

CLITHEROE ROAD
WHALLEY

Design and Access Statement



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Architecture
Urban Design
Masterplanning
Landscape
Sustainability
Project Services
Planning
Transport Planning
Interiors
Research

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This report is to be read in conjunction with all drawings and supporting documents submitted as part of the planning application.



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INTRODUCTION

1.1 FORWARD

The purpose of this design and access statement is to provide information to support a full planning application for a portion of land which has previously received outline planning approval in 2013 from Ribble Valley Borough Council, reference 3/2013/0137 and reserved matters approval in January 2016 reference 3/2015/0489.

1.2 INTRODUCTION

This document has been prepared by PRP on behalf of Trafford Housing Trust. The proposal provides 188 no. residential dwellings through a range of market, shared ownership and affordable homes (use-class C3) alongside vehicular access, public open space, new footpaths, landscaping and a sustainable drainage system.

It is structured in accordance with the CABI Guidance 'Design and Access Statements - How to Read, Write and Use Them' and explains the design principles and concepts that have been applied to the layout, scale and appearance of the proposal. It demonstrates how the scheme has been designed in order to take account of the relationship to the surrounding area and describes the proposed access arrangements.

1.3 PROJECT VISION

The overall vision for the site is to provide a safe, high quality and attractive place for people to live. The development will comprise dwellings of varying sizes and tenure in order to meet the needs of the local area.

Housing will be set within a robust, effective and aesthetically pleasing Green Infrastructure comprising new public open space for recreation. Equipped with a children's play area, trim trails and sustainable drainage systems it will enhance the existing assets of the site and its locality.

Existing hedgerows and trees will be retained and incorporated into the proposed layout where possible. Rather than attempting to imitate existing development within Whalley the proposed design is informed and inspired by the character and detail of the architecture and landscape found within the town and the surrounding area.

SECTION 02
SITE ANALYSIS AND CONTEXT APPRAISAL





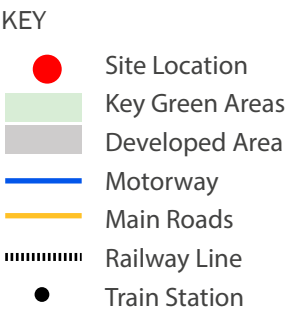
2.1 SITE LOCATION AND CONTEXT

The site sits on the eastern edge of Whalley between the recently completed 'Lawson Rise' Redrow Homes development and the A671.

Whalley is located in North-East Lancashire in the Borough of the Ribble Valley, 4 miles from Clitheroe, 7 miles from Accrington and 8 miles from both Burnley and Blackburn. The village sits on the banks of the River Calder at the heart of the Ribble Valley and is one of Lancashire's most attractive areas.

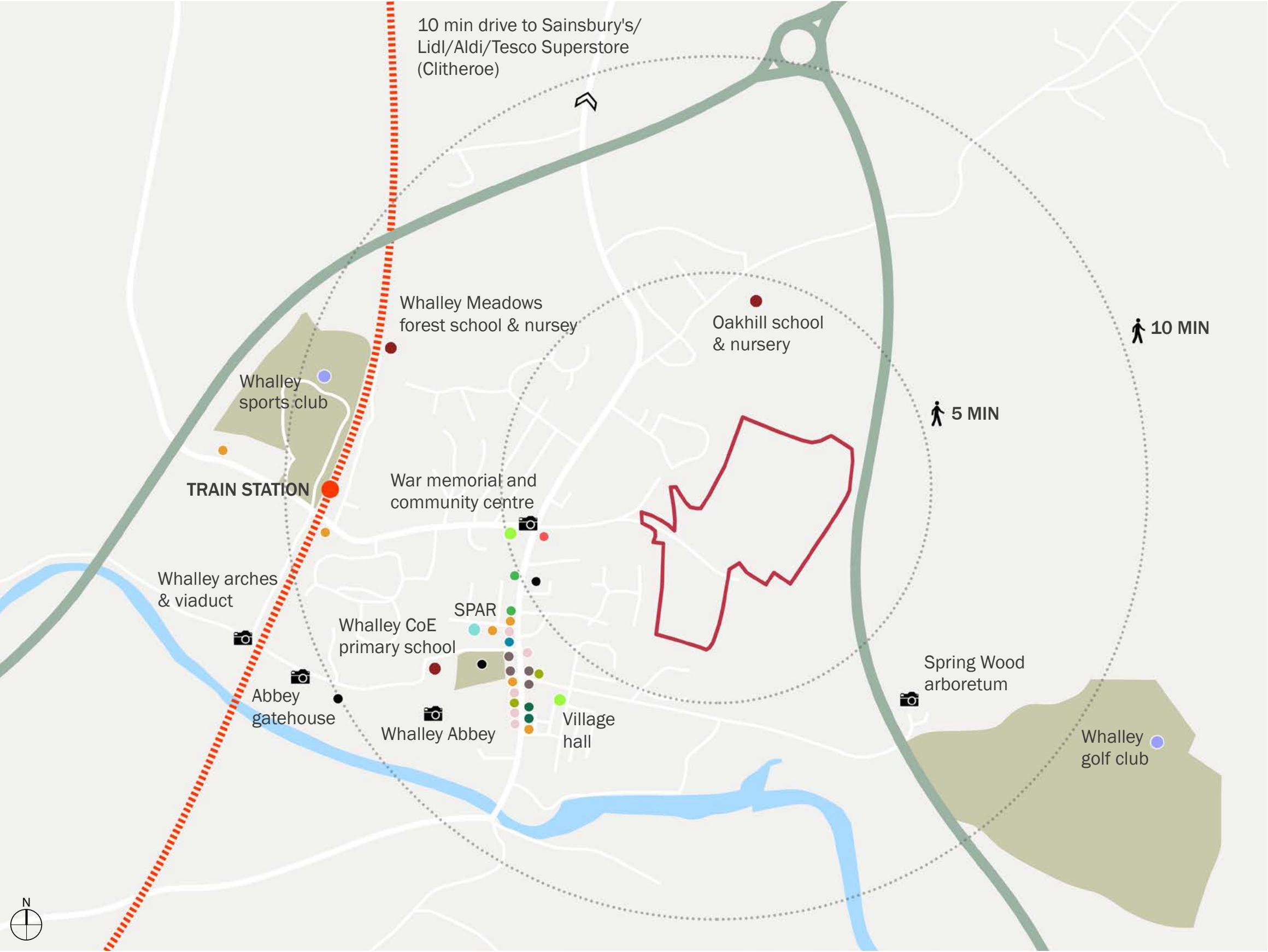
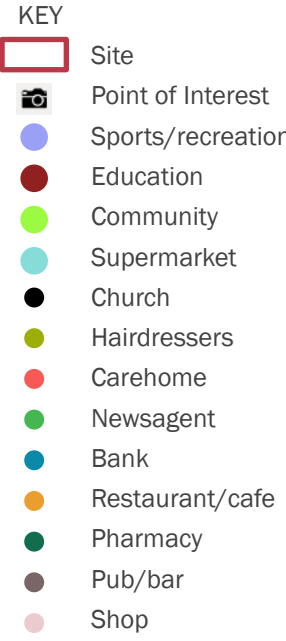
The village is central to a cluster of smaller local settlements including Barrow, Wiswell, and Billington. The A59 runs the length of the area, linking the settlements of Copster Green, Whalley, Clitheroe, Chatburn and Gisburn. The railway links the valley to Blackburn and Yorkshire and beyond.

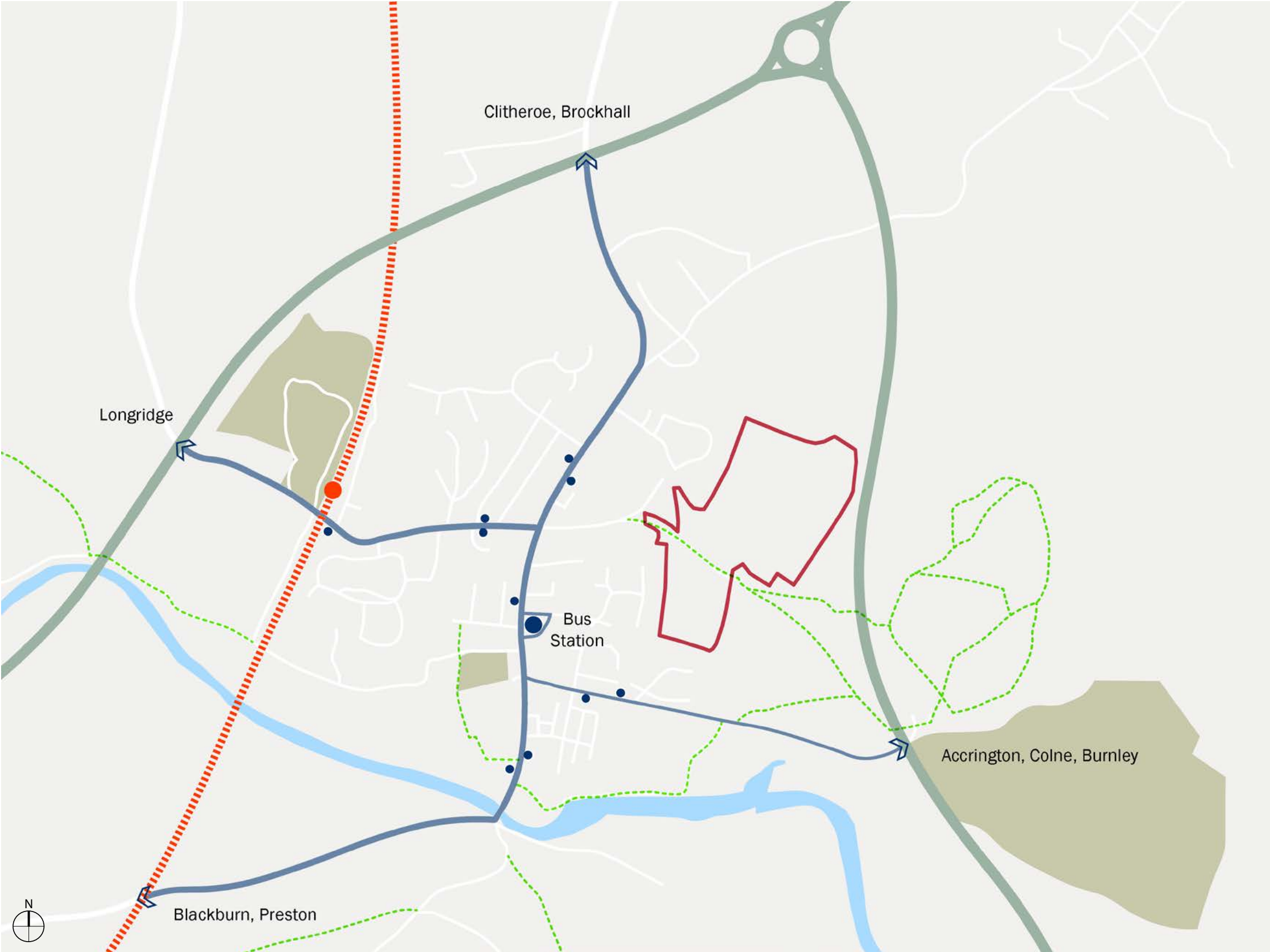
Whalley is located 4 miles south of the Forest of Bowland Area of Outstanding Natural Beauty and lies on the northern edge of the Lancashire Valleys Character Area (The Character of England Landscape, Wildlife and Cultural Features Map produced in 2005 by Natural England with support from English Heritage). It is overshadowed to the south by Whalley Nab, which is 607ft high, it acts as both a picturesque backdrop to the site and is an excellent location for walking and cycling. Surrounded by fields and natural landscaping Whalley is a very desirable place to live. Interestingly the name Whalley means 'The Field of Wells', from 'Well Lea', as there were many wells in the village and vicinity.



2.2 LOCAL AMENITIES

As identified within the outline planning application Whalley has a variety of predominantly residential character areas which sit within a series of open spaces. The site is well connected to a range of supporting services, facilities and community infrastructure which are within 5 – 10 minutes walking distance to the west. The key below illustrates the variety of amenities located within Whalley. Echoing the description within the outline application documents it remains a vibrant settlement that serves its surrounding rural area. It is a Key Service Centre as identified in the Local Development Framework. The LDF Settlement Hierarchy document identifies it as the joint second most significant settlement together with Longridge, Clitheroe is the most with the best provision of services.





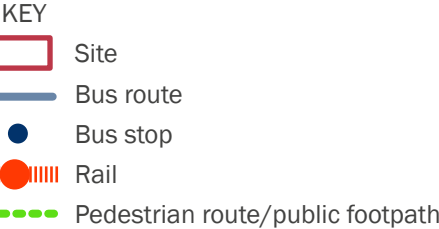
2.3 TRANSPORT LINKS

Whalley benefits from well-established transport links with its own train and bus stations that provide access to Clitheroe, the wider Ribble Valley and beyond. The adjacent diagram indicates the proximity of these to the site together with the location of the road network.

The A59 and A671, both less than 0.5km of the site provide good quality links to the national motorway network.

The site also benefits from a number of public footpaths which provide access to Whalley and the adjacent open countryside.

2.6 Site Features, Topography and Characteristics



2.4 SITE FEATURES, TOPOGRAPHY AND CHARACTERISTICS

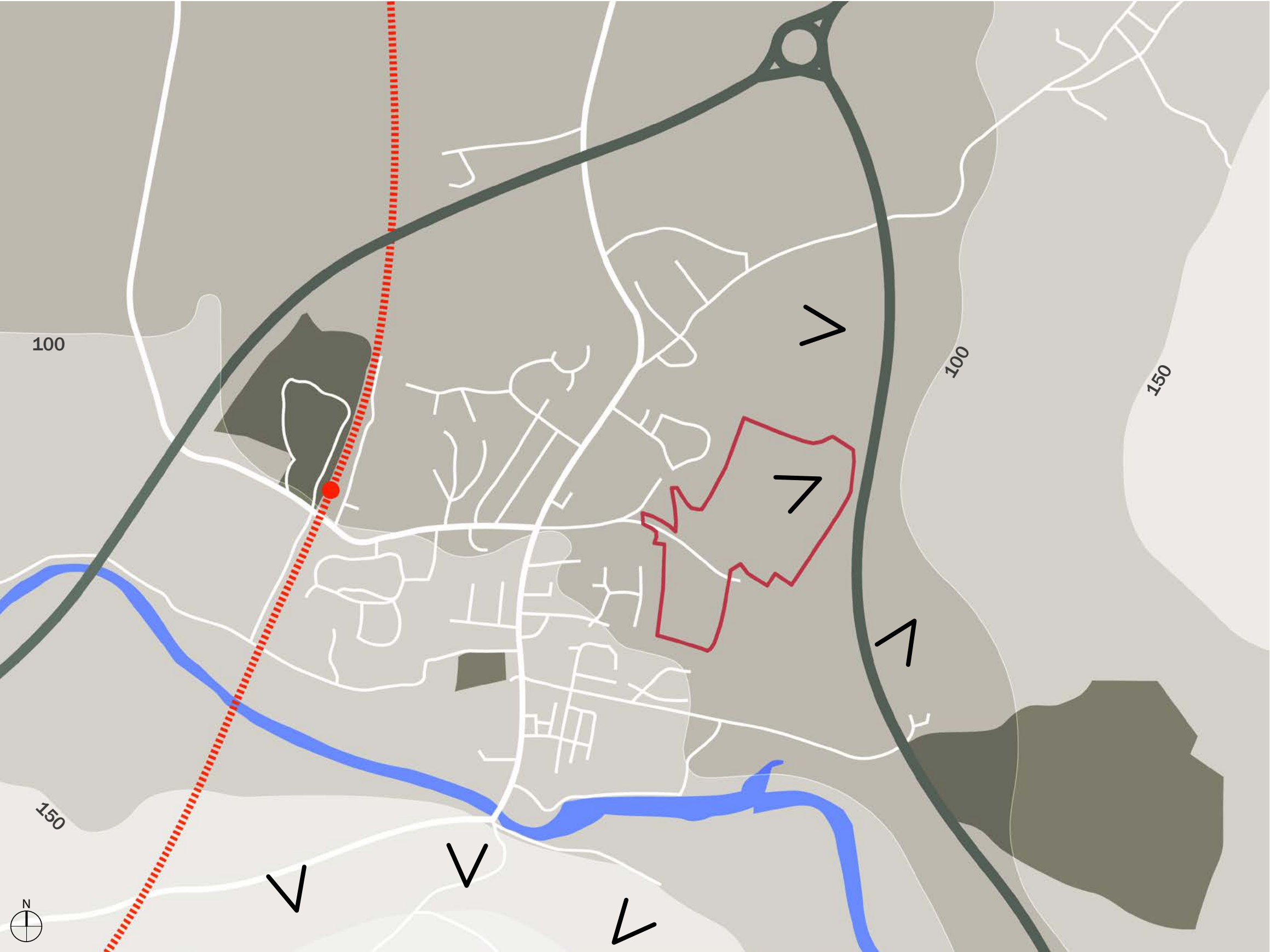
The Haweswater Reservoir aqueduct runs north-west to south-east through the central portion of the site which separates it into two distinct parcels of land.

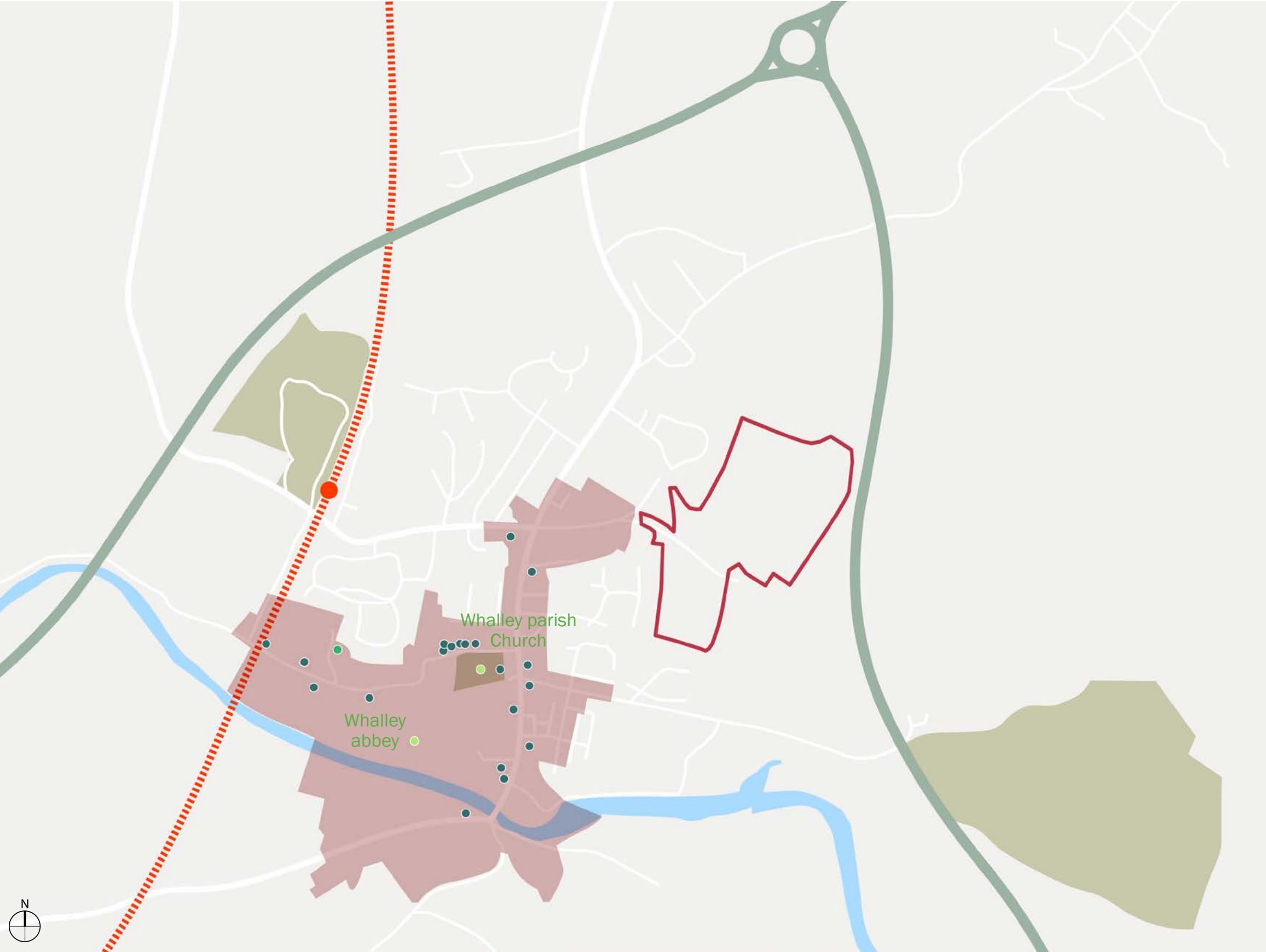
The northern portion of the site is characterised by a relatively significant level change and lies on a south-west facing slope falling from approximately 84m AOD at the north-eastern corner to an area of streams and wetland at 55m AOD in the opposite corner. The change in level is generally gradual with the exception of a hollow area towards the east.

The southern portion sits on more of a plateau falling gradually from east to west by approximately 5m from 59m AOD to 54m AOD, the level change in this area is far less significant to that of the northern part of the site.

All ownership boundaries with the exception of that to the new Redrow Homes development are generally hedgerows of varying quality.

To the north lies open grassland which is within the ownership of Oakhill School and Nursery. Dense mature woodland leading to Spring Wood forms the south-eastern boundary and acts as a landscape buffer between the site and the A671. To the south-west lies further open grassland whilst the eastern boundaries are characterised by existing residential development.





2.5 CONSERVATION AREA

The adjacent diagram demonstrates the extent of the historic conservation area referenced from RVBC's Townscape Appraisal map. It extends from the river Calder which is the area where Whalley first originated up towards Brookes Lane which adjoins the western boundary of the site.

Whilst it does not directly relate to the site we have included this diagram to illustrate the historic character of Whalley. The village has a four Scheduled Ancient Monuments within close proximity to its centre and can be dated back to 628AD with the existence of Roman artefacts at St Mary and All Saints Parish Church. Other notable landmarks are Whalley Viaduct, also known as the Whalley Arches, constructed between 1846 and 1850 and Whalley Abbey which dates back to the 14th century. The village has a total of 23 listed buildings.



- KEY
- Site
 - Conservation area
 - Grade II listed
 - Grade II* listed
 - Grade I listed

2.6 EXISTING CHARACTER

The existing context of Whalley is characterised predominantly by late 19th century two storey properties constructed from local stone with grey slate roofs. Three storey

properties can be found towards the centre of the village to larger buildings. Architectural detail is provided by stone window surrounds and in some cases porches and bay windows.



Brooke's Lane

BROOKE'S LANE

Very relevant to the site context given its adjacency to the site.

- Predominantly strong facing material and window surrounds
- Porches to larger properties
- Front to back roof pitches





Accrington Road



Queen Street



Clitheroe Road



CLITHEROE ROAD

- Front to back roof pitches
- Bay windows
- No porches
- Subtle variation in stone colour



CLITHEROE ROAD

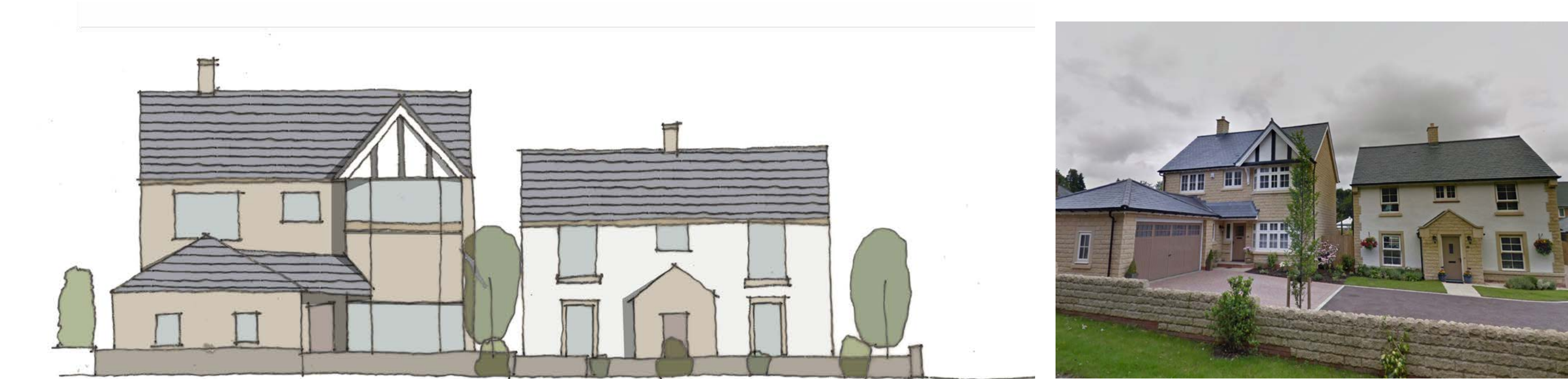
- Use of expressed gables to emphasise corners and end of terraces



2.7 POST 19TH CENTURY TO RECENT CHARACTER



2.8 NEW DEVELOPMENT



Lawson Rise. Redrow. Clitheroe Road



Monks Cross Development. David Wilson Homes. Mitton Road

2.9 SITE PHOTOGRAPHS





2.10 CONSTRAINTS

- Key**
- Proposed primary school site
 - Aproximate location of green space (min 4.5 HA to be proposed)
 - Noise from existing road
 - Species-rich hedgerow
 - Watercourse
 - Location of Aqueduct
 - Public right of way
 - Existing back gardens
 - Telecommunications mast
 - Survey Trees
 - Marshland
 - Steep incline
 - Visually sensitive area
 - Character areas
 - Ancient woodland
 - Contours
 - Pumping station (approximate location)

2.11 OPPORTUNITIES



- Key**
- Views over open space
 - Incorporate existing character into proposal
 - Utilise open green space for public amenity and recreation
 - Incorporate existing watercourse into landscape strategy
 - Utilise existing access points into site to create an accessible and permeable layout
 - Respect back of existing dwellings to retain privacy
 - Utilise existing woodland to reduce road noise
 - Connect with existing development
 - Create active frontage over public open space
 - Incorporate existing footpath into scheme
 - Primary vehicular route - A671
 - Secondary vehicular route - Clitheroe Road
 - Primary route into site



2.12 SPECIALIST REPORTS

A range of site investigations and reports have been carried out in support of the design development and, where necessary, have informed the planning submission. The reports provided include the following:

- 1. Geo-Environmental Assessment
Delta Simons
- 2. Ecology Appraisal including Bat Survey
Delta Simons
- 3. Tree and Hedgerow Survey
Delta Simons
- 4. Noise/Acoustic Assessment
Delta Simons
- 5. Archaeological Geophysical Survey
Delta Simons
- 6. Flood Risk Assessment
Civic Engineers
- 7. Transport Assessment
Crofts
- 8. Travel Plan
Crofts
- 9. Utilities Study
Utility Connections

SECTION 03
DESIGN OBJECTIVES AND SOLUTIONS



3.1 DESIGN OBJECTIVES

There are a number of key design objectives which inform the masterplan:

- To retain & enhance views
- To deliver a high quality “place” which is sustainable, safe, and attractive
- Provide a high quality built and landscaped design that incorporates Best Practice principles
- To deliver a mix of housing - up to 188 new dwellings, offering 1-5 bedroom properties, comprising a range of house types from bungalows, to detached properties and apartments
- To provide an integrated network of public open spaces and new play and trim trail facilities
- To establish a legible environment which promotes sustainability and reducing energy consumption, with a choice of interconnecting attractive streets and pedestrian routes which provide excellent connectivity across the site and facilitate easy access into both Whalley and the surrounding countryside
- To adopt inclusive design, by making the place accessible for all

Identifying the distinctive components that define local character has been a fundamental starting point for the design of the site. Local character comprises a variety of design elements, from the way in which streets interconnect, development blocks and how buildings are arranged, the use of common building materials and boundary treatments.

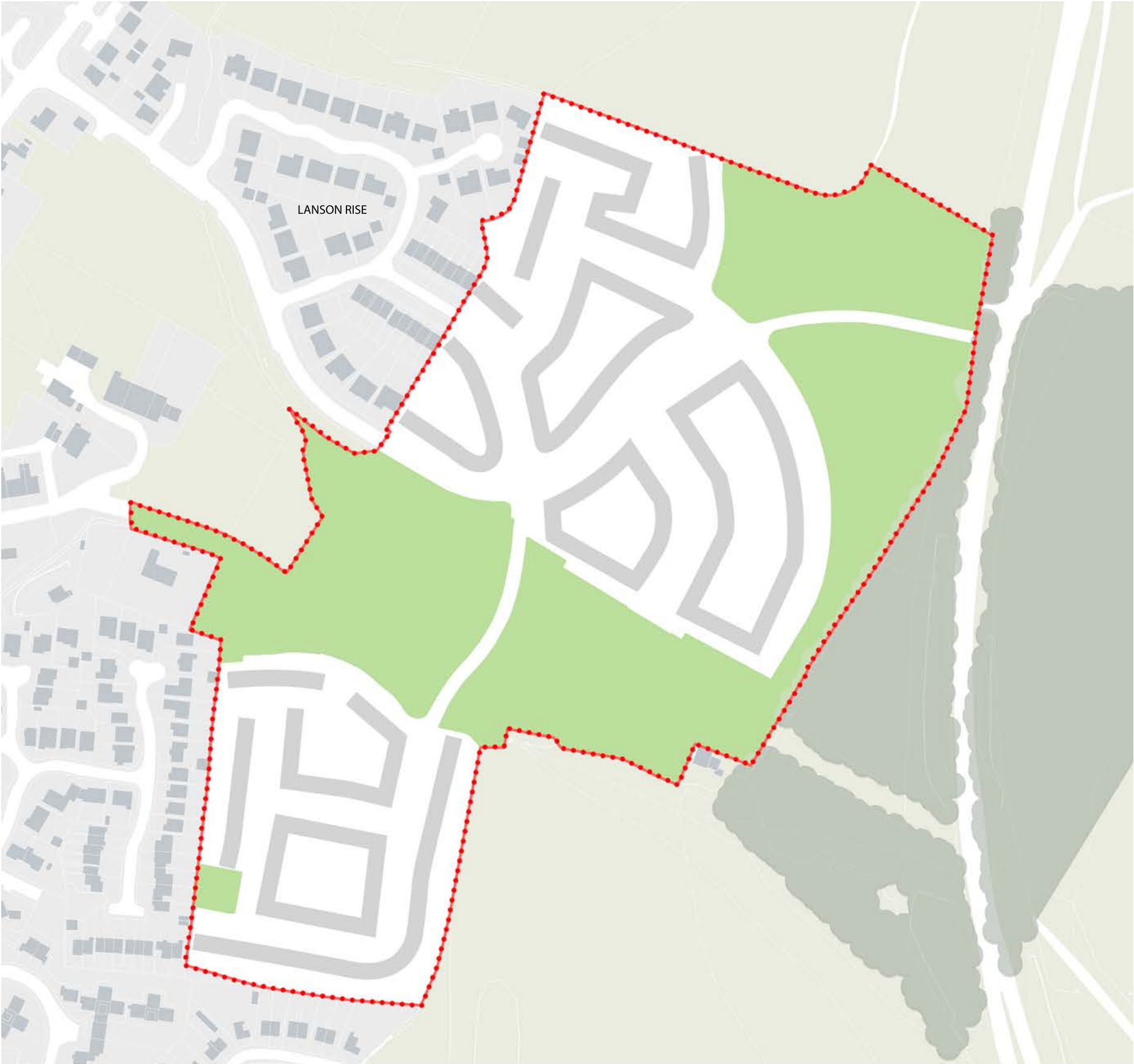
The design proposals do not seek to recreate, or generate a pastiche of what has gone before, but instead look forward to contemporary sustainable design solutions which effectively integrate into the existing fabric of Whalley by way of referencing common building materials, layout and street hierarchy.

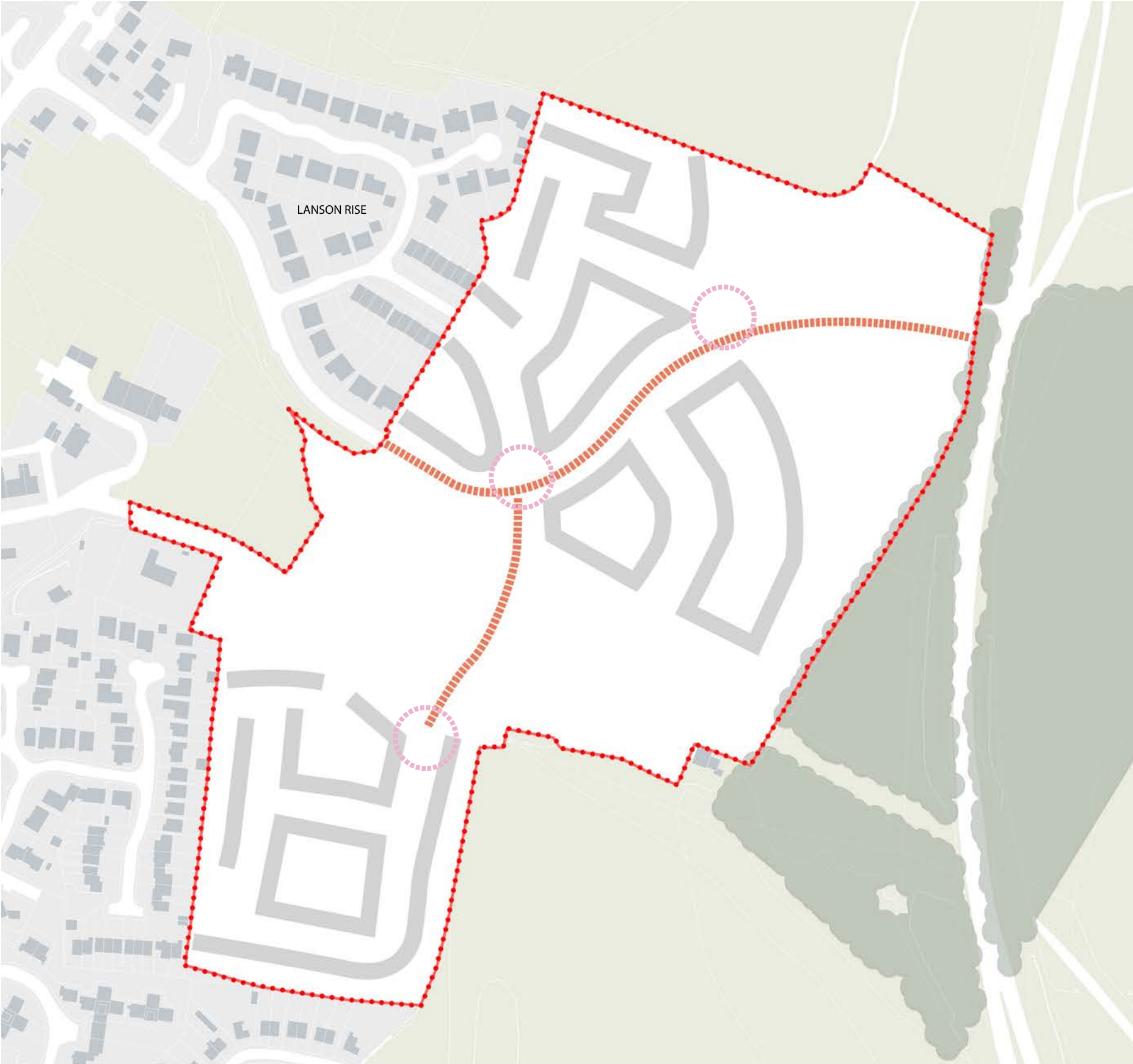
3.2 PROPOSED OPEN GREEN SPACE

Key

Perimeter blocks

Proposed Green Space



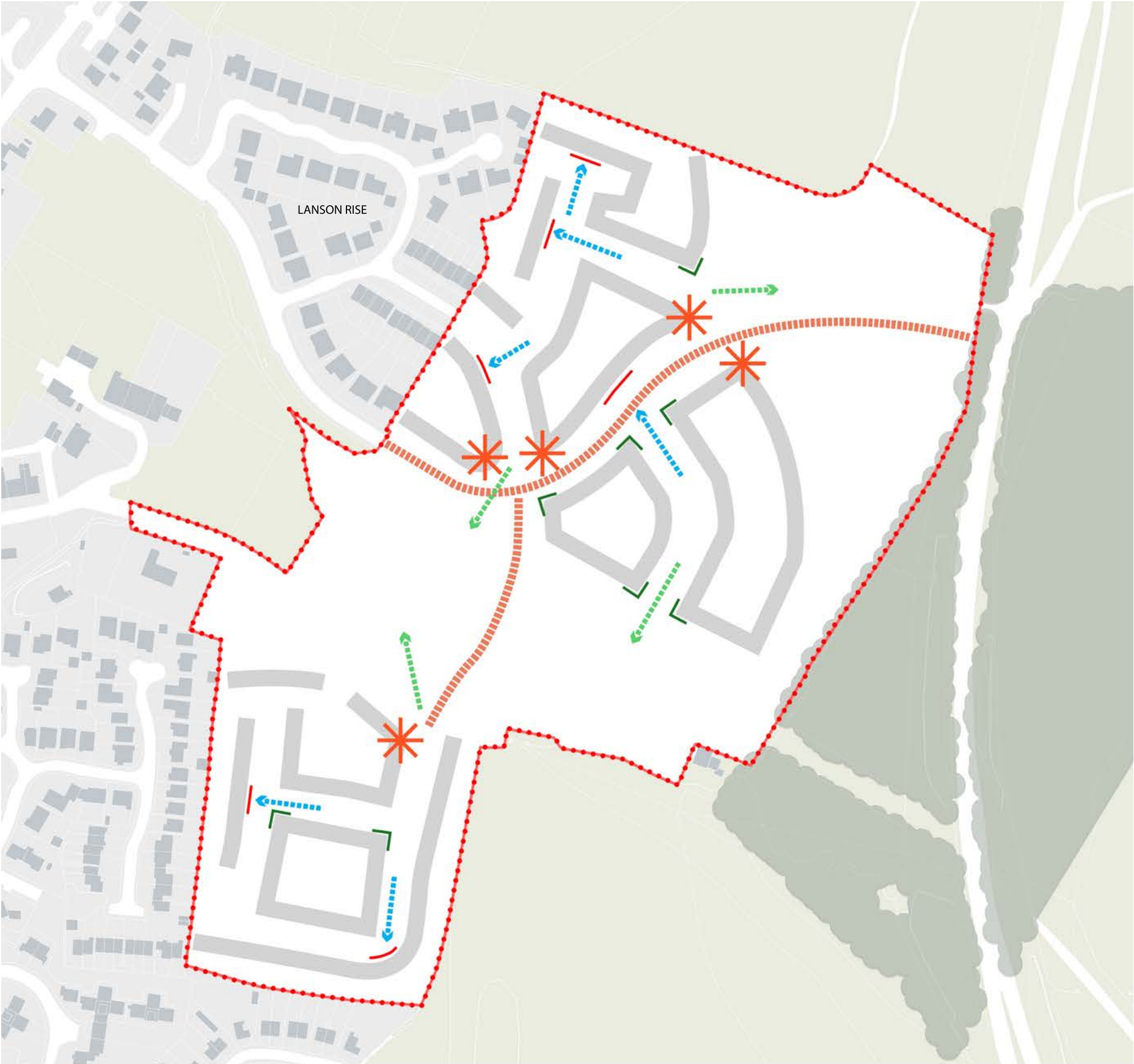


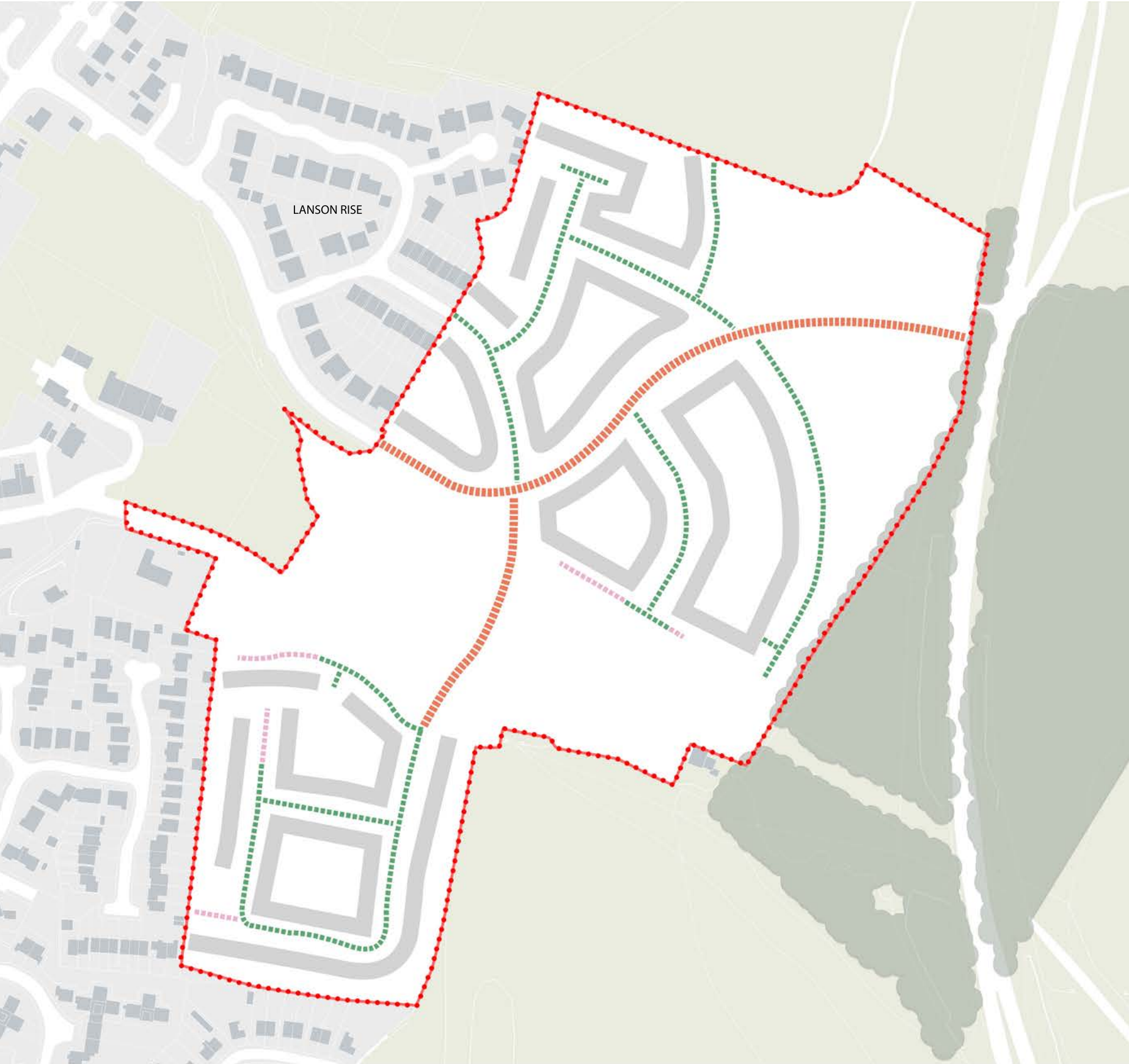
3.3 KEY NODE POINTS

- Key**
- Perimeter blocks
 - Residential avenue
 - Focal point

3.4 SPECIALS AND FRONTAGES

- Key**
- Perimeter blocks
 - Residential avenue
 - View towards built form
 - Vista towards green space / open view
 - Terminate views
 - Emphasise and turn corner
 - Gateway building





3.5 STREET HIERARCHY

3.6 USE AND AMOUNT

The proposal looks to deliver a total of 188 dwellings (C3 residential use class). This land use is in line with the approved outline and reserved matters consent. The site acts as an appropriate location for the expansion of Whalley in this location with its boundaries of the village to the west and A671 to the east. It also benefits from inherent sustainability credentials, being within walking and cycling distance of the existing local facilities as well as public transport services available from the bus and railway stations.

The overall site area is 10.28 hectares (25.40 acres) with the land use being split between developable residential 5.91 hectares (14.60 acres) and open space 4.37 hectares (10.80 acres). The gross residential density is therefore 32 dwellings per hectare (13 per acre) or 18 dwellings per hectare net (7 per acre), which is deemed appropriate when considering the site’s rural location and other recent residential developments in the area.

3.7 TYPOLOGIES

The proposals provide a mixture of 2 to 5 bedroom houses, 1 and 2 bedroom apartments and 2 bedroom bungalows. The accommodation is designed to offer a wide choice with a balance of typologies arranged across the site.

The 4 and 5 bedroom houses are detached properties. The 3 bedroom houses have been designed as detached, semi-detached or short terraces with the 2 bedroom houses taking a similar approach but without a detached option.

The detached properties will also benefit from garages, whether that be integral, attached or detached, depending on their location within the layout.

3.8 SCALE AND DENSITY

The height of the proposed dwellings match the immediate adjacent settlements with all properties sitting at two storeys with the exception of 10 single storey bungalows.

As this proposal is forming part of a full new application and not a reserved matters application pursuant to the original outline consent, the layout is not specifically required to follow the previously approved Parameters Plan. The design team, however, have decided to follow for the most part the previously approved open space parameter plan so the scheme retains a significant proportion of open space and does not appear overdeveloped. It also respects the previous visual impact study which informed the locations where development is best placed.

A balance of street frontages has been developed to allow an appropriate proportion of open space to built form through a variety of front gardens and parking arrangements interspersed with tree and shrub planting.

3.9 LAYOUT AND CHARACTER AREAS

The layout has been developed to provide a street hierarchy that delivers principle and secondary streets. The existing track and watercourse extending from Brooke’s Lane divide the site naturally into two parts both with differing topographical characteristics.

The north portion, as described in section 2.6 of this document, is located on a south-westerly facing slope which falls at a gradient of approximately 1 in 12. As a result, the road layout has been developed to follow the contours where possible, to maximise accessibility and plot relationship. The street character in this area is therefore defined by properties that typically step on their party walls or in the case of detached dwellings step between gardens and drives. This approach delivers a series of stepped street scenes typically seen in the Ribble Valley whilst creating a natural variety in built form.

The fall in topography to the southern portion of the site is significantly less at 1 in 24. As with the northern portion, the streets in this area generally follow the contours of the site. However, they take a less fluid form due to the rectangular nature of the shape of the site. The steps between properties are significantly less resulting in the street scenes remaining varied with stepped frontages and a variety in materiality. In contrast to the northern portion of the site a lighter brick colour has been chosen as the predominant material colour here.

3.10 ACCESS AND MOVEMENT

The Access and Movement strategy for the development site adopts the principles established in the outline consent with a primary spine route linking the recently completed ‘Lawson Rise’ Redrow development to the A671. This route forms the two access points into the site for pedestrians, vehicles and cycles. At the western end the road provides access to and from the local road network into Whalley whilst to the north-east it provides access to the A671 and the wider main road network.

- The internal road layout has been designed to ensure that:
- Primary (avenues) and secondary circulation (streets) have been designed to encourage lower vehicular speed by avoiding straight sections of road by restricting visibility, segregating pedestrian use, and incorporating raised platforms in key locations.
 - Private roads (shared lanes) have been designed as shared surfaces to further reduce vehicular speed and integrate pedestrian use.
 - The primary street will be designed for 30mph, with the secondary streets and shared surfaced residential streets designed for 20mph following ‘home zone’ design principles.

All junctions and the internal road network that they serve have been designed to accommodate emergency and service/refuse vehicles as well as private vehicles, whilst ensuring that roads do not dominate the development. The entire road network has been tracked to ensure that the Local Authority’s refuse vehicle can manoeuvre around the development. Tracking can be provided, on request to demonstrate this.

A network of footpaths is proposed throughout the site which links with the adjoining footpath from Brooke’s Lane and other local Public Rights of Way to Spring Wood and Archbishop’s Wood. The footpath network also provides easy access to dedicated areas of open space within the site.

The road fronting the dwellings to the north-east of the development has been designed to provide a future link through to Oakhill School, should this be required.

The current vehicular track to the existing telecommunications is proposed to be diverted through the proposed road layout with a junction off the north-south avenue. The existing footpath right of way will remain.



3.11 PROPOSED SITE LAYOUT

3.12 ACCOMMODATION SCHEDULE

				GIA		Sub-total GIA		No.	Percent
Market Sale				ft ²	m ²	ft ²	m ²		
HT A	5B8P	2 Storey House		1,870	173.7	13,088	1,216	7	3.7%
HT B	4B7P	2 Storey House		1,617	150.2	56,203	5,407	36	19.1%
HT C	4B7P	2 Storey House		1,453	135.0	8,719	810	6	3.2%
HT D	3B5P	2 Storey House		1,071	99.5	7,497	697	7	3.7%
HT E	3B5P	2 Storey House		1,071	99.5	14,994	1,393	14	7.4%
HT F	3B5P	2 Storey House		1,071	99.5	8,568	796	8	4.3%
HT G	3B4P	2 Storey House		921	85.6	19,349	1,798	21	11.2%
HT H	3B4P Over 55s	2 Storey House		921	85.6	1,843	171	2	1.1%
HT J	2B3P	2 Storey House		766	71.2	15,328	1,424	20	10.6%
HT J	2B3P Over 55s	2 Storey House		766	71.2	1,533	142	2	1.1%
HT K	2B3P Over 55s	Bungalow		702	65.2	5,614	522	8	4.3%
Sub-Total						154,736	14,375	131	69.7%
Affordable Rent				ft ²	m ²	ft ²	m ²		
HT H	3B4P	2 Storey House		921	85.6	9,214	856	10	5.3%
HT H	3B4P Over 55s	2 Storey House		921	85.6	1,843	171	2	1.1%
HT J	2B3P	2 Storey House		766	71.2	4,598	427	6	3.2%
HT J	2B3P Over 55s	2 Storey House		766	71.2	766	71	1	0.5%
HT M	2B3P	Single Level Apartment		688	63.9	2,751	256	4	2.1%
HT M	2B3P Over 55s	Single Level Apartment		688	63.9	2,751	256	4	2.1%
HT N	1B2P	Single Level Apartment		578	53.7	578	54	1	0.5%
HT N	1B2P Over 55s	Single Level Apartment		578	53.7	578	54	1	0.5%
Sub-Total						23,060	2,144	29	15.4%
Shared Ownership				ft ²	m ²	ft ²	m ²		
HT H	3B4P	2 Storey House		921	85.6	11,057	1,027	12	6.4%
HT H	3B4P Over 55s	2 Storey House		921	85.6	3,686	342	4	2.1%
HT J	2B3P	2 Storey House		766	71.2	6,131	570	8	4.3%
HT J	2B3P Over 55s	2 Storey House		766	71.2	1,533	142	2	1.1%
HT L	2B3P Over 55s	Bungalow		657	61.0	1,313	122	2	1.1%
Sub-Total						23,719	2,204	28	14.9%
Totals for Site						201,535	18,723	188	100.0%

See drawing AA7403 2011 for further information



3.13 APPEARANCE

The proposed dwellings present a façade treatment which is appropriate to its historic setting and proximity to the adjacent conservation area. Whilst the site does not sit within the conservation area the design team have developed a proposal that respects the area.

The roofs take a simple form with typically front to back ridges emphasised in key locations with expressed gables. Dormers and roof lights have been avoided.

The elevations reflect as closely as possible the proportion of solid to void found on the existing context of the nearby traditional buildings. Fussy detailing and applied features have been avoided to reflect the local precedent of the area. Front and rear elevations are distinguished from one another to reflect the typical hierarchy of the area with the majority of detail integrated into the principal front (and in some cases side elevations) whilst the rear elevations take on a calmer more functional form.

3.14 MATERIALITY

The facing materials pallet has been chosen to complement the existing adjacent dwellings both within the adjacent Redrow development and conservation area beyond. Stone is the predominant material used along the proposed central avenue which extends from Springwood Drive, this is used to emphasis corners and the ‘gateway’ into the scheme from the A671. Secondary materials along this route are render, also found in the adjacent site and conservation area. These are interspersed with a handful of brick faced dwellings to integrate these street scenes with the rest of the development. The selected brick palette will complement the stone whilst providing a slightly more contemporary feel to the locations further away from the central avenue.

All roofs are proposed to be grey to match the local traditional slate colour.

Windows will be a mid grey to compliment the brick, stone and render colours.

Window border detailing, feature sills and bays are proposed to be constructed using a facing reconstituted stone material.

3.15 PARKING

Residential parking has been provided in the form of in-curtilage parking spaces designed to reduce the visual impact, thereby preventing cars from visually dominating the street scene.

The following maximum parking standards have been applied throughout the scheme in accordance with the Joint Lancashire Structure Plan Parking Standards. As the document identifies maximum standards the design team have limited the parking to a proportion of properties to reduce the overall average.

- 1 bedroom: 1 space per dwelling
- 2 and 3 bedrooms: 2 spaces per dwelling
- 4 and 5 bedrooms: 3 spaces per dwelling

Where integral or detached garages have been proposed these account for one or two of the above spaces, these are either set back from the front of properties or located to the rear thereby enhancing the primary elevations. Parking courts have been avoided as this was felt to be at odds with the rural nature of the residential development being proposed. Visitor parking will be accommodated within the network of streets.

3.16 INCLUSIVE DESIGN

Inclusive design is about making places everyone can use. It should enable everyone to participate independently, confidentially and equally.

The site is located in a well-connected area of Whalley. It is within walking distance of a number of local and national transport connections. A network of pedestrian and cycle links to the village centre will enable users of the building to meet their daily travel requirements.

The Disability Discrimination Act (DDA) outlines measures to be taken that reduce the discrimination which many disabled and elderly people face. The majority of requirements covered by the DDA are addressed in various sections of the Building Regulations, in particular, Part M. These measures include level access, sanitary provision and space standards.

All dwellings will achieve the Nationally Described Space Standards and as a

minimum Building Regulations Part M Category 1: Visitable dwellings. A proportion of 15% of the homes (28 in total) split across tenures have been designed to Building Regulations Part M Category 2: Accessible and adaptable dwellings.

3.17 REFUSE AND RECYCLING

The majority of proposed properties have an area of hard-standing in their rear gardens, sufficiently large to accommodate the range of waste and recycling bins required by the Local Authority.

The walk up apartment properties have secure areas for bin storage located in between blocks locations to provide convenient access to bins for waste and recycling in a number of eurobins.

Every property has access from the street to the rear of the property allowing residents to present the appropriate bin for collection on the appropriate day and then return it thereafter. This will ensure that no bins are visible to view from public areas.

Please see drawings AA7403 2010 and 2011 for illustrative refuse storage locations.

Refuse vehicles can collect all bins from the kerbside and the street layout has been designed for an 11m refuse collection vehicle.

3.18 DESIGN FOR SECURITY

Whilst the scheme is not required to achieve Secured by Design, the proposed scheme has been designed with the safety and security of its residents in mind.

High quality design plays an important role in creating safe and secure places. Places that are well designed, based on best practice guidance can assist in deterring crime and anti-social behaviour. A strong frontage has been adopted with active ground floors to increase natural surveillance of the public realm and all dwellings front onto and have access from the street.

3.19 GARDEN LANDSCAPE STRATEGY

A proportion of the rear gardens to dwellings will require landscaping and

retaining structures to allow for level changes. The principles we have adopted to accommodate this are illustrated on the adjacent diagram in sections through two typical locations and a series of precedent images.

- Patios will have a maximum fall of 1 in 40
- Patios will have a low retaining wall of maximum 600mm in the same materials as the plot it is linked to
- Gardens will have a maximum fall of 1 in 20 with grass landscaped batters of 1 in 3
- If further level changes are required to be accommodated then cribblock retaining structures will be utilised on plot boundaries up to a maximum of 2 metres

3.20 BOUNDARY TREATMENTS

The treatment of front gardens will be grass and low shrubs in selected places, a proportion of front gardens will have tree planting along the avenues to enhance the streetscape and provide continuity from the adjacent Redrow development. Further information can be found within the Green Infrastructure Strategy overleaf.

All boundaries between gardens and public spaces will be constructed from a matching facing material to the dwelling to which they are linked, in the case of rendered properties this will be the lower brick or stone material. These boundaries will be softened by providing low shrubs between the footpath and boundary.

Rear boundaries will be timber fences with trellises in places and in some cases cribblock walls as suggested above.



Key



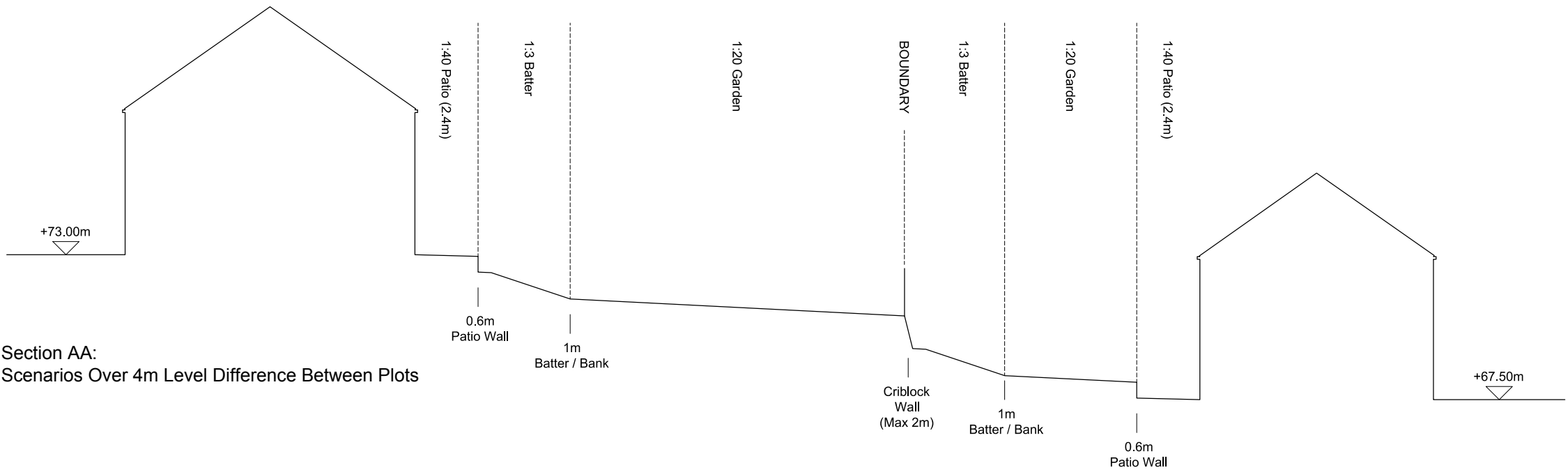
Patio Wall



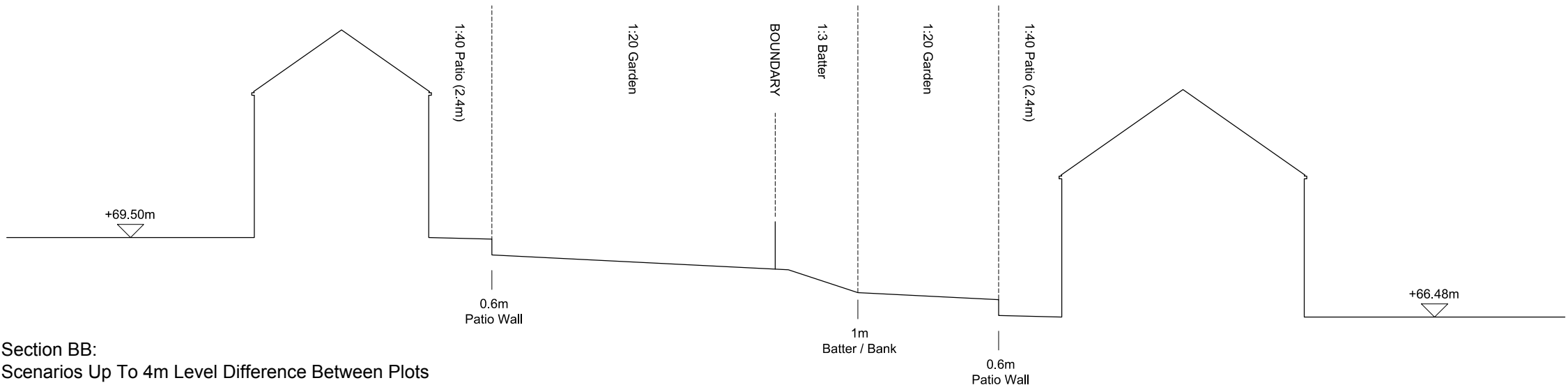
Grass Bank / Batter



Cribblock Wall



Section AA:
Scenarios Over 4m Level Difference Between Plots



Section BB:
Scenarios Up To 4m Level Difference Between Plots

3.21 GREEN INFRASTRUCTURE STRATEGY

Character Areas

The Character areas for the development have been based upon those identified in this document.

Streetscape Strategy

Key street styles have been developed appropriate to the layout and include:

Green Street / Avenue

The main estate road: footpath to one side with shared path / cycleway to 3m width on the adjacent side. An avenue is created by roadside tree planting in verges or front gardens using street trees with an upright form. See Appendix 1 for suggested plants.

Green Street Type C

Estate roads overlooking open space: footpath to the residential side with a green verge and tree planting to the opposite side.

Country Lane / Green Street Type D

Link Roads to the A671 and between `Villages': A rural character road is formed using native tree planting and hedges boundaries, a shared footpath / cycleway route to one side with tree planted avenues or hedges with trees.

`Village' Street

Secondary estate roads: roads with a narrow width and defined footpaths. Additional planting to the front gardens provides defensible boundaries where areas are too small for mowing. Planting includes ornamental species to attract wildlife. Garden trees are planted in front gardens for screening and instant softening of the streetscape. Trees are selected for an upright and compact form, shrubs to add colour at all seasons. Traffic calming measures including a narrowing of the road width at the junction using bollards or tree planting or a change in surface material will define a cul-de-sac or subsidiary route.

Shared Surface

Cul-de-sacs or Courtyards: vehicular speed is reduced by the use of different surface materials or obstacles using street furniture or trees to divert around. These are pedestrian priority areas with opportunities for play and seating. Planting will include ornamental species to attract wildlife. Garden trees are selected for colour and with upright compact form.

Open Space Strategy

Existing trees and shrubs will be retained where possible and managed as recommended by the Ecologist and Arboriculturalist, particularly in relation to bats, invasive species (Himalayan Balsam, Snowberry and Horsetail) and planting recommendations.

1. Country Park and Hill Top Green

A linear park created around the existing network of paths, streams and ditches, the water aqua duct and newly created attenuation ponds. The limitations of the easement of the aqua duct and potential safety risk created by the steep embankments of the attenuation ponds has informed the design of this area whilst the character of surrounding countryside is still evident. The inlet and outlet levels dictate a boggy ditch rather than deep water during normal conditions.

The link road between the two `villages' of the development has a `country lane' character. Native hedgerows form naturalistic boundaries to the ponds, with limited access to areas for safety reasons. These areas may become wildlife havens in time. Bird boxes, bird hides will be added for interest and to improve biodiversity. Surrounding areas are sown with wildflora meadow and tussock seed mixes and include planted areas of native shrubbery and woodland trees.

Picnic areas, seating areas, an equipped play area as well as a trim trail facility will be located along key routes. Natural surveillance of activity areas from adjacent housing has influenced the location of these facilities. Some are located to take advantage of key viewpoints across the site.

Paths and cycle-ways link key routes and will be surfaced with macadam.

Links to existing path network

The existing well-used track along the valley bottom adjacent to the Beck has links to footpaths within Spring Wood and Archbishop's Wood. It is intended that this network is extended through the Country Park. The existing track (PROW) will be resurfaced to with a new gravel top course.

APPENDIX 1: PLANTING

Street Trees

London Plane, Platanus hispanica Common Lime, Tilia europaea Rowan, Sorbus aucuparia

Swedish Whitebeam, Sorbus intemedia

Field Maple, Acer campestre

Garden trees

Birch, Betula pendula

Field Maple, Acer campestre

Snowy Mespilus, Amelanchier lamarkii

Ornamental Cherries inc. Prunus serrula,

Crab Apple, Malus tschonoskii, M. John Downie

Ornamental Pear, Pyrus salicifolia

And fruiting trees including apples, pears plums and cherries

Recommendations of the Ecologist for Natural Planting Areas:

Native floral species to plant for wildlife enhancement on-Site

The following list gives good examples of plants for different conditions which have value for native fauna either as a food source or shelter. To maximise value for wildlife plants should ideally be native, not cultivars, and sourced locally where possible. Planting should look to provide food at all levels, with under-planting of trees with shrubs or species rich grassland to provide maximum value out of an area and add interest to planting schemes.

Note: it is currently generally not advised to plant ash because of ash die back. However, ash is a very valuable plant for wildlife especially as a semi-mature and mature tree. Therefore, if locally sourced trees or self-sets known to be free of the fungus are available then these should be incorporated. Additionally, trees not showing signs of being affected should be retained where possible.

Trees and Shrubs	Trees and shrubs suitable for hedges and understorey planting	Screen Planting to the rear of plots 143 to 150
Large Trees	Blackthorn Prunus spinosa; Buckthorn Rhamnus catharticus; Field maple Acer campestre; Holly Ilex aquifolium;	Tree planting:
Beech Fagus sylvatica; Bird cherry Prunus padus;	Elder Sambucus nigra;	Comprising Selected Standard trees 10-12cm girth, 300-350cm height clear stemmed175-200cm including:
Elm Ulmus procera;	Guelder rose Viburnum opulus;	Crab Apple Malus sylvestris
Oaks Quercus robur and Q. petraea; White willow Salix alba;	Hawthorn Crataegus monogyna;	Field maple Acer campestre
Field maple Acer campestre; Silver birch Betula pendula; Rowan Sorbus aucuparia;	Hazel Corylus avellana;	Rowan Sorbus aucuparia
Small-leaved lime Tilia cordata	Privets, including wild privet Ligustrum vulgare; and Spindle Euonymus europaeus.	Silver birch Betula pendula
		Cherry Prunus avium
	Climber and scramblers suitable for hedgerows and understorey planting	Bird Cherry Prunus padus
Medium/ Small Trees		
	Dog rose Rosa canina; Field rose Rosa arvensis; Ivy Hedera helix;	Shrub zone to the rear of plots 143-150:
Alder Alnus glutinosa;	Honeysuckle Lonicera periclymenum;	including native planting and wildlife friendly species (Gardening with Wildlife in Mind, English Nature 2005):
Apples Malus spp. (local varieties can be found); Field maple Acer campestre;	Wild clematis/ old man's beard Clematis vitalba; and Hop Humulus lupulus.	Shrubs to be a minimum of 45-60cm, minimum rate 3 plants per m2, climbers 60-80cm height, including:
Holly Ilex aquifolium;		Honeysuckle Lonicera periclymenum
Pears Pyrus spp.;	Understorey flowering plants providing ground cover for shady areas	Holly Ilex aquifolium
Rowan Sorbus aucuparia; Silver birch Betula pendula; Yew Taxus baccata;		Hazel Corylus avellana
Elder Sambucus nigra; Hazel Corylus avellana;	These species flower early before trees are in full leaf, and will do well in areas that become shady later in the year.	Dog Rose Rosa canina
Hawthorn Crataegus monogyna; Honeysuckle Lonicera periclymenum; Wild privet Ligustrum vulgare; Blackthorn Prunus spinosa; and Guelder-rose Viburnum opulus.		Guelder-rose Viburnum opulus
	Bluebell Hyacinthoides non-scripta; Bugle Ajuga reptans;	Budliea Budliea davidii
	Wild daffodil Narcissus pseudonarcissus; Foxglove Digitalis purpurea;	Clematis Clematis tangutica
	Lords-and-ladies/ cuckoopint Arum maculatum; Primrose Primula vulgaris;	Daisy bush Oleria macrodonta
Plants for hedgerows and woodland understoreys	Sweet violet Viola odorata; and Wood avens Geum urbanum.	Hebe Hebe `Midsummer Beauty`
		Rosmary Rosmary officinalis
		Firethorn Pyracantha angustifolia
		Berberis Berberis stenophylla
A combination of shrubs and climbers can make attractive hedges of great benefit for wildlife, as well as providing a functional boundary. Standard trees should be incorporated in hedgerows, with ash, oak and wayfarer tree three traditional choices, depending on the region. These should be marked so as not to be cut during management works. In addition, undersowing with a suitable shade tolerant wildflower mix is important to maximise value.		The zone will be a 3m wide zone including a gravel access path and post and wire fence to the rear boundary of the properties.