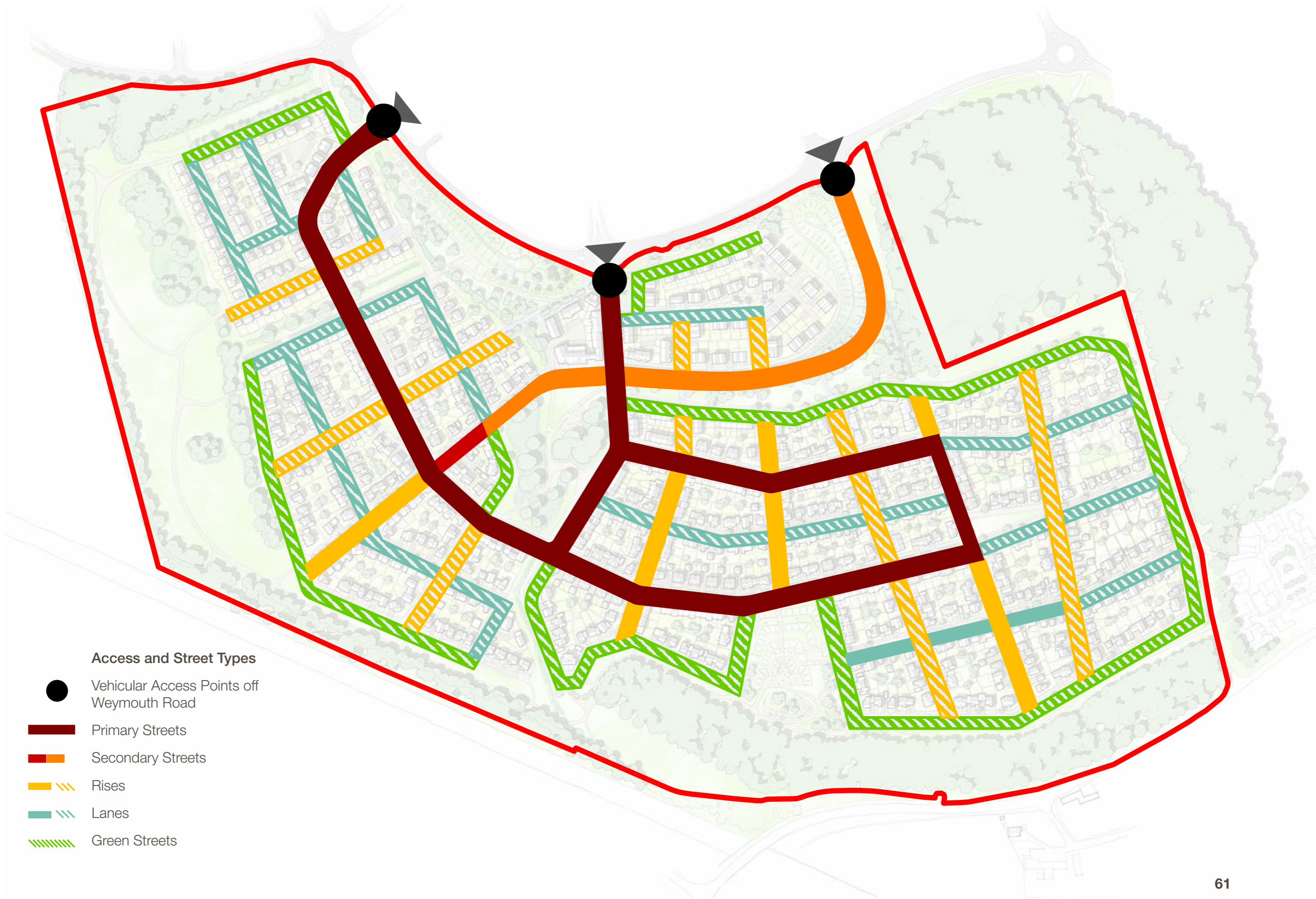


# 4.5 Access and Street Types

The road hierarchy has been designed to take account of the site's topography and aims to create as few steep gradient roads as possible mindful that some may be steeper reflecting the hillside character. Further information on each street type is provided in the table below:

Dimensions are of the road corridor from between plot boundaries. For building set-backs please refer to the design code.

<p><b>Primary Street</b></p> <p>The Primary Street provides the initial network from Weymouth Road linking together all character areas and key public spaces. The street is designed to accommodate public transport and will include an off carriageway shared cycleway / footway.</p> <p>Off carriageway visitor parking will be accommodated within a verge to one side of the street and a swale will be integrated into</p>	<p>the opposite, lower side. Direct access to properties is permitted at intervals.</p> <p>The street will act as a green spine through the development and will have street trees to both sides of the carriageway at a maximum 10m apart so as to create a meaningful leafy boulevard environment.</p>	
<p><b>Secondary Streets</b></p> <p>Provides the alternative access from Weymouth Road from the east and connects into the 'Primary Street' at the heart of the development and onto the eastern character areas and public spaces.</p> <p>The street will continue the green spine through the development from the 'Primary Street' and will have street trees to both sides of the</p>	<p>carriageway at similar spacing to the 'Primary Street'.</p> <p>The secondary street will be single sided as it passes Blakeney Woods and will have a Boulevard character with street trees and off carriageway shared cycleway / footway.</p> <p>Off carriageway visitor parking will be accommodated within a verge along with sections of swale at intervals. Direct access to properties is permitted.</p>	
<p><b>Rises</b></p> <p>These residential streets are defined by their placement on the site running perpendicular to the general slope of the land. They are laid out like 'Mikado sticks' and provide visual links between the multi-user route running along the elevated south with long-views out to the north.</p>	<p>They are to be designed as a lower order residential street albeit still creating a leafy character with street trees to one side within a wide verge which is to accommodate a swale where necessary.</p>	
<p><b>Lanes</b></p> <p>These streets are of a similar order to the rises but are laid out in a general east – west direction to form a grid with the 'Rises'. These streets generally follow the contours of the site.</p>	<p>They are to have a home-zone character with reduced vehicle speeds created by the inclusion of chicanes; alternating verges which accommodate multiple street trees and parking at intervals.</p> <p>The surface treatment will create a pedestrian and cycle friendly environment.</p>	
<p><b>Green Streets</b></p> <p>These streets lead on from the Rises and Lanes and are located at the edges of the development adjacent to the network of open space provision. The streets are all single sided and the dwellings are to be designed to either face on to the green spaces or on occasion be arranged with their gable end facing.</p>	<p>These streets are to be designed as community streets where the access to private drives is a shared surface designed to be used positively as extended amenity space providing informal play provision and community interaction.</p> <p>These streets must ensure 100% permeability for pedestrians and cyclists but may prohibit through traffic.</p>	



## 4.6 Character Areas

**There are five character areas identified within the masterplan. In order for the development to be brought forward as envisioned, a set of rules will be prescribed to each character area within the Design Code document. This will allow each area to develop a different feel and character, and in turn create a sense of place, which will encourage each neighbourhood to have its own identity.**

Each neighbourhood has been given a name for the purpose of this application, and to allow us to build a better picture of what each area will be like. The names chosen are based on local features and local knowledge, and these will be subject to change.

The plan on the following page shows the extent of each character area. The boxes on the following pages then talk about each area in turn and provide an artists illustration of a view into each of the new neighbourhoods.



### Knockles Square

**The first neighbourhood and the gateway into the site when approaching from Moorside Road. This neighbourhood is bounded by woodland and natural open green space to the north and west respectively and hedgerows to the south and provides a mix of low and medium density housing and is based around a small public square at the centre of the development.**



1. View into Knockles Square



# 4.6 Character Areas

## Moor Farm

The second neighbourhood is accessed through the primary route, and is made up of low and very low density housing. The neighbourhood offers direct access to the Silksworth Plantation open greenspace to the west and properties in the east will have views onto the central park.



2. View into Moor Farm



## Chapelgarth Meadows

The third neighbourhood is accessed off the first roundabout on Weymouth Road and is bounded by green space, planted with trees and the drainage ponds. This neighbourhood will contain medium density housing, and house the village centre, with a shop and space for a community facility, overlooking the central park.



3. View into the centre of Chapelgarth Meadows





### Thristley

The fourth neighbourhood will contain very low and low density housing, surrounding the elevated park. The layout of the streets provides views to the sea and city.



4. View down a Thristley street



### Foxcover

The fifth neighbourhood is made up of mostly very low density housing. A more flexible building line will be permitted here creating a more rural feel to the neighbourhood and to encourage houses with large front gardens.



5. Executive housing in Foxcover



# 4.7 Housing and the Community Heart

The majority of the land will be for housing (C3). The diagram on the next page shows the spread of housing across the site and the proposed density areas. The area within a black boundary indicates the location for shops and community/leisure uses, which will form the community heart of the scheme. Permitted use classes here will be: Shops (A1) Financial and Professional Services (A2), Restaurant and Cafes (A3) Offices (B1) Non Residential (D1) and Assembly and Leisure (D2), together with associated landscaping and car parking



### Housing Density

The housing density has been defined to create centres at the heart of each neighbourhood. Higher density housing also follows the primary and secondary routes through the site, to create a strong frontage here. Housing density across the site has been categorised as follows:

- Very low density: Housing in these areas will be permitted to be 10-20 units per hectare;
- Low density: Housing in these areas will be permitted to be 22-32 units per hectare;
- Medium density: Housing in these areas will be permitted to be 35-40 units per hectare.

### Housing Type

The majority of housing will be detached or semi-detached properties, with some terraced housing. Siglioni are committed to deliver a minimum of 20% executive homes on the site, in line with the SSGA aspirations. However we believe in encouraging mixed communities and envision that the homes will mostly be 3-4 bedroom houses. An indicative mix would be as follows:

- 75% to be 3-4 bedroom homes
- 20% to be executive - 5+ bedrooms (committed)
- 5% to be 2 bedroom homes

### Building Heights

The majority of houses will be permitted to be built up to an eaves height of 2-storeys. This will allow bungalows to be built and homes to have rooms in the roof, with dormer windows. Homes in Character Area 3 and closer to the urban edge and primary routes will be permitted to be built up to an eaves height of 3 storeys.

Properties in prominent gateway positions within each character area will be encouraged to be built up to three storeys in height and add interest to the street scene through the provision of windows on the gable end and architectural detailing on street facing façades.



2 storey Barratt Homes at Trumpington Meadows, with dormer windows

### Housing Tenure

In line with the SSGA, 10% of new homes provided will be for affordable homes, social rent, shared ownership and/or starter homes. These homes will be required to meet the highest energy efficiency standards to reduce fuel bills and will be peppered around the development.

- 90% market sale
- 10% affordable homes/ social rented/ shared ownership/ starter homes



3 storey homes, The Wynd, Amble



# 4.8 Sustainable Urban Drainage Strategy

**Many Local Authorities request Sustainable Urban Drainage Systems (SUDS) to be delivered as part of large housing developments. These help to better manage and control storm water movement around the site to reduce the risk of flooding and improve water quality, whilst incorporating green space and planting into streets which in turn enhances the public realm.**

The SUDS strategy for the site has been designed in line with The Local Lead Flood Authority (LLFA) and Northumbrian Water's (NWL) recommendations for the site.

The installation of a SUDS system will greatly reduce the risk of flooding on the site by storing water in extreme storm events, and will manage the flow of water around the site within underground pipes and swales.

The SUDS strategy requires that within each housing plot or area, no more than 40% of land should be covered with building or paving to be drained (contributing impermeable area) to the site infrastructure drainage system.

## Character Areas 1, 2 and 3

Stormwater from Character Areas 1 to 3 is to be conveyed to two detention basins provided off Weymouth Road to deal with excess water in extreme storm events.

The basins are sized to cope with all flows (unrestricted) from Areas 1 to 3 and are interconnected and utilise flow controls for eventual discharge to the Northumbrian Water sewer infrastructure to previously agreed rates.

These will be delivered as part of the Phase 1 Infrastructure Works. Both basins involve significant earth remodelling to the site which is to be sensitively engineered and formed as part of the landscape design of the Weymouth Frontage.

The basins have been designed to have a maximum gradient of 1:4 to allow safe access for maintenance. The basins are to be predominately dry for most of the year.

## Character Areas 4 and 5

Areas 4-5 are part of a separate stormwater network that discharge to a watercourse in Blakeney Woods.

Stormwater from Areas 4 to 5 is to be conveyed via swales and underground pipes to a discharge point on the eastern boundary. This outlet will discharge flows to the watercourse in Blakeney Woods where the LLFA have agreed a flow rate equal to greenfield runoff. Attenuation is to be provided to Area 4 and 5 to satisfy the LLFA requirements which include flow restrictions to greenfield runoff. Attenuation should be in the form of ponds or basins with a maximum gradient of 1:4 to allow safe access for maintenance and should be in accordance with the LLFA.

The plan adjacent identifies the location of the basins, and the location of potential swales across the entire scheme. These are designed to be incorporated into certain street types and follow the topography of the land.



Artists impression of how the drainage ponds on Weymouth Road could look



Example of a drainage pond



Examples of swales





**SUDS Strategy**



Swales



Drainage Ponds

# 4.9 Phasing and Delivery

Subject to the approval of the hybrid planning consent, the development will be brought forward by different house builders on a parcel by parcel basis. Phase 1 works are proposed to be delivered by Siglion and will include enabling works to access points on Weymouth Road, installation of the drainage ponds and landscaping works.

The development has been divided into a series of parcels based on the neighbourhood character areas. The diagram below sets out parcels of land and the green space they will be attached to (based on the number of dwellings in each parcel). For each parcel of land developed, the attached green space will need to be brought forward alongside it.

This will ensure the landscaping and green space is brought forward as intended. An indication of how the SANG would be delivered based on character areas is then provided on the following pages:



Indicative Phasing Plan

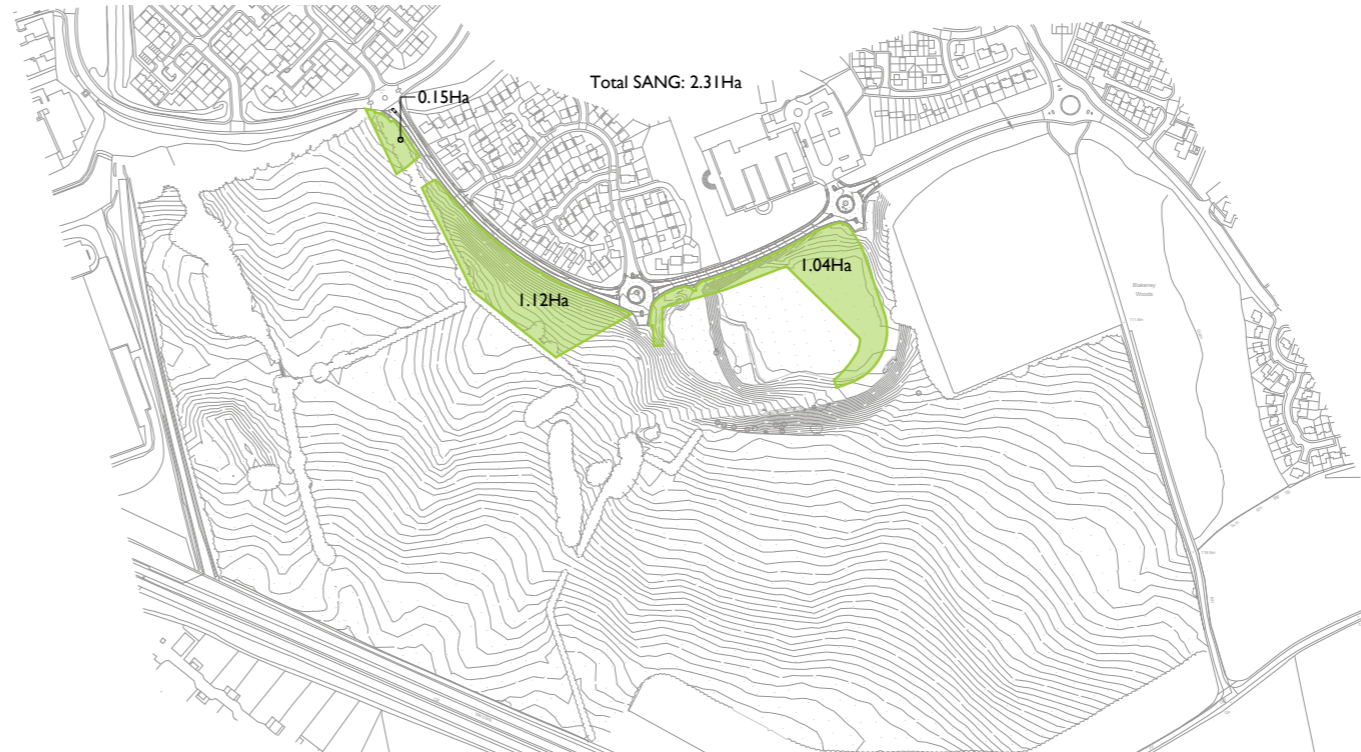
# 4.9 Phasing and Delivery

## Indicative delivery of SANG

### Indicative phase 1 - First Phase Infrastructure Works

Areas of SANG proposed to be delivered as part of the enabling (infrastructure works) in advance of the first phases of residential development:

The area of SANG would be integrated into works to enhance the Weymouth Road frontage and would include footpaths through the areas of two drainage attenuation basins. Estate type railings are proposed to control access and create a safe area for dogs to be off a lead.



### Indicative phase 2 - Character Area 1 - “North Knockles”:

The diagram illustrates that the allocation of SANG for Character area 1 would be partly delivered by the preceding infrastructure works and land around the Woodland edge to Moorside Road.



SANG requirements [based on 91 units]		
Min required SANG [Ha]	Actual SANG [Ha]	Total SANG (Including Weymouth Frontage)
1.64	2.33	3.37

**SANG requirement** for the site is 8 hectares per 1000 population.

Assuming an average household size of 2.25.

$1000/2.25 = 444$  dwellings to generate 1000

population, therefore 8 hectares would be needed for 444 dwellings. Therefore 0.018 hectares needed per dwelling.

# 4.9 Phasing and Delivery

## Indicative phase 3- Character Area 2 - “ Weymouth Meadows”:

The diagram illustrates that the allocation of SANG for Character area 2 would be delivered by the preceding infrastructure works.

SANG requirements [based on 40 units]		
Min required SANG [Ha]	Actual SANG [Ha]	Total SANG (Including Previous Phase)
0.72	1.04	3.37



## Indicative phase 4 - Character Area 3 - “ Moor Farm”:

The diagram illustrates that the allocation of SANG for Character area 3 which would be delivered through part of the retained and enhanced area of Silksworth Plantation.

SANG requirements [based on 166 units]		
Min required SANG [Ha]	Actual SANG [Ha]	Total SANG (Including Previous Phase)
2.98	3.01	6.38





# 4.9 Phasing and Delivery

## Indicative phase 5- Character Area 4 - “Thristley”:

The diagram illustrates that the allocation of SANG for Character area 4 would be partly delivered through the retained and enhanced area of Silksworth Plantation. The rest of the allocation would be delivered through proposed enhancements to the woodland area at Burdon Lane and the proposed recreation corridor running parallel with the northern edge of the woodland.

SANG requirements [based on 290 units]		
Min required SANG [Ha]	Actual SANG [Ha]	Total SANG (Including Weymouth Frontage)
5.22	5.24	11.62



## Indicative phase 6- Character Area 5 - “Moor Farm”:

The diagram illustrates that the allocation of SANG for Character area 5 which would be delivered through the proposed enhancements to the woodland area at Burdon Lane and the proposed recreation corridor running parallel with the northern edge of the woodland.

SANG requirements [based on 117 units]		
Min required SANG [Ha]	Actual SANG [Ha]	Total SANG (Including Weymouth Frontage)
2.11	2.12	13.74



# 4.10 Phase 1 Enabling Works

To enable future development on the site, Siglion will bring forward a number of infrastructure works as part of Phase 1 of the development. These include traffic calming measures to Weymouth Road, a pedestrian crossing over Weymouth Road, work to the vehicular access points into the site and the drainage attenuation basins which will serve the whole scheme. The plan opposite illustrates these works.

### Description of Proposed works

#### Vehicle Accesses

Three vehicle accesses serve the new development from Weymouth Road to the north. The eastern most is from the existing roundabout opposite Portland College. A fourth stub exit exists ready to extend into the site. No further extension works are proposed to this junction under the phase 1 works.

The second vehicle access is central to the northern boundary of the development and would be extended from the existing roundabout opposite Englemann Way. The phase 1 proposals include an extension of this road south into the site by approximately 70m. This road forms one end of the Primary Street section. The Primary Street provides the initial network from Weymouth Road linking together the central and western character areas and key public spaces. The street corridor is 18.25m wide and is designed to accommodate public transport. An off carriageway 3m wide shared cycleway / footway is provided to one side of the street and a 2m wide footpath to the other.

The street will act as a green spine through the development and will have street trees to both sides of the carriage way at a maximum 10m apart so as to create a meaningful leafy boulevard environment. A swale is to be integrated within the verge to the eastern, lower side of the street.

The third vehicle access is proposed as a new junction from Weymouth Road to the west of the development. This junction includes a dedicated right hand turn from Weymouth Road. This road will form the other end of the Primary Road section and is made up of the same components as described above.

#### Non-vehicular Circulation

Weymouth Road currently does not have a footway to its southern verge. To remedy this the phase 1 works propose to integrate a 3m wide off-carriageway shared footpath and cycleway following the engineering works of the new attenuation basins and winding through new planting. The route has been designed at a maximum 1:21 gradient. New footpaths will link into this existing crossing points and one proposed crossing point on Weymouth Road. Stepped access from the cycleway provides direct access south up to the top of the embankment and connecting with the existing desire lines to around the field boundaries. A secondary footpath is provided winding down around and up the form of basin 2.

#### Drainage Attenuation Basins

Two drainage attenuation basins are proposed within the phase 1 works. They are placed to the east and west of the central roundabout. The basin to the west is referred to as basin 1 and the basin to the east is referred to as basin 2. Both basins involve significant earth remodelling to the site which is to be sensitively engineered and formed as part of the landscape design of the Weymouth Frontage. The basins have been designed to have a maximum gradient of 1:4 to allow safe access for maintenance. The basins are to be predominately dry for most of the year.

#### Existing Vegetation

To aid with delivering the third junction to the west of the development a section of hedge and a few hedgerow trees are proposed to be felled as they are directly impacted by the construction of the new road and re-grading works.

A second section of hedgerow to the top of the embankment area to Weymouth Road is proposed to be felled to allow for new stepped access and regrading works.

A group of young self-set trees are proposed to be removed from the eastern dual plateau and terraced area of the site to assist with re-grading the area to accommodate basin 2. The amount of any trees and hedgerows removed will be fully offset by new planting across the scheme.

#### Landscape Design

The phase 1 works form the frontage to Weymouth Road and have four key functions:-

- Welcoming frontage for the new residential extension
- Provision of part of the SANG [Suitable Alternative Natural Greenspace] allocation for the development.
- Visual mitigation to lessen the effects of the change on the outlook of this area from residents of Burdon Vale and existing users of Weymouth Road
- Sensitive integration and landscape mitigation for the drainage attenuation basins.

To provide a green frontage to Weymouth Road substantial new planting works are proposed. These include localised areas of trees and under-storey planting which provide visual screening and a naturalised edge to the sculptural mounds.

Further tree lines and groupings follow the new recreational routes. Each basin is to include permanent isolated pools and a channel designed to provide ecological enhancement. Swathes of grass seed mixes are proposed relating to the new topography and the likelihood of the areas being wet.

The shared cycleway / footpath is proposed to be surfaced in a light buff coloured tarmac to blend into the natural setting but provide a robust, cleaner surface for residents. The footpath around basin two will be surfaced in compacted aggregate to provide a natural feel. The footpath which runs up the Primary Street is to be surfaced in textured concrete flag paving.

Timber benches are proposed at intervals along the shared footpath and cycleway and footpath around basin 1 to provide resting points for walkers.

#### Boundary Edge Treatment

To assist with providing a safe environment for pedestrians and dogs using the SANG facility 1.2m high estate type railings are proposed along the southern verge of Weymouth Road and the eastern edge of basin 2. These would be finished in black powder polyester coating.



Phase 1 Infrastructure Works: Detailed plans have been submitted as part of the planning application package, labelled with the drawing numbers above.

