

DEWSBURY RIVERSIDE PHASE ONE

Design and Access Statement

September 2021

**BARTON
WILLMORE**

 **Kirklees**
COUNCIL

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1 INTRODUCTION

This Design & Access Statement (DAS) has been prepared by Barton Willmore on behalf of Kirklees Council (the Applicant) to support a hybrid planning application for land at Riverside, Dewsbury (the Site).

1.1. APPLICATION CONTEXT

The Site (edge red on the plan opposite) forms the first phase of the wider Dewsbury Riverside allocation (Local Plan ref: Site HS61), which has been identified by the Council to deliver some 4,000 homes, alongside supporting physical and community infrastructure.

The hybrid planning application comprises:

- » **Full planning permission** for engineering works, drainage and utilities connection for the provision of site access from Forge Lane and Ravensthorpe Road (including the demolition of the Masjid Abu Bakr)
- » **Outline planning permission** for up to 350 dwellings and a mixed use development (including community facilities) with all matters reserved (except means of access)

This DAS provides an explanation of the development parameters, design concept and principles that have been applied to the following aspects of the proposed development: layout, amount, scale, landscaping, appearance, and access and movement.

1.2. DOCUMENT STRUCTURE

The document is structured as follows:

Chapter One (Introduction): Describes the location of the Site and its features.

Chapter Two (Context Assessment): Describes the contextual elements influencing the development of the Site. This includes an analysis of the policy context and local settlement characteristics, including its townscape and landscape context, and sustainability credentials.

Chapter Three (Site Assessment): Provides a comprehensive assessment of the Site's characteristics.

Chapter Four (Evolution and Involvement): Describes the evolution of the design proposals in response to discussions with the local authority and consultation with the surrounding community.

Chapter Four (Evaluation): Provides a summary of the development considerations and opportunities that will inform the design.

Chapter Six (Outline Design): Presents the development parameters and illustrative guidance material that future reserved matters applications should broadly follow.

Chapter Six (Detailed Design): Describes the detailed proposals for the provision of vehicle access from Forge Lane, alongside the delivery of a new spine road.

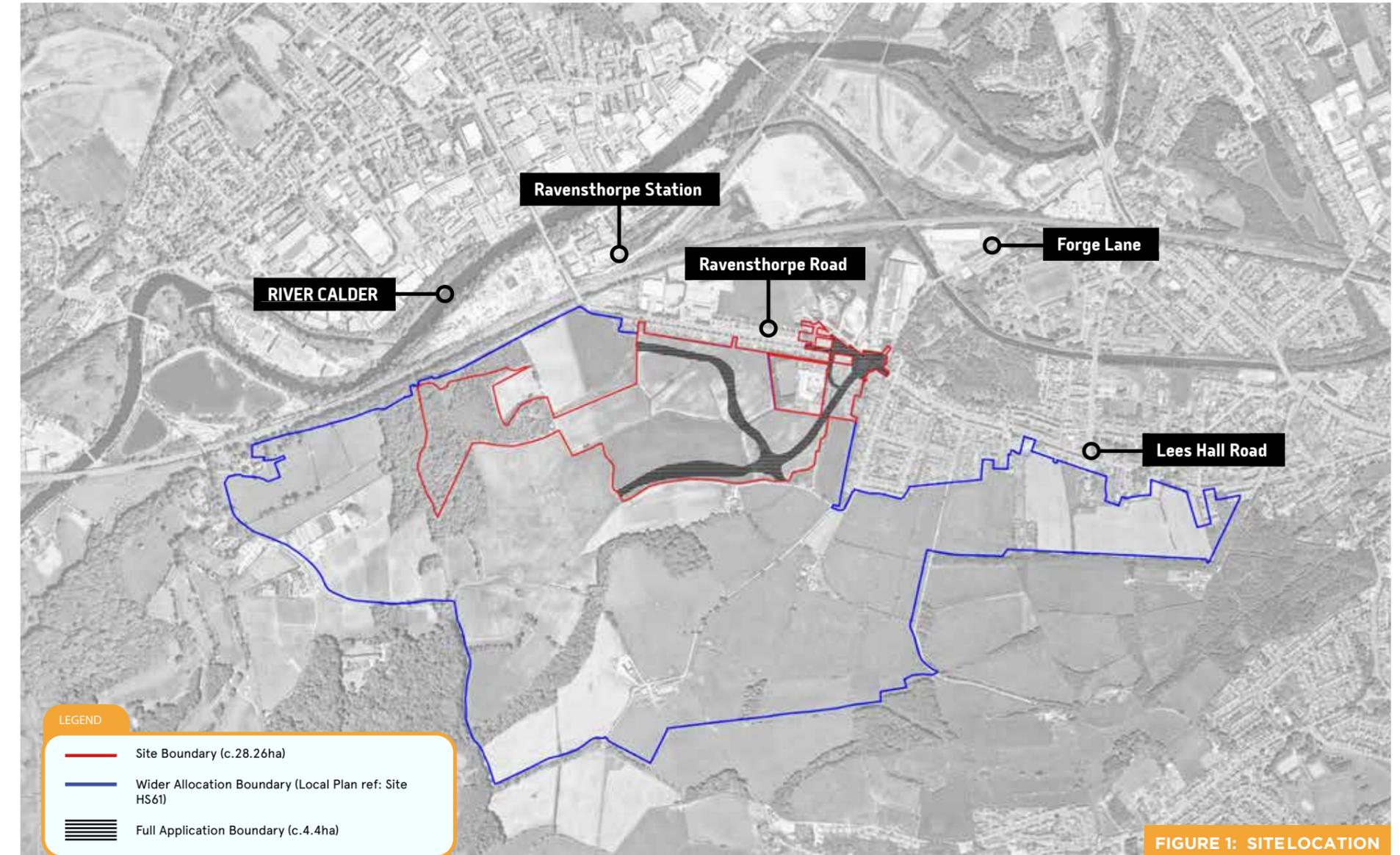


FIGURE 1: SITE LOCATION

1.3. VISION

The proposed development provides an opportunity to establish a high-quality residential development, within the Dewsbury Riverside allocation (Local Plan ref: Site HS61).

The design material presented through this document demonstrates how a sympathetically designed new neighbourhood can be delivered to align with the Cabinet approved masterplan for the allocation (Figure 2).

Our ambition is to work with the Site's natural characteristics, including its rising topography, to create a high-quality place in which a variety of family homes are sensitively integrated with areas of publicly accessible open space.

The proposed development will provide excellent standards of placemaking, comprising a network of well-landscaped residential streets and public spaces that respond to the Site's landscape and townscape context.

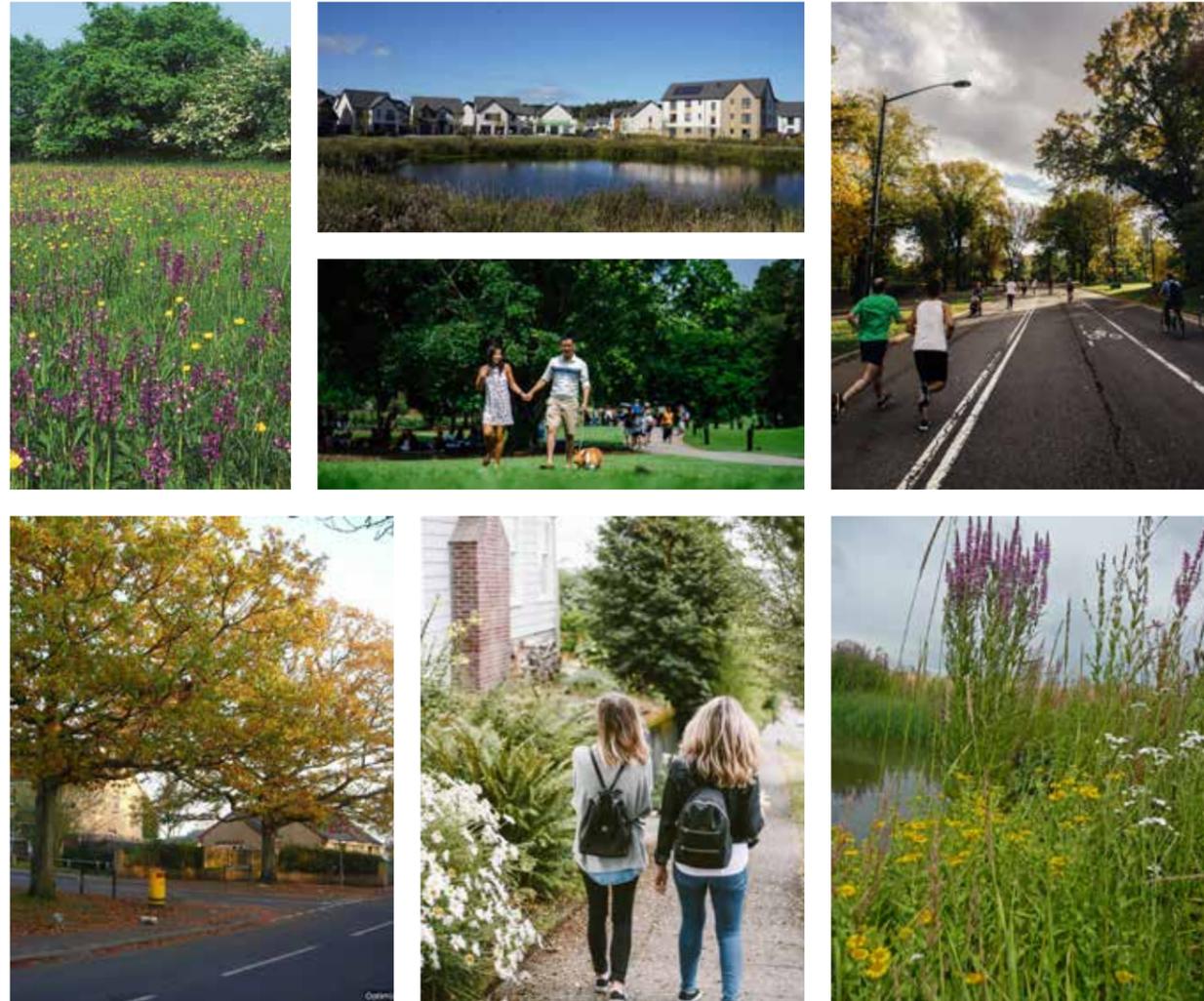




FIGURE 3: ILLUSTRATIVE MASTERPLAN (BIRDSEYE SKETCH)

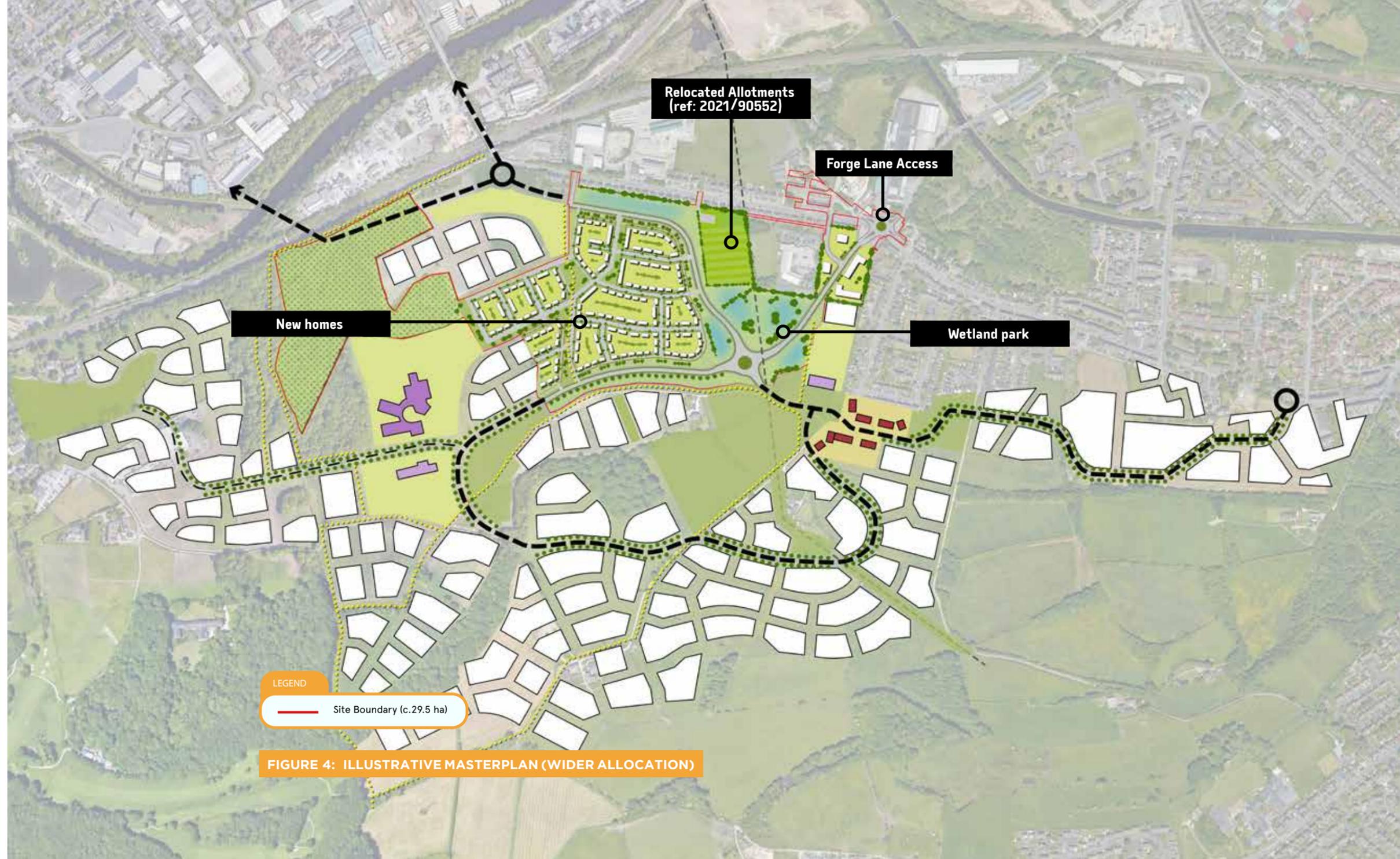


FIGURE 4: ILLUSTRATIVE MASTERPLAN (WIDER ALLOCATION)

1.4. SITE LOCATION

The Site is located within the north-western part of the Dewsbury Riverside housing allocation, c.2km to the south-west of Dewsbury Town Centre and close to the largely residential communities of Ravensthorpe, and Thornhill Lees.

Ravensthorpe Train Station lies c.500m north-west of the Site and provides regular train services running between Huddersfield and Leeds City Centre.

Network Rail proposals for the Transpennine Rail Route [Huddersfield to Westtown] comprise the proposed re-aligning of the Calder Road Bridge and improvements to Ravensthorpe Train Station, including a bus drop-off and junction.

Several bus stops are located along Lees Hall Road, to the north of the Site which provide hourly services to the surrounding area, including Wakefield City Centre (c.10km from the Site).

1.5. SITE DESCRIPTION

The Site extends to c.30ha and comprises, agricultural land, an area of woodland, Ravensthorpe Road Allotments, and Ravensthorpe Road and Masjid Abubakr Mosque and Lees Hall Playgroup.

In addition to the woodland, the Site consists of the occasional mature tree, scrub planting and boundary hedgerow.

Ravenshall School bounds the north-eastern Site boundary.

Ravensthorpe Road Allotments will be relocated to a new area within the Site to the west of Ravenshall School. This is covered by a separate planning permission granted on 3rd June 2021 (Reference 2021/62/90552/E).

The Site is bound to the north-east by residential development along Ravensthorpe Road and to the north-west by the Huddersfield Railway Line. The surrounding residential development is mainly comprised of two storey semi-detached or terraced dwellings.

Dewsbury District Golf Club and residential properties on Sands Lane are located to the west, and agricultural land extends from the southern boundary of the Site.

The Site's topography rises from north to south. The lowest point is located adjacent to Ravensthorpe Road at c.44m AOD and the highest point is located along the southern boundary at c.83m AOD.

An existing watercourse runs to the east of the Site, through Priest Royd Wood and to the rear of Ravenshall School where it becomes enclosed.



FIGURE 5: SITE AERIAL

2 CONTEXT ASSESSMENT

This section provides a summary of the relevant planning policies that will influence the Site's development and a summary of the contextual influences that will underpin the future development of the Site.

2.1. NATIONAL PLANNING POLICY FRAMEWORK (NPPF) (2021)

The proposals for the scheme are in line with the National Planning Policy Framework (NPPF) (2021) which sets out that planning permission should be determined in accordance with the adopted Development Plan and advocates the presumption in favour of sustainable development.

2.2. NATIONAL DESIGN GUIDE (2019)

The proposed scheme will address the 10 characteristics of well-designed places as set out in the National Design Guide, which work together to:

- » Create the physical character of a place;
- » Nurture and sustain a sense of community; and
- » Positively address environmental issues affecting climate.

2.3. LOCAL PLANNING POLICY

The Kirklees Local Plan Strategy and Policies 2013-2031 was adopted by the Council in 2019. The following Local Plan policies are considered relevant to the design of the proposed development:

- » Policy LP2 (Place Shaping) – development proposals should build on the strengths, opportunities and help address challenges identified in the Local Plan, in order to protect and enhance the qualities which contribute to the character of these places.
- » Policy LP3 (Location of New Development) – development should reflect the settlement's size and function, place shaping strengths, opportunities and challenges for growth, spatial priorities for urban renaissance and regeneration and the need to provide for new homes and jobs.
- » Policy LP4 (Providing Infrastructure) – New development should contribute to the provision of infrastructure, taking account of local and strategic needs and financial viability.

- » Policy LP5 (Masterplanning Sites) – Masterplans must involve all the relevant stakeholders, including the council, landowners, developers, the local community, service providers and other interested parties. Masterplans will be developed in consultation with the council prior to the submission of a planning application.
- » Policy LP20 (Sustainable Travel) – Proposals for new development shall be designed to encourage sustainable modes of travel and demonstrate how links have been utilised to encourage connectivity.
- » Policy LP24 (Design) – high-quality design is fundamental to making places more attractive, sustainable, safe and accessible.
- » Policy LP30 (Biodiversity and Geodiversity) – Development proposals will be required to protect and enhance the biodiversity and geodiversity of Kirklees, including the range of international, national and locally designated wildlife and geological sites, Habitats and Species of Principal Importance and the Kirklees Wildlife Habitat Network.

- » Policy LP32 (Landscape) – proposals should be designed to take into account and seek to enhance the landscape character of the area.
- » Policy LP35 (Historic Environment) – development proposals affecting a designated heritage asset (or an archaeological site of national importance) should preserve or enhance the significance of the asset.
- » Policy LP63 (New Open Space) – new open space should be provided in accordance with the council's local open space standards or national standards where relevant.

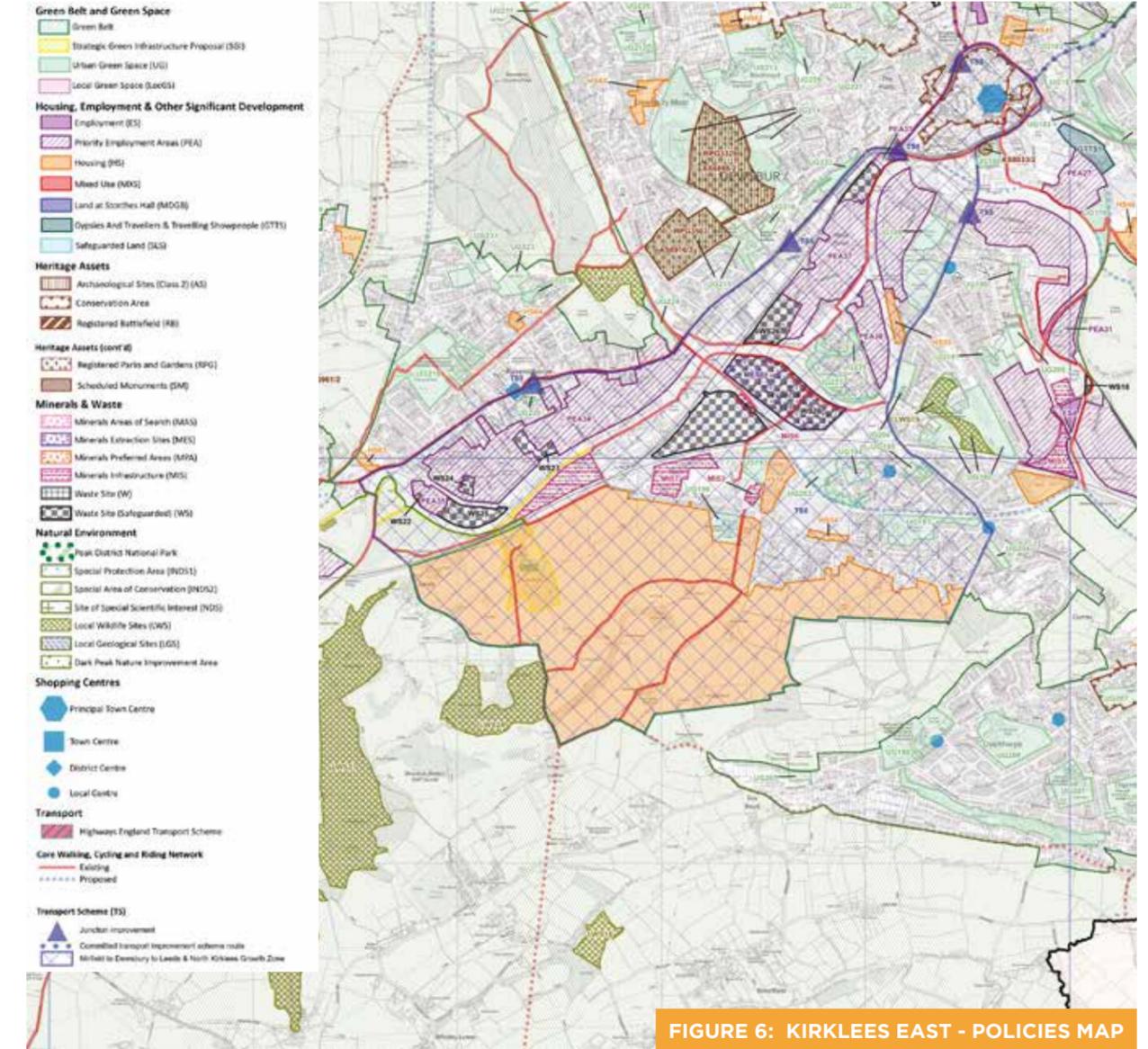


FIGURE 6: KIRKLEES EAST - POLICIES MAP

2.3.1. Policy – HS61 Land to the south of, Ravensthorpe / Lees Hall Road, Dewsbury

Dewsbury Riverside is identified as a Housing Growth Area (HGA) within the Kirklees Local Plan document. Provided within this document is an assessment of the Dewsbury Riverside Allocation, including its policy parameters which outlines the broad areas for development and high-level design principles.

Policy – HS61 policy parameters, relevant to the masterplanning process, are as follows:

- » Replacement allotment provision of equivalent or better quantity and quality will be required in a suitable location as part of the development.
- » Landscape character assessment has been undertaken for this Site which should be considered in the development masterplan.
- » Site requires a drainage masterplan
- » Early Years and Childcare provision will be required relating to this allocation.
- » The provision of one new 2 form entry primary school will be required during the plan period with further 2 form entry capacity required beyond the plan period.
- » The provision of secondary school places will be monitored and delivered to meet demand as new housing is delivered during and beyond the plan period. The masterplan will safeguard land for future secondary school provision beyond the plan period should the need arise.
- » Early Years and Childcare provision will be required relating to this allocation.
- » Recreational and biodiversity – new areas of public open space, green infrastructure and habitats required.

- » The allocation will play a key role in helping transform Dewsbury and Ravensthorpe. Proposals should indicate how the place shaping strengths, opportunities and challenges can be addressed through reference to policies in the Local Plan, the Dewsbury Strategic Housing allocations Framework and other regeneration and urban renaissance strategies and initiatives.
- » Provision of multiple access points to be carefully phased to ensure it complies with other policies in the Local Plan regarding transport.
- » Proposals for this allocation should also contribute towards: improved rail, road, pedestrian and cycle connections; Improvements to Ravensthorpe Station and surrounding area; delivery of landscape and environmental enhancements; services and infrastructure; and Mirfield Promenade Strategic Green Infrastructure proposals (SGI2110)
- » Additional mitigation on the wider highway network will be required.
- » The creation of a new local centre commensurate with the scale of growth proposed will be supported, subject to the sequential test and impact assessment.
- » Take account of TS5 Mirfield to Dewsbury to Leeds and North Kirklees Growth Zone. .
- » A landscape buffer along the southern boundary of the site is required.

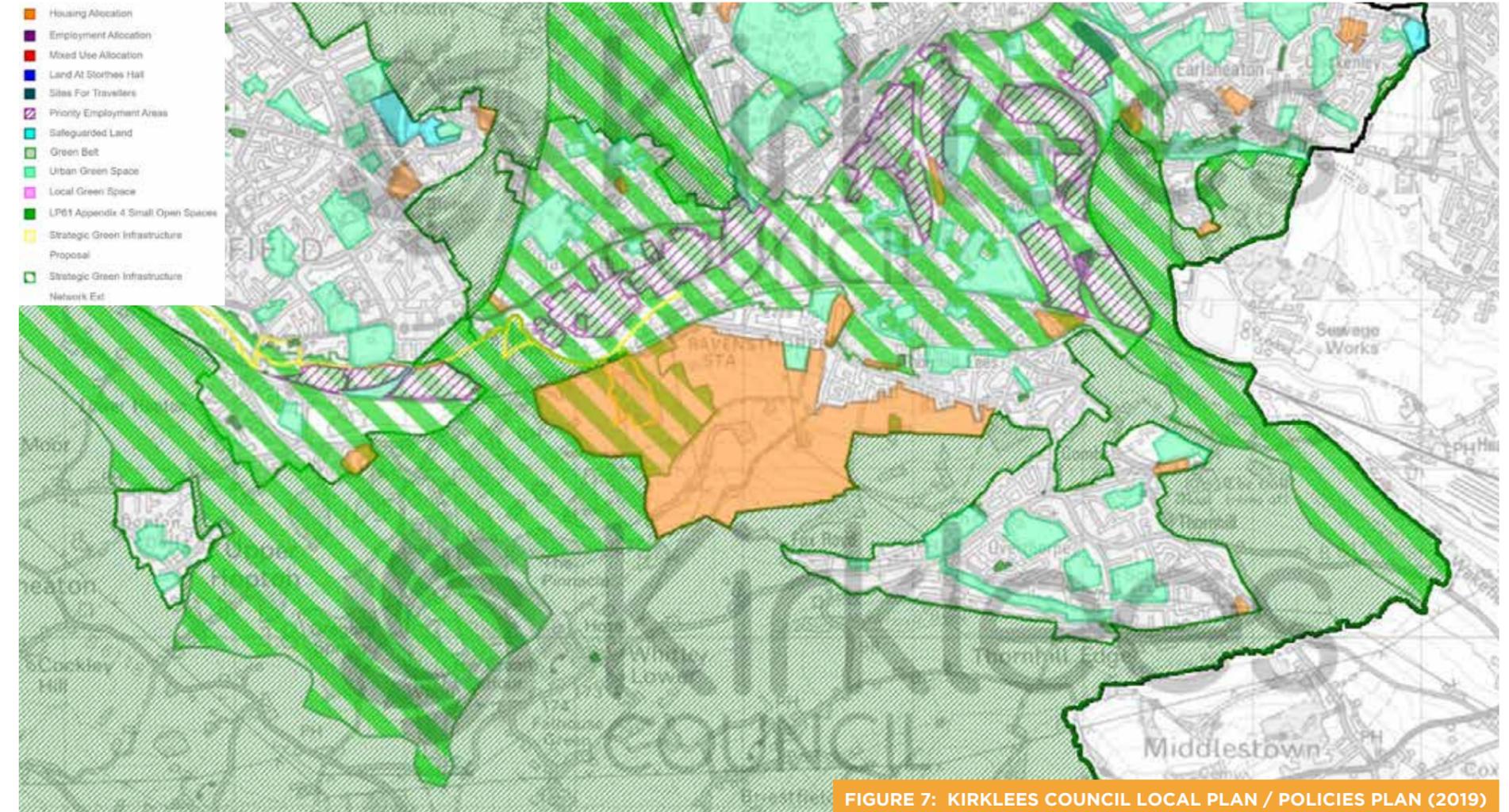


FIGURE 7: KIRKLEES COUNCIL LOCAL PLAN / POLICIES PLAN (2019)

2.4. KIRKLEES LOCAL PLAN- HIGHWAY DESIGN GUIDE (2018)

The Kirklees Highway Design Guide SPD (2018) aims to promote high standards of highway design that reflect nationally recognised best-practice, and facilitate the delivery of high quality residential, employment and mixed-use developments in Kirklees. This SPD is relevant to all aspects of the built environment. It will help encourage good design in terms of how developments, routes and spaces relate to one another to create streets and public spaces that are safe, accessible, and pleasant to use

The SPD provides useful design guidance, relating to pedestrian and cycle infrastructure and street design, inducing street hierarchy, dimensions, gradients, traffic calming, road alignments and materials.

2.4.1. Residential Street Types and Hierarchy

Within new residential areas, streets need to accommodate various types of movement in a safe and convenient way. Streets should also be designed so that they respond to their context. To achieve this, it is important that new residential streets form part of a hierarchy that is clear and legible to all users who share the same space.

The following street types, referenced with the SPD, have been identified as relevant to the proposed development:

Street Type A (Residential Connector Streets):

These are the main streets that provide structure for new residential development and connect it to the surrounding urban fabric and highway network. Connector Streets can provide a transition between the surrounding major roads and the more pedestrian dominated Local Residential Streets (Type B). Connector streets provide the primary vehicular access to an area, and link with other street types within new development to form the backbone of a permeable network of streets for pedestrians and cyclists. It is likely that this street type would also carry the majority of bus traffic through any new development.

Street Type B (Shared Surface Streets): These are the general streets within residential areas that carry a wide range of movement, provide the main

setting for new homes, and allow direct access to individual dwellings. Local residential streets will be used by service vehicles, and the requirements of these vehicles will need to be accommodated, although should not over dominate. Layout and on-street parking will also need to be appropriately designed and controlled.

Private 'Non-Adopted Streets or Drives: New development serving more than 5 dwellings (or any existing private road which will serve more than 5 dwellings after completion of new development) should be laid out to an adoptable standard and be able to be offered for adoption. The Council does not normally adopt developments of 5 dwellings or less.

2.4.2. Vertical Alignment

Streets should follow the topography of a Site to avoid an unnatural appearance; however there may be occasions when this is not possible for safety or design reasons. The introduction of cuttings or embankments in such circumstances must be well integrated into a site's topography.

Type	A	B	C
Title	Residential Connector Street	Local Residential Street	Shared Surface Street
Potential number of dwellings	300 - 700	200 - 300	An amount generating no more than 100 VPH
Alignment	Curvilinear	Curvilinear	Angular with alignment shifts
Design speed	25 mph	20 mph	15 mph
Speed restraint feature separation (Maximum)	100 metres	60 metres	40 metres
Forward visibilities (Minimum)	33 metres	25 metres	23 metres
Centreline radius (Minimum)	35 metres	20 metres	Based on vehicle tracking
Cross -section	2 metre footway - verge - carriageway - verge - 2 metre footway	2 metre footway - carriageway - 2 metre footway	hard margin - carriageway - hard margin
Carriageway width (Minimum)	6.75 metres	4.8 - 5.5 metres (5.5 metres for 50+ units)	4.8 - 5.5 metres
Crossfall	Balanced either side of centreline	Uniform fall across carriageway	Uniform fall across carriageway
Pedestrian provision	Segregated	Segregated	Shared
Verges	1.2 metre grassed verge between footway and carriageway on both sides	Desirable but generally not required	0.6 metre wide hard margin on both sides (except where a footway is provided)
On-street parking	On-street parking to be provided by laybys and carriageway widening	On-street parking to be provided by laybys and carriageway widening	On-street parking to be provided by laybys and carriageway widening

10 KEY DESIGN DRIVER

a) The desirable maximum carriageway longitudinal section gradient on all adoptable Street Types is 1 in 20 (5%). If this is not achievable then the specific circumstances should be discussed with the Council in order to address potential mobility and safety implications. A gradient no steeper than 1 in 10 (10%) is preferred. The gradient of a non-priority route on the approach to a junction should be a gradient of 1 in 40 (2.5%) for the initial 10 metre length with an absolute maximum of 1 in 25 (4%).

b) With regard to mobility, 1 in 100 (1%) is never an obstacle, 1 in 50 (2%) can be managed by most people (and also provides good drainage), 1 in 40 (2.5%) can be managed by the majority people, but gradients steeper than 2.5% prove impossible for many manual wheelchair users.

5 KEY DESIGN DRIVER

If there is the possibility that a street will serve further properties in the future, for instance if there is an adjacent allocated site which is likely to be developed (and accessed through the first site) then the streets should be designed to the appropriate standard, or be capable of being altered in the future. In order to 'future proof' a street layout, no 'ransom strips' or other gaps should be left between the adopted highway and a site boundary.

FIGURE 8: EXTRACTS FROM KIRKLESS HIGHWAY DESIGN GUIDE SPD

2.5. SUSTAINABILITY

2.5.1. Retail, Leisure & Community Facilities

The Site occupies a sustainable location with good access to local services and facilities.

Pedestrian and cycle access into the Site can be achieved from multiple points along Ravensthorpe Road.

Figure 6 opposite demonstrates that a good range of local facilities are within a 2km walking distance of the Site.

Local facilities/ services close to the Site, include but are not limited to:

- » Ravenshall School
- » Thornhill Lees Community Centre
- » Slaithwaite Road Surgery
- » Thornhill Leeds Infant and Nursery School
- » Retail Park (Huddersfield Road/A644)
- » Holroyd Park
- » Masjid Abubakr Mosque and Lees Hall Playgroup

2.5.2. Links and Transport

The Site is located adjacent to Ravensthorpe Road, which connects directly to the A644 and onto the M1.

Ravensthorpe Railway Station is located some 300m from the Site. It is situated on the Huddersfield Railway Line, between Leeds and Manchester, 8 miles (13 km) north-east of Huddersfield. Ravensthorpe is served each day (including Sundays) by an hourly TransPennine Express service running between Leeds and Huddersfield. A limited number of weekday peak Northern services between Leeds and Manchester Victoria via Brighouse also stop here.

The closest bus stops to the Site are on Ouzelwell Lane, and Lees Hall Road, within a 400m walking distance. Details of the services available from these stops are shown in the table below.

2.5.3. Walking and Cycling

The Site includes a network of public footpaths, connecting to the existing settlement.

Two existing lanes/ farm tracks give limited vehicular access to farms and dwellings. A number of these are unsurfaced tracks at the steeper higher levels.

Horse riders use the area and there are a number of claimed and designated bridleways crossing the Site. Cyclists also use the bridleways on the higher contours to access the wider area.

Route 66: Sustrans National Cycle Route 66 is within 1km of the Site and can be directly accessed off Calder Road. This cycle route runs from central Manchester to Spurn Head via Bradford, Leeds, York, Beverley and Hull.

Calder Valley Greenway route 69: This section of the route, running between Huddersfield and Dewsbury town centres, is described by sustrans as mainly traffic free and is surprisingly rural passing through a pleasant wooded and agricultural landscape.

Spen Valley Greenway: The Spen Valley Greenway is a seven-mile long cyclepath connecting Dewsbury to Bradford. It uses a disused railway line running near the river Spen between the towns of Cleckheaton, Dewsbury and Heckmondwike, eventually leading to Bradford.

Summary of Bus Services – Lees Hall Road				
Bus No. & Operator	Route	Typical Daytime Frequency		
		Mon – Fri	Sat	Sun
128/128A Arriva	Dewsbury Bus Station – Thornhill Lees – Grange Moor – Lupset – Wakefield Bus Station	60mins	60mins	60mins
AL/AL4 Lyles Coaches	Lees Hall Road – Valley Drive – Slaithwaite	1 service only	-	-

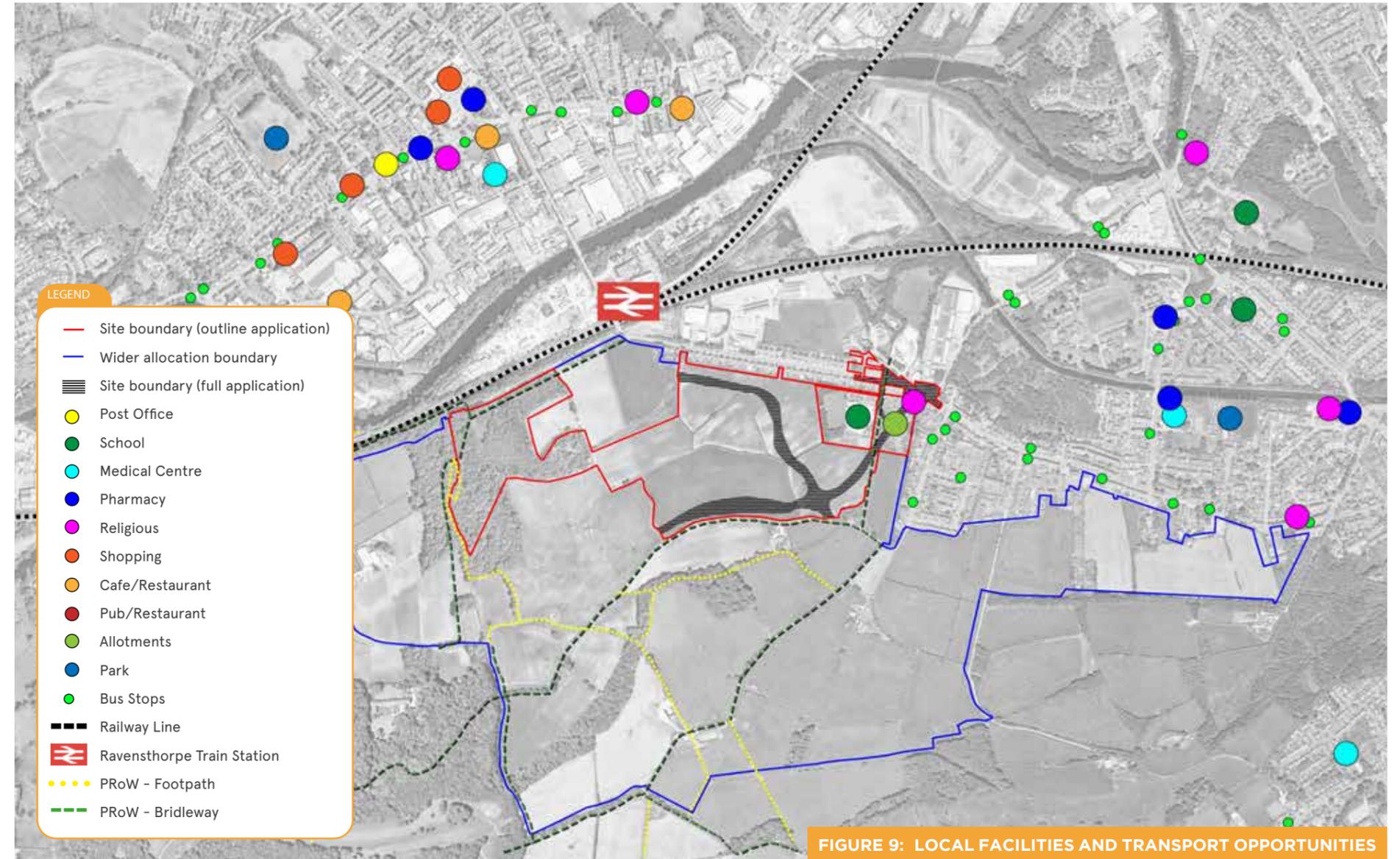


FIGURE 9: LOCAL FACILITIES AND TRANSPORT OPPORTUNITIES

2.6. TOWNSCAPE ANALYSIS

The surrounding residential area comprises of a well-established residential settlement delivered across distinctive historic periods, ranging from post-industrial growth to modern suburban type developments.

Housing to the north, east and west of the Site, comprises a variety of different housetypes occupying a low land setting associated with the River Calder.

Housing to the south of the Site includes more recent housing growth positioned within areas of steeper topography.

The plan opposite highlights several different residential character areas within the surrounding settlement and close to the Site. Further information relating to the character of these areas is described throughout this section, highlighting key design principles that are relevant to the proposed development.



2.6.1. Area 1 – Ravensthorpe Road

Key Characteristics

- » Linear and defined by the main road running through the area.
- » Width of the street is approximately 30m from front elevation to front elevation.
- » Roads and pavements are wide with larger front gardens of the semi detached units which are the predominant housing types in this area.
- » Other house types can be found, in particular, behind the pocket park off Ravensthorpe Road is a row of red brick terraced units with back yards fronting out over the park.
- » 2 storey homes with some loft conversions.
- » Other than the pocket park there is little greenery. Many residents have driveways with some low lying vegetation.
- » The width of Ravensthorpe Road suggest that avenue trees have been removed.

Street Scape Summary



Row of Victorian terrace housing towards the roundabout of Forge Lane and Lees Hall Road.



Main house type found in the character area was built around early mid 20th century. Hard surfaces dominate.



The large semi detached properties make up most of the housing and building materials vary to front elevations.



AREA 1 - RAVENSTHORPE ROAD

Materials Study



Surface Treatment: Tarmac roads with slabs and concrete block on pavements and driveways



Roofing: Slate, clay or concrete roof tiles. Steeply pitched, hipped roof with deep eaves and central chimneys



Boundary Treatment: Mainly walled boundaries of either brick or concrete. Between plots some low metal fencing but this does vary



Brick Work: The brick work changes with each house type. The semi detached units have a variety of bay window treatments

2.6.2. Area 2 – Ouzewell

Key Characteristics

- » Standard block estate pattern with main through route leading to a farm track.
- » Mainly made up of early to mid 20th century Local Authority housing.
- » Commonly 22m from front elevation to front elevation.
- » Small front and back gardens, predominantly grass at the front.
- » Massing is mainly semi-detached units, with wide plots, all 2 storey.
- » There are areas of landscaping but this is mainly grassed over with an area of shrub planting.
- » Trees can be seen in gardens and in the Blackers Crescent area.
- » Not all homes have driveways and therefore on street parking is prevalent.

Street Scape Summary



Blackers Crescent cul-de-sac is made up of a small Radburn estate located at the entrance of Ouzelwell Lane



Mainly redbrick public housing make up the terrace row with gables on the end facing onto Ouzelwell Lane



1970's - 1980's housing facing Lees Hall Road. Based on a Radburn layout with informal parking on the pavement

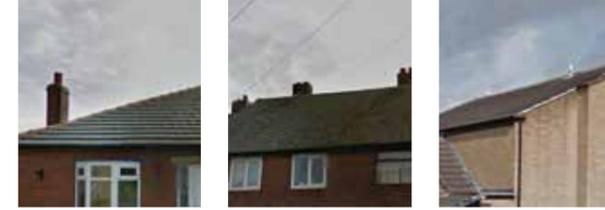


AREA 2 - OUZEWELL

Materials Study



Surface Treatment: The area is made up of tarmac roads with some paving defining the boundaries of the pavements



Roofing: High pitched dual tiled roofing on the red brick dwellings. On the Blacker Crescent housing, the pitch is lower and asymmetric



Boundary Treatment: Some walls are used in front of dwellings but grass or other vegetation is more widely used



Brick Work: Red/brown bricks are more commonly used apart from the Blackers Crescent housing which is made up of buff bricks

2.6.3. Area 3 - Off King Edward Street

Key Characteristics

- » Mainly made up of late 20th and early 21st Century housing.
- » 18m - 22m from front elevation to front elevation with an offset building line.
- » Front gardens manicured and well kept with a variety of shrubs. Open plan boundaries defined by shrub planting
- » The massing is a varied range from terraces, semidetached and detached and also varies from 1,1 1/2 to 2 storey homes.
- » Landscaping area are manicured and well kept.
- » There are few large trees in the area but more shrubs and other low lying vegetation.
- » Most homes have driveways but on street parking is still evident.

Street Scope Summary



Street scope near the entrance to King Edwards Street is made up of a range of different house types.



Housing along Sovereign's Way varies in storey heights from one to two story dwellings. Building materials are uniform.



Terraced housing constructed in natural stone, newer homes appear to be constructed in artificial stone for continuity.



AREA 3 - OFF KING EDWARD STREET

Materials Study



Surface Treatment: Both the pavements and the roads are made up of tarmac with curb stones defining the separation.



Roofing: It varies in roof pitches and plastic gable end verge materials. The roof tiles appear to be concrete or natural slate.



Boundary Treatment: The boundary treatments are a mixture of shrubs, planting, fencing and grassed areas.



Brick Work: Buff colours predominate and although dwellings were constructed at different times, the colour gives continuity.

2.6.4. Area 5 - Providence Court

Key Characteristics

- » Miller Homes housing estate with one point of access from Brewery Lane and no through route.
- » Built around the last 10 years.
- » Well enclosed streets and squares.
- » More commonly 21m from front elevation to front elevation but building lines vary.
- » Small front gardens with front boundaries railings hedges or shrubs.
- » Street trees traffic calm in key locations.
- » The massing varies from a row of town house terraces to semi-detached and detached units.
- » Heights are 2, 2.5 and 3 storey.
- » There is a landscaped public open space with play equipment.

Street Scope Summary



Providence Court southern cul-de-sac with a range of 2 and 2 1/2 storey terrace dwellings with parking court for residents.



Providence Court buff and red brick homes with the buff dwelling turning the corner.



AREA 5 - PROVIDENCE COURT

Materials Study



Surface Treatment: The surface treatment is made up of different paving with a variation of patterns, helping to define different areas



Roofing: Standard modern roofing materials with plastic gable end verge materials and no chimneys.



Boundary Treatment: These are made up of small bushes or shrubs, black fencing and bollards, with areas of grass land.



Brick Work: This varies in colour from red to buff with artificial stone.

2.6.5. Area 7 - Thornhill and Overthorpe

Key Characteristics

- » Views over the site to the north restricted by levels and retaining wall forming highway boundary.
- » Single sided, single storey development to the lane, two or three stories to the rear with extensive views.
- » Early to mid twentieth century red brick and stone semi detached, detached and terraced houses ascend the hill.
- » Front gardens separate the dwellings from the highway.
- » Character area is linear and defined by the main road running through the area.
- » Hipped roofs and central chimney stacks break the roof line.

Street Scape Summary



Terraced housing along Whitley Road constructed in natural stone, newer homes are constructed in artificial stone for continuity.



Edge of Thornhill along Low Road looking towards Howroyd Beck.



Bungalows at the entrance to Mountain Road.



AREA 5 - THORNHILL AND OVERTHORPE

Materials Study



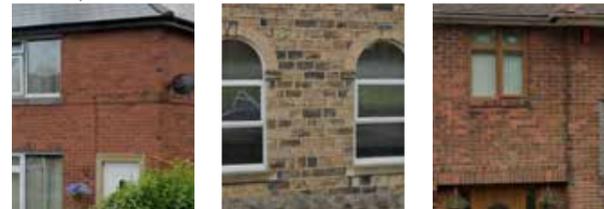
Surface Treatment: The pavements and the roads are made up of tarmac with some stone kerbs. Some driveways are block paved.



Roofing: Slate roofs pitched front to back with chimneys on the party wall. Deep eaves fit tight above window lintel.



Boundary Treatment: A variety of low walls and ornamental soft landscape.



Brick Work: A mixture of red brick or artificial and natural stone in a variety of coursing patterns.

2.6.6. Summary

Although there is no specific or dominant single architectural style within the local area, generally the key characteristics to residential properties are:

- » Historic housing growth generally occupies low land areas adjacent to the river. Area of steeper topography to the south of the Site are characterised by more modern housing.
- » Predominantly 2 storey dwellings with occasional 3 storey and single storey residential development.
- » High density areas comprising of mainly terraced properties.
- » Medium / lower density areas comprising of detached or semi detached housing.
- » Terraced housing is located generally close to the main access roads and footpath with minimal space in front of the dwellings.
- » Detached and semi detached properties are set back from the main road with front gardens and/or driveways.
- » Varied in approach to elevation style, however, traditional materials such as stone, red brick, render with slate or tiled roofing are generally used.
- » Detailing to elevations generally simple and uncomplicated with feature brick coursing or areas of timber cladding breaking up the elevation.



2.7. LANDSCAPE CHARACTER

DEP Landscape Architecture Ltd has undertaken a Landscape and Visual Impact Assessment (LVIA) for the Site.

2.7.1. Landscape Character Baseline

A baseline for Landscape Character of the surrounding landscape has been taken from published material which includes Natural England National Character Area, the Kirklees District Landscape Character Assessment (2015) and Land South of Ravensthorpe Road, Thornhill Lees, Dewsbury-Landscape Character Assessment (2015).

Natural England National Character Area: The Site falls within National Landscape Character Area 37 Yorkshire Southern Pennine Fringe, on its eastern edge adjacent to NLCA 38 Nottinghamshire, Derbyshire and Yorkshire Coalfield. Important characteristics relating to this character area are described through the LVIA submitted in support of this application.

Kirklees District Landscape Character Assessment (2015): The Site lies within Landscape Character Type E – Rural Fringes and is part of Landscape Character Area E7 – Emley Moor Northern Fringes, of the Kirklees District Landscape Character Assessment. Important characteristics relating to this character area are described through the LVIA submitted in support of this application.

Land South of Ravensthorpe Road, Thornhill Lees, Dewsbury-Landscape Character Assessment (2015):

The area has been divided into 4 separate local landscape types:

- » (1) Fringe farming
- » (2) Traditional farming
- » (3) Open Plateau
- » (4) Valley side

The fringe farming and traditional farming landscape types cover the majority of the Site:

Fringe farming characteristics:

- » **Landform:** Flat, valley bottom.
- » **Vegetation:** Isolated small trees, hedgerows.
- » **Tree Cover:** No tree cover.
- » **Land Use:** Recreational walking, arable farming. Horse riding, cycling.
- » **Enclosure and Views:** Wire fences and hedgerows. Views are enclosed by inclining valley side to the south and residential development to the north. Wider views are blocked by clusters of woodland.
- » **Settlement and Buildings:** Bounded to the north by residential development dating from early 1900's to modern day.
- » **Transport and Access:** Accessible via a private track, use by farm vehicles and bicycles, there is also Ouzewell Lane which a part adopted part private lane, providing access only to farm buildings

Traditional farming characteristics:

- » **Landform:** Gently sloping incline down to flatter valley bottom.
- » **Vegetation:** Mature hedgerow, mainly hawthorn, with intermittent trees. Maintained grassland used for grazing, of dairy cattle.
- » **Tree Cover:** Clusters of mature woodland edge to the west and south.
- » **Land Use:** Grazing for dairy farming. Horse riding, cycling, recreational walking.
- » **Enclosure and Views:** Stone walls, fences and hedgerows. Views are enclosed by inclining valley side to the south and mature hedgerows. The site is enclosed by the railway to the north. Wider views from the south to north are of the town of Ravensthorpe and beyond. Looking south wider views span across the whole site, but are constrained by the landform.
- » **Settlement and Buildings:** The area is bounded to the north by the railway. With one isolated farming house and associated buildings. No other built development.
- » **Transport and Access:** The area is only accessible to the public, on foot via public bridleway and private track.

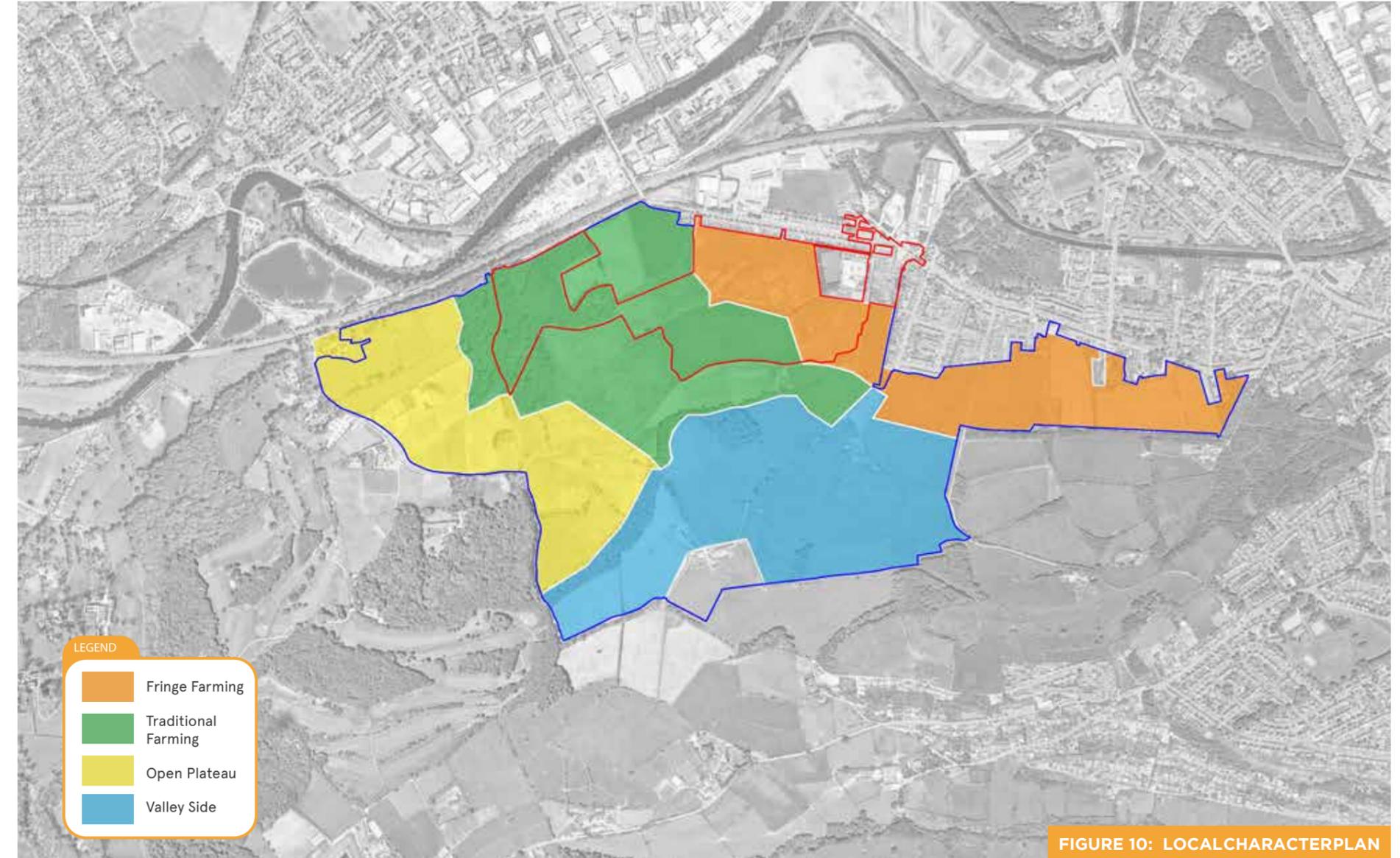


FIGURE 10: LOCAL CHARACTER PLAN

2.7.2. Visual Appraisal

Local Visual Character-Urban: The urban area of Dewsbury extends southwards to the River Calder, the railway line and the Calder and Hebble Navigation, sitting in the valley bottom, which generally forms the settlement edge. This area, is industrial in character, dominated by large industrial buildings, plant and transport infrastructure. Thornhill Lees, a mainly residential area, sits on the southern edge.

Due to the flat, low lying nature of the landform and the scale/mass of industrial buildings, views are restricted, although elevated open countryside is visible to the south where views are more open.

Local Visual Character-Rural: The Site and parts of the wider allocation comprise a combination of farmland, hedgerows and both established and recently planted woodland. It is a large area of open agricultural land with semi-improved natural grassland, a small number of low-quality trees and a distinct network of hedgerows present. The Site is bounded to the north by the urban fringe of Ravensthorpe Road and existing two storey housing.

Local Visual Character-Urban Fringe: Generally, there is a fairly direct transition between the urban edge of Dewsbury and the rural landscape to the south. This is largely due to the well-defined boundaries of the settlement edge, established by the railway line and the River Calder. Where settlement extends beyond these edges, there is a stronger presence of urban fringe character. The settlements of Thornhill Lees and Ravensthorpe form the southern edge of the Dewsbury urban fringe. The settlements of Thornhill, Thornhill Edge and Overthorpe southeast of the Site, wrap around the eastern edge of the study area, sitting on elevated ground and have spread where the landform is less steep, with elevated views across the site to Dewsbury.

There are longer distance views, generally focused to the north, which reveal the more densely settled lower lying urban area of Dewsbury.



View of Ouzewell Lane looking north



View south from footpath in Lady Wood



View up Ings Lane from Ouzewell



View of Ouzewell Lane looking north



View north east towards Ravenshall School and existing allotments



View into site from existing bridleway off Ravensthorpe Road



View across paddocks towards Lady Wood from Sands Lane



View north towards Ravensthorpe Road



Ravensthorpe Road Access



Footpath adjacent rail line



View west across the site towards Dewsbury Centre

3 SITE ASSESSMENT

This section sets out the findings and recommendations from technical studies which have been undertaken in support of the Site's future development.

3.1. VEHICLE AND PEDESTRIAN ACCESS

Development Planning Ltd has undertaken a Transport Assessment of the Site, which has been submitted in support of the application.

In accordance with Cabinet Approved Masterplan, the Site can be access via a redesigned roundabout access at the junction of Ravensthorpe Road/ Forge Lane/ Lees Hall Road. The delivery of this access point would require the relocation of Masjid Abubakr Mosque and Lees Hall Playgroup (555, Lees Hall Road).

To allow the delivery of development prior to the mosque relocation, an initial access point can be provided from Ravensthorpe Road(S), accommodating up to 150 dwellings.

In addition to the vehicular access points to the Site, additional pedestrian access points are to be provided directly onto Ravensthorpe Road, via the new allotment access and a new pedestrian access located between number 139 and 143 Ravensthorpe Road.

The internal Spine Road has been submitted in detail (see Chapter 7) for approval as part of the full planning application. The internal Spine Road has been designed to accommodate pedestrians.

3.2. NETWORK RAIL (NEW JUNCTION AND TRAIN STATION)

Network Rail (NR) has shared draft proposals with the Council to deliver a new Calder Road bridge crossing the Huddersfield Railway Line and connecting to a new roundabout, which provides access to a proposed train station drop off point and a link to Ravensthorpe Road.

The NR design proposal is being developed in more detail by NR and further design progression must align with the emerging design proposals for Dewsbury Riverside, allowing the Spine Road to connect with the NR proposals.

3.3. PUBLIC RIGHT OF WAY

The Site includes two designated bridleways, one to the north of the Site and one to the east. There are also a number of claimed bridleways running through the core of the Site.

There are no public footpaths within the core of the Site, although two rights of way run through Lady Wood.

The wider allocation includes bridleways and designated public footpaths.

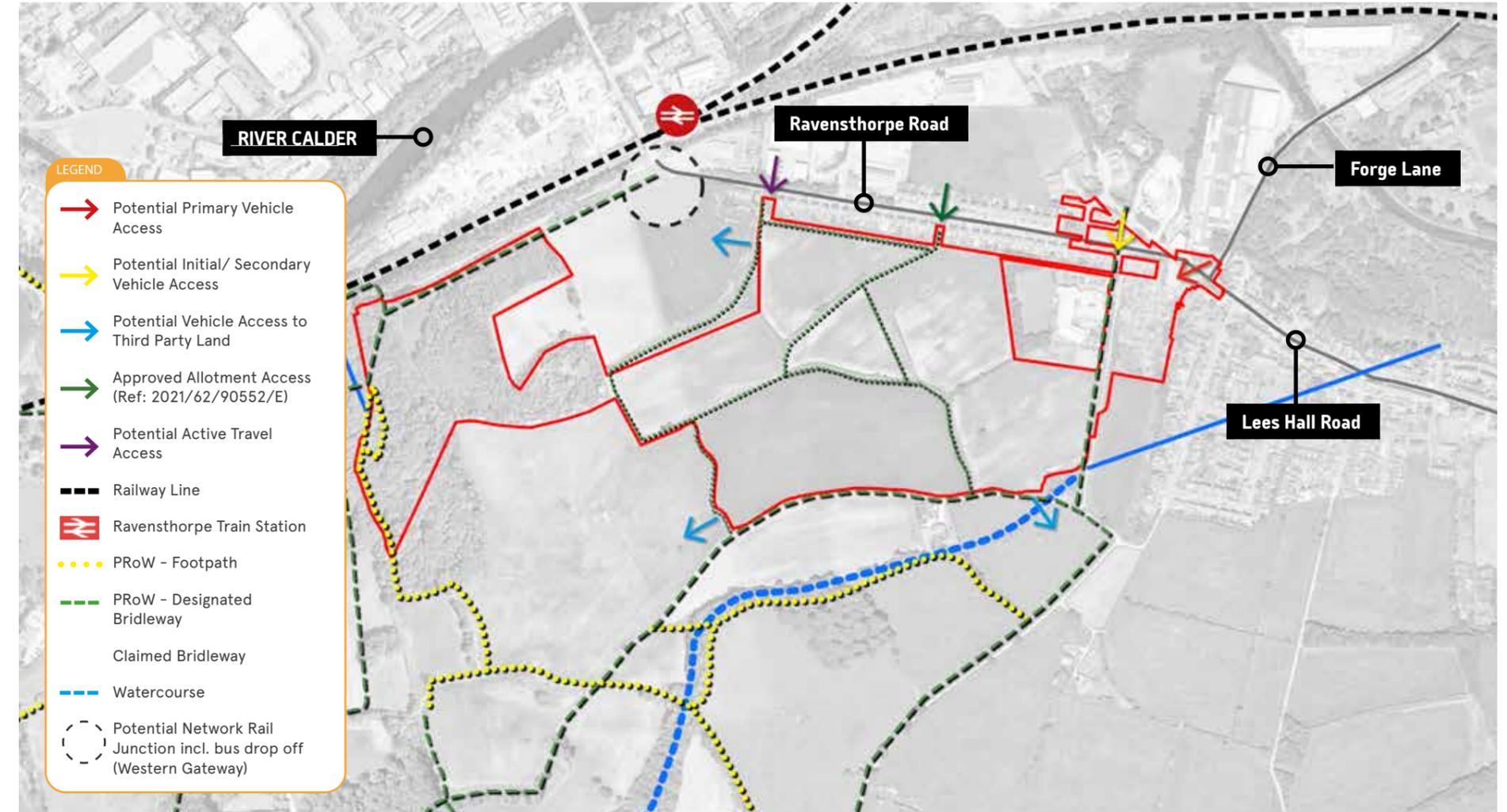
3.4. GROUND CONDITIONS

Due to the nature of some previous activities including mining on some of the Site, remediation and restoration may be required in certain areas.

Natural ground was encountered in the majority of exploratory holes beneath topsoil which was typically c. 300mm thick.

Bedrock was encountered from between 0.7m and 3.1m depth, and comprised coal; sandstone and mudstone.

The Coal Authority have records of 40 mine entries within, or within 20m of, the Site, the majority of which are located in Lady Wood in the west where no development is proposed. However, one mine entry is located in the centre of the Site, two mine entries are located in the north and one mine entry is located within the grounds of Ravenshall School (northeast of the Site; no development proposed).



3.5. NOISE QUALITY

Vanguardia Ltd has undertaken a noise and vibration impact assessment for the proposed development.

The development is not expected to introduce any significant sources of vibration; vibration effects associated with the completed development were therefore scoped out of the assessment.

The construction phase may give rise to adverse noise effect at the Ravensthorpe receptors during Site preparation, and at the dwelling immediately adjacent to Masjid Abubakr Mosque and Lees Hall Playgroup building during demolition of those buildings. However, it has been noted that this is based on the absolute worst-case assumption of all equipment items being in operation at the closest point to the receptor.

3.6. UTILITIES

The Site includes three overhead powerlines, including:

- » 132kV overhead line crossing through Lady Wood
- » 33kV overhead line crossing through Lady Wood
- » 132kV overhead line crossing through the Site to the left of the Ravenshall School

Running east-west, adjacent to the Site's southern-most boundary is a 450m high pressure gas main. A spur from this main runs north-south through the centre of the Site.

3.7. TOPOGRAPHY

Topography across the Site generally slopes towards the north and the north east. The steepest slopes reach gradients of about 1:6 in the centre-north, although the 'typical' gradient is c. 1:12. The highest elevation is approximately 87m AOD whilst the lowest elevation is 44.3m AOD.

3.8. FLOOD RISK AND DRAINAGE

Buro Happold has undertaken a Flood Risk and Drainage Strategy for the Site.

The Site falls within Flood Zone 1 with a less than 1 in 1,000 chance of river or sea flooding in any one year.

The nearest river is the River Calder, which is located approximately 70m to the north, from the Site boundary at its nearest location.

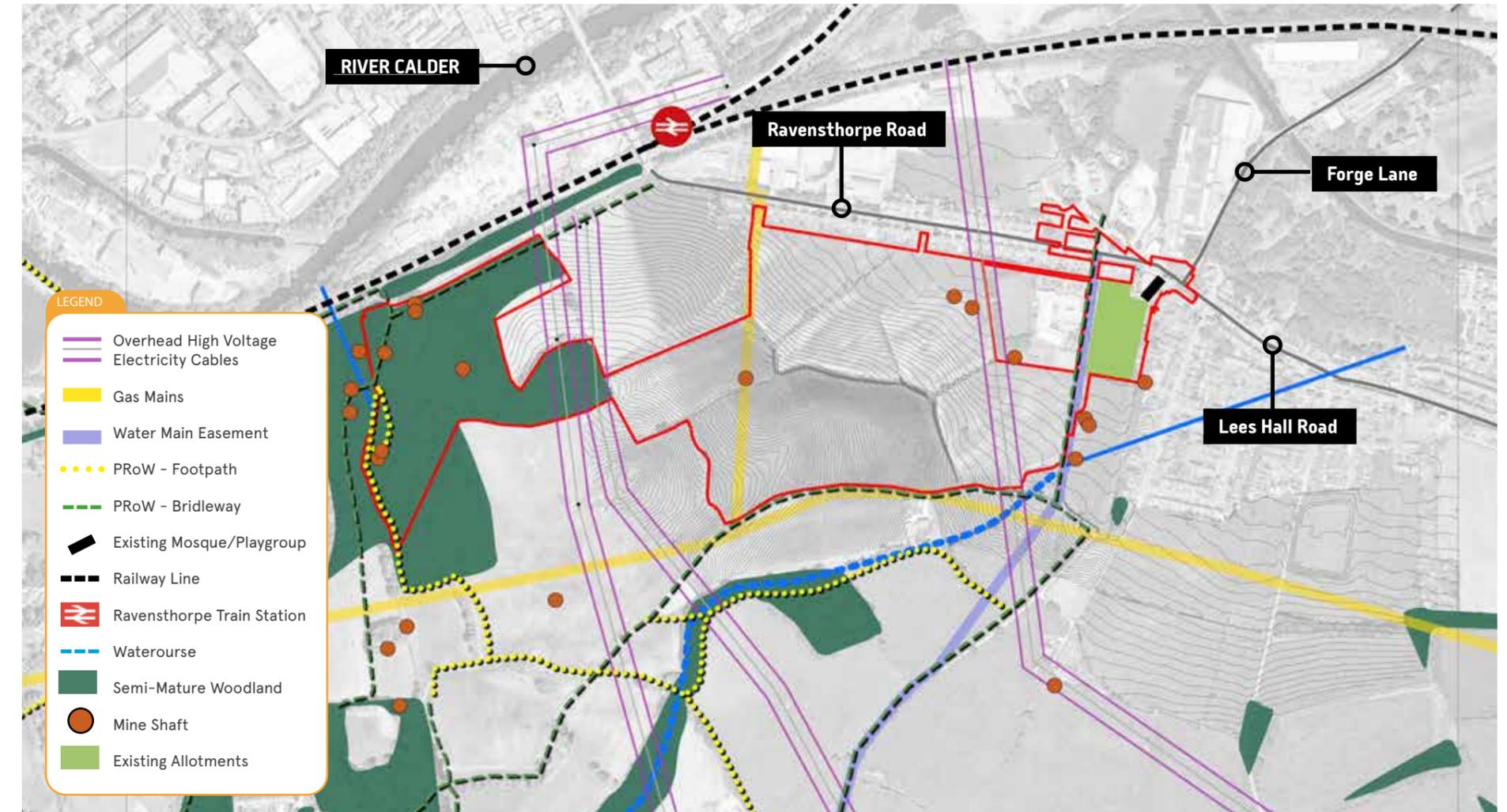
Sustainable drainage systems (SuDS) can be used to restrict runoff to greenfield runoff rates in accordance with the Kirklees Local Plan Strategy and Policies (February 2019) for the critical 1 in 100 year rainfall event, with an additional 40% allowance for climate change in accordance with the latest EA guidance.

The runoff in the north of the Site can be conveyed by gravity via swales towards the northern end where detention basins will provide attenuation. These detention basins will discharge to the sewer located under Ravensthorpe Road at a discharge rate of 3.5 l/s. The southern site runoff will be conveyed by gravity via swales and other drainage routes towards the east of the Site where detention basins can provide attenuation and water quality treatment before discharging to the existing culverted watercourse at a discharge rate of 5 l/s.

3.9. EXISTING DEVELOPMENT

Small buildings have been present in the north east from pre-1855. However, these were demolished and replaced with a car park and allotment gardens (which remain in-place) inc. 1930.

The relocation of the Masjid Abubakr Mosque and Lees Hall Playgroup situated in the north eastern corner of the Site is required to facilitate the delivery of the proposed primary vehicle access.



3.10. ECOLOGY

Buro Happold has undertaken an Ecological Impact Assessment for the Site.

The Site comprises predominantly agricultural land consisting of cereal crop. A large extent of broad leaved woodland is located to the west of the Site and is considered to be a priority habitat.

Connectivity across the Site is considered to be poor with occasional species poor hedgerow and minimal field margins.

The Site sits within the 'Pennine Foothills' Biodiversity Opportunity Zone' which sets out specific objectives that should be targeted for protection and enhancement of habitats and species within the zone.

Species specific surveys identified low bat and badger activity that was concentrated around the woodland. The breeding bird assemblage is considered to be of District value and comprises a range of farmland, woodland and generalist species.

3.11. TREE SURVEY

Ian Taverdale Arboricultural Consultant has undertaken an Arboricultural Assessment for the Site.

No trees within the Site or immediately adjacent to the Site boundaries are covered by Tree Preservation Orders or located within a Conservation Area.

Where possible, Category A, B and C trees within the Site, will be retained. However, it should be noted that Site levels may preclude the retention of trees, in which case adequate replacements should be provided.

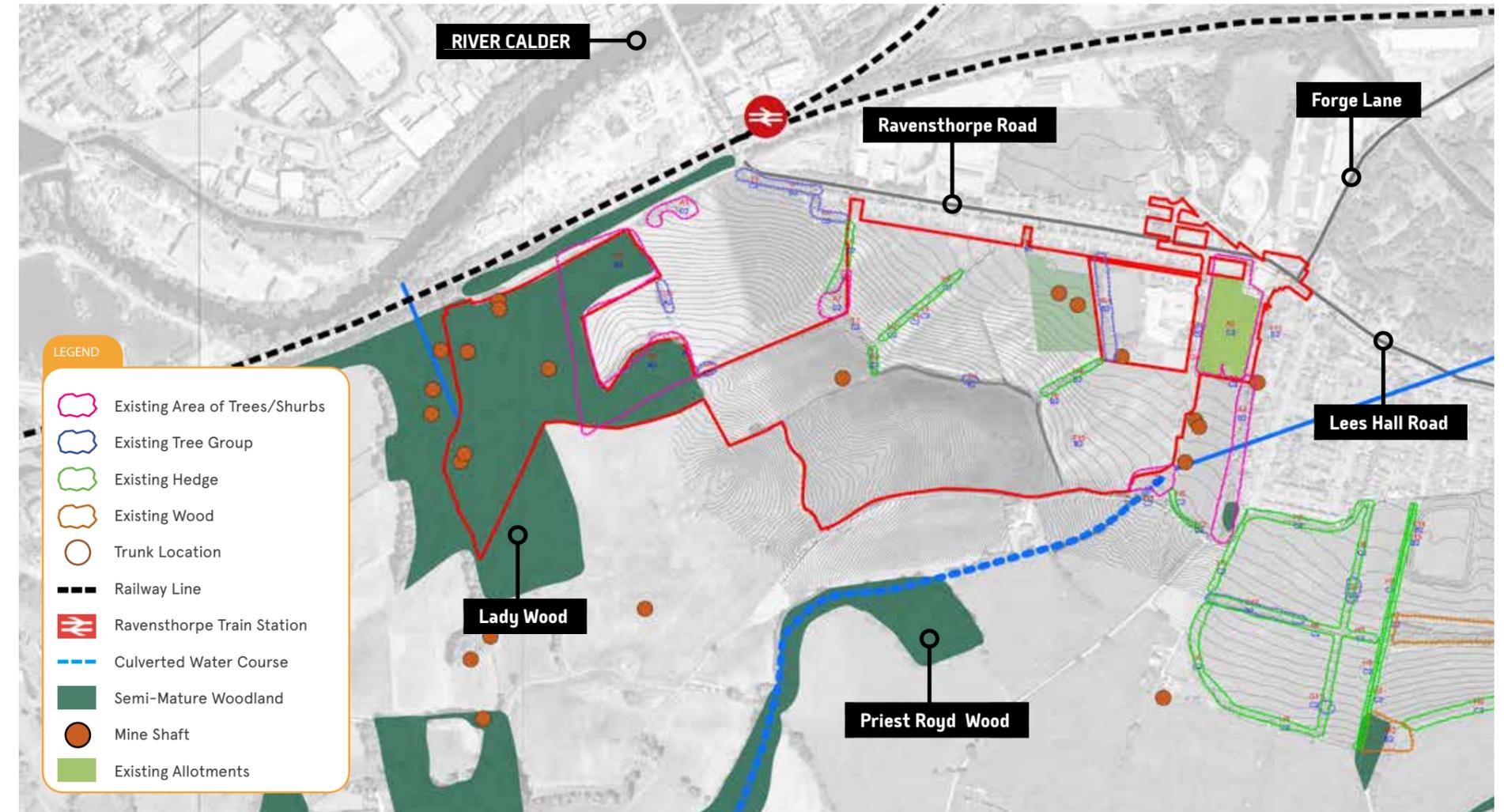
3.12. HERITAGE AND ARCHAEOLOGY

Wardell Armstrong has undertaken an Archaeological and Built Heritage Assessment of the Site.

Baseline information was gathered from the West Yorkshire Historic Environment Record, Historic England data sets, Kirklees Local Studies Library and a Site walkover survey.

Baseline collection has ascertained that there is no evidence for the presence of archaeological remains which could preclude development. The potential archaeological remains present within the Site are able to be mitigated through appropriate archaeological fieldwork which could reasonably be undertaken as a condition to consent or as part of a reserved matters application. The granting of consent would not be in conflict with legislation and national and local planning policy on archaeological grounds.

It is considered that baseline collection has ascertained that there would be no harm to designated heritage assets located within the vicinity of the Site as a consequence of change within their setting. In the event that any stakeholder disagrees with this conclusion and considers harm to be incurred to the Grade I and II* Listed Buildings at Lees Hall, the public benefits to be offered by the scheme could be used to demonstrate full compliance with national and local planning policy.



4 INVOLVEMENT AND EVOLUTION

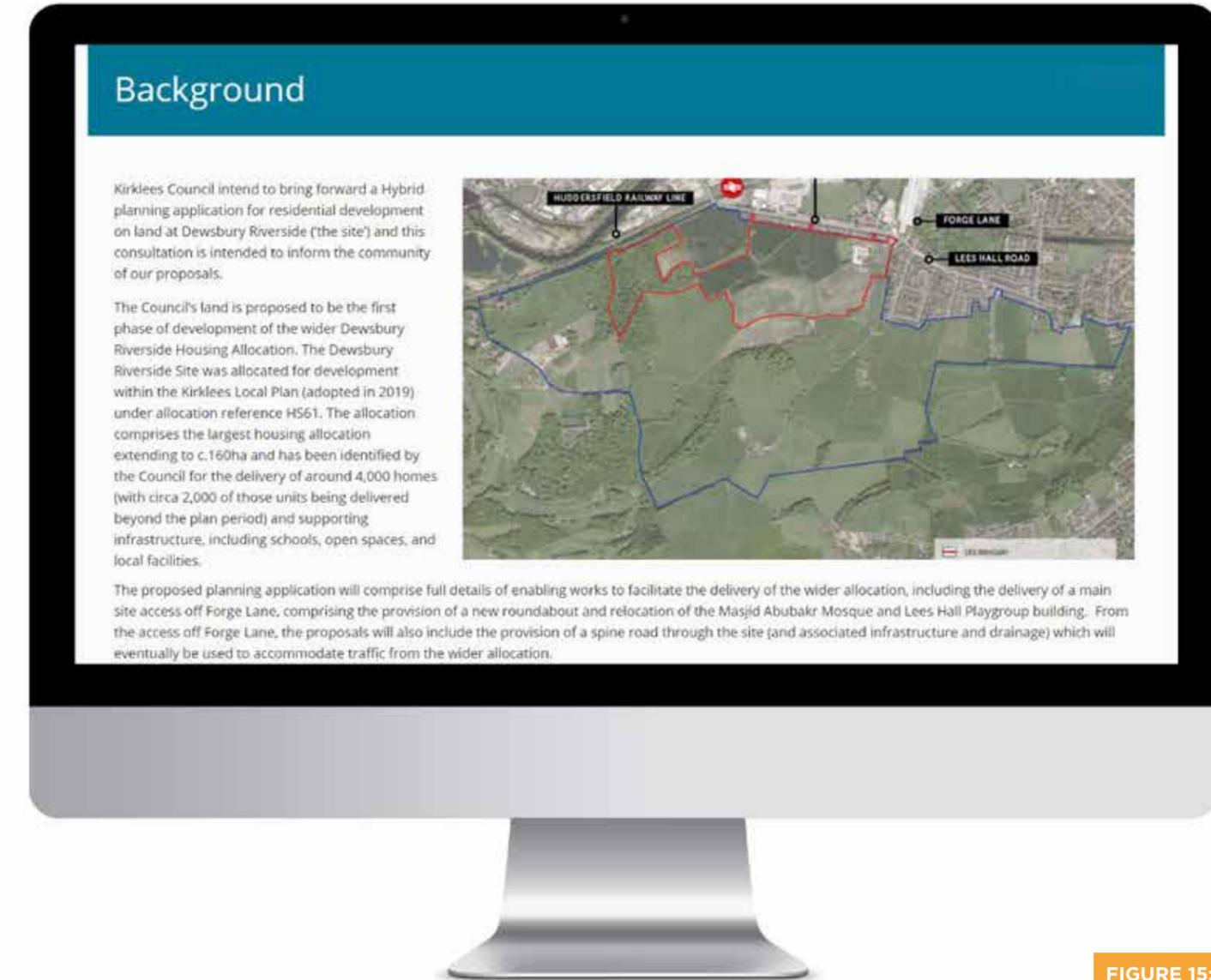
This section provides a summary of the engagement process undertaken and how the masterplan has evolved. Further details of the consultation activities undertaken are documented in the Statement of Community Involvement (SCI).

3.13. PUBLIC ENGAGEMENT

The consultation activities undertaken in preparation of the design proposals presented through this document have been chosen in view of the COVID-19 restrictions.

The proposals have been informed by ongoing discussions with officers at Kirklees Council, alongside statutory and local stakeholders. Methods of consultation and engagement include:

- » Ongoing meetings with officers at Kirklees Council (as client).
- » Several virtual team meetings with officers at Kirklees Council over the course of the project, to discuss various technical matters, relating to highways, drainage, landscape and land use.
- » Provision of a website (www.riversidedewsbury.co.uk) which went live on 21st June 2021, allowing local residents and stakeholders to review the proposed development and make comments between 21st June 2021 and 1st August 2021; and
- » A letter and questionnaire were issued to existing residents near to the sites. The letter provided an overview of the proposed development and invited residents to provide comments via the website.
- » Online live chat 'drop-in sessions were held so interested parties were given the opportunity to speak directly with a member of the project team. This session was held between 11am and 7pm on the 6th July 2021.
- » A dedicated email address (dewsbury@bartonwillmore.co.uk) was set up to provide an additional method of contact for interested parties.
- » The council advertised the consultation 8 times on social media between 28th June and 1st August 2021.



4.1. CONSULTATION THEMES AND RESPONSES

The discussions and comments received during the public consultation uncovered key themes that the local community and interested parties raised, including:

- » The relocation of the Masjid Abubakr Mosque and Lees Hall Playgroup
- » Increased pressure on highways infrastructure and traffic
- » Loss over greenfield / Green Belt land
- » Increased pressure on local facilities (schools, doctors etc.)
- » Flood Risk

Feedback to the consultation was provided through the following means:

- » 151 questionnaire responses received online via the Dewsbury Riverside website;
- » 36 questions submitted online;
- » 9 email query responses;
- » Tawk To online live chat function 'drop-in' session; and
- » 1 written response via post.

Responses received from the engagement activity was varied. Some support was demonstrated for the proposals, however there were several areas, where the community identified areas of concern. The Consultation process has been valuable in identifying those key areas of concern.

4.1.1. Masterplan Evolution

The feedback generated has informed the iterative design approach to the masterplan for the Site. The aim has been to use the engagement process to inform an attractive, inclusive and deliverable development proposal that meets the needs of local people.

The responses received have been pivotal in developing an illustrative masterplan for the Site that can address the concerns and aspirations voiced by local people. The approach has been to respond positively to feedback from relevant stakeholders, and to amend and modify the proposals to reflect the needs and concerns arising from the consultation process.

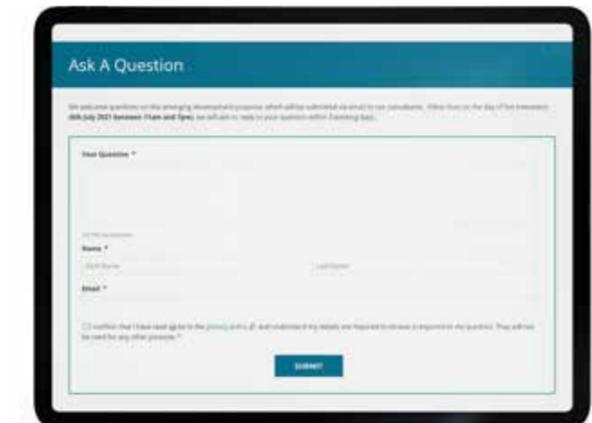
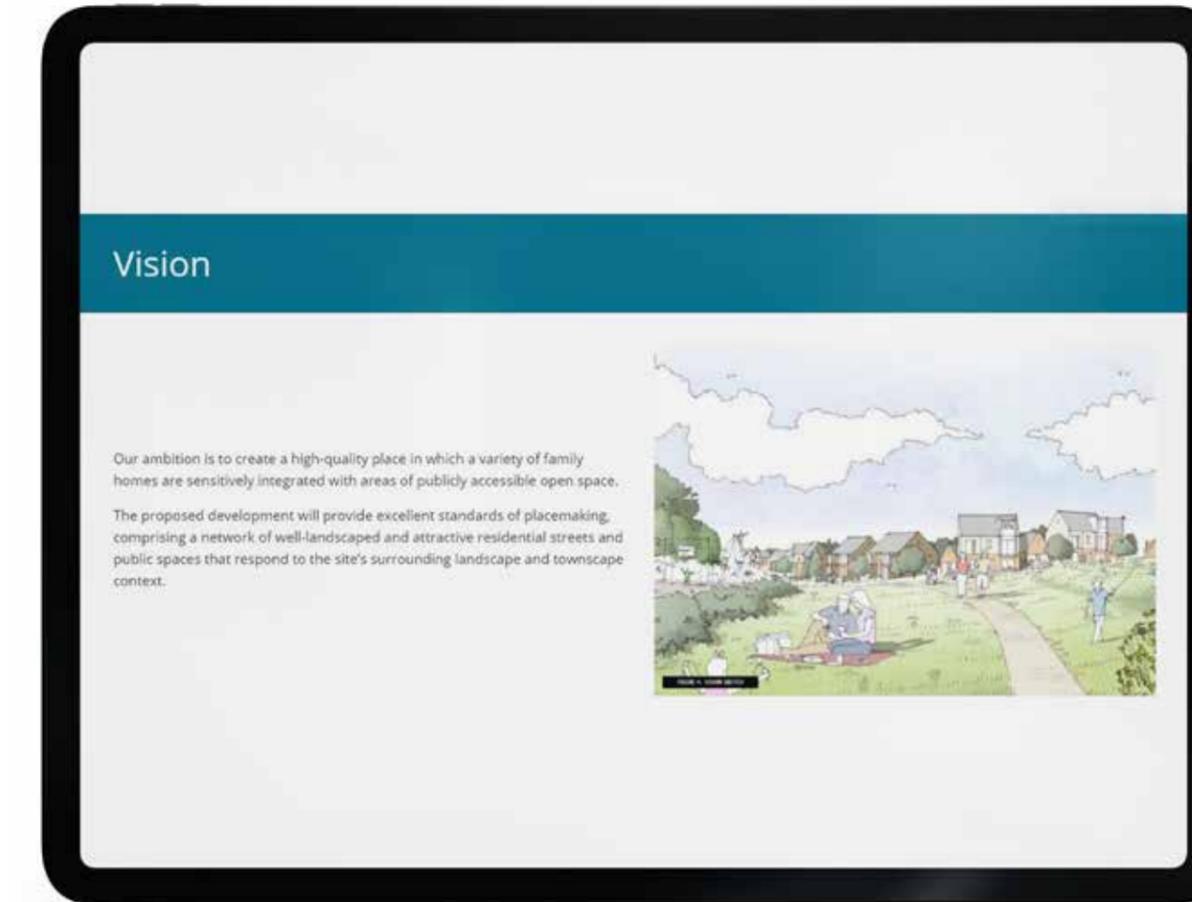


FIGURE 16: WEBSITE EXTRACT

4.2. EVOLUTION

The masterplan evolution described through this section has been underpinned by consultation with the Council and key stakeholders.

Options considered for the delivery of development on the Site land and the adjoining land to test different solution to the position of the Spine Road and the connection to the proposed Network Rail junction (Western Gateway).

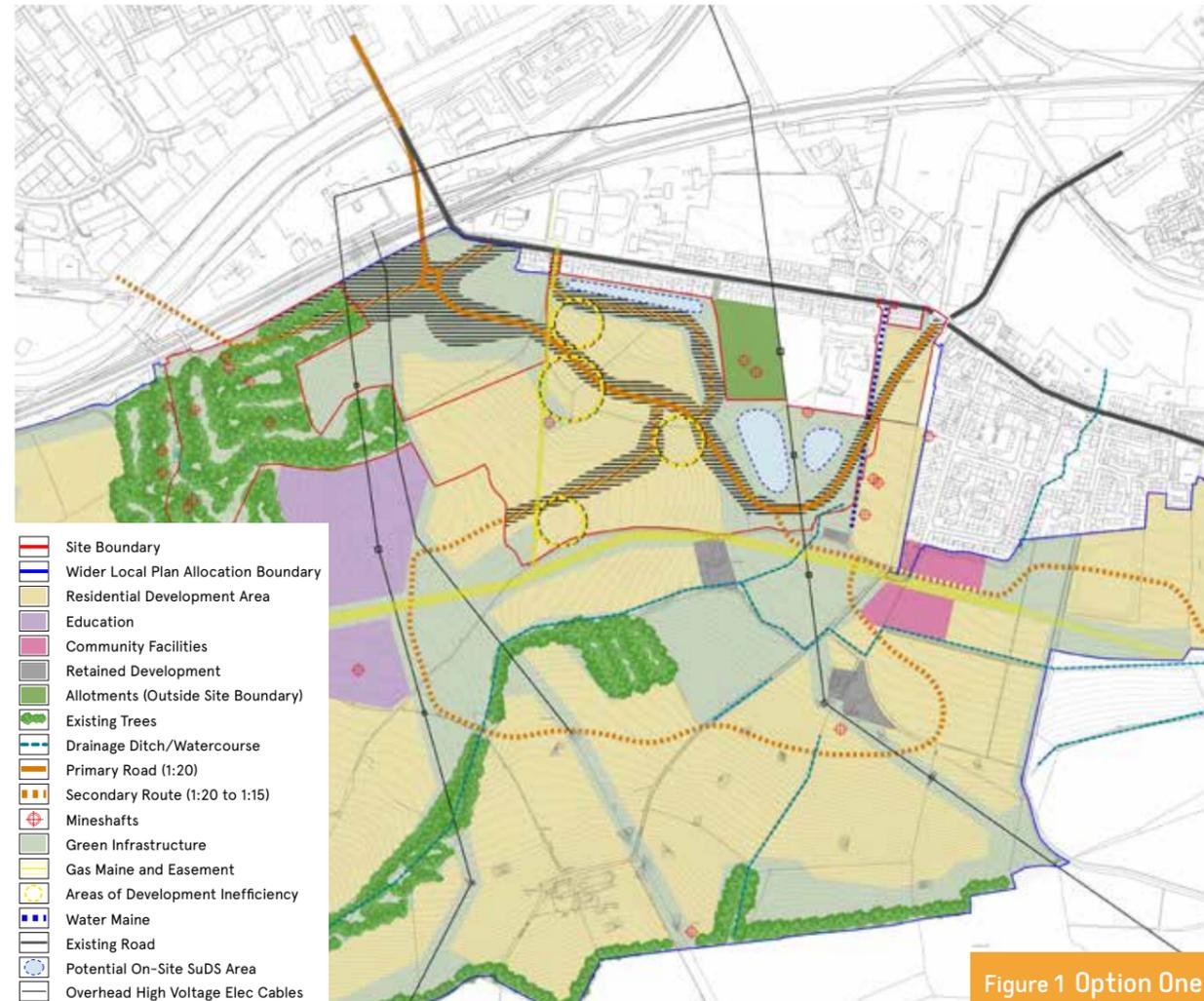
4.2.1. Discounted Option : Strategic road running through the middle of the Site

An option was explored that placed the Spine Road centrally within the Council's land, following the line of an existing contour.

The combination of the wide road and the topographical challenge meant this option would require earthworks along the length of the route and when connecting to the Western Gateway.

More detailed road modeling identified the need to shift the positioning of the Spine Road to deliver the required 1:20 gradients, whilst also avoiding the pressured gas main. This alteration in the road position resulted in several areas of inefficiency within the potential developable area.

The inefficiencies resulting from the revised road position meant this option must now be discounted.



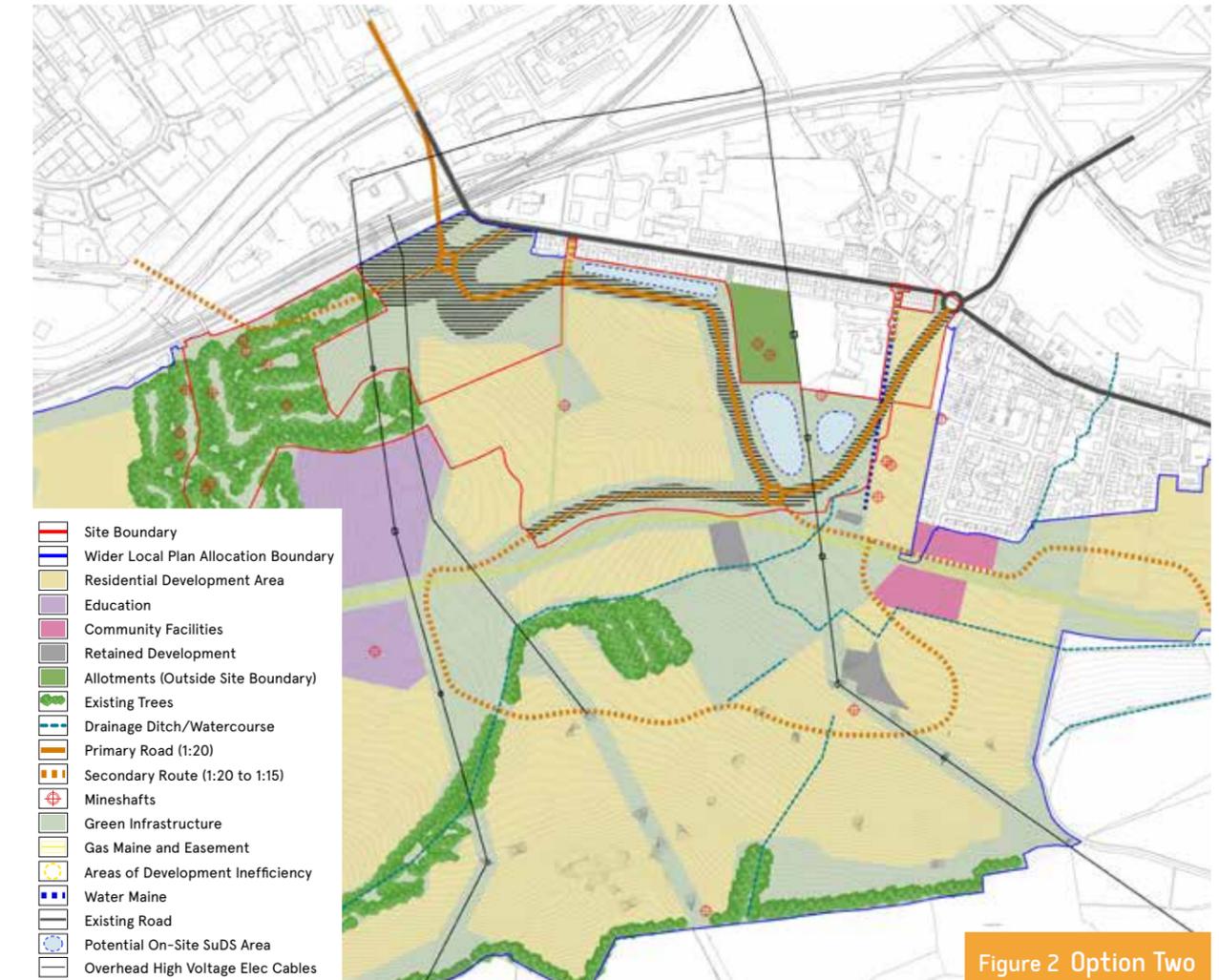
4.2.2. Preferred Option: Spine Road running to the north of the Site

This option placed the Spine Road along the northern boundary of the Site, parallel to existing housing served off Ravensthorpe Road and the proposed allotments.

This route avoids the steeper area of the Site which reduces the amount of earthworks required along the length of the road. There is the potential, therefore, for the road to be designed / seem less significant to the pedestrian.

The Spine Road will be required to accommodate a bus route. This means the road gradient should be no steeper than 1:15 and preferably no steeper than 1:20. All other residential streets can be steeper at 1:10. With this in mind, this option places the Spine Road at the edge of the Site, in areas that have less topography and where there is less conflict with the pressured gas mains. The core of the Council's land can then deliver 1:10 residential streets which is considerably more efficient and will enhance the place making qualities of the Council's land.

This option formed the basis of the Illustrative Masterpan presented through this document.



5 EVALUATION

This chapter takes account of the Site assessment and engagement stages set out previously to provide a concise summary of the Site's opportunities and considerations.

5.1. LANDSCAPE AND OPEN SPACE

- 1 Provide green corridors running through the Site, connecting existing habitats and allowing off active travel movement.
- 2 Preserve and enhance Lady Wood
- 3 Provide landscape buffers to the boundaries with the surrounding residential area.
- 4 Preserve land for the new allotments within a parkland setting.

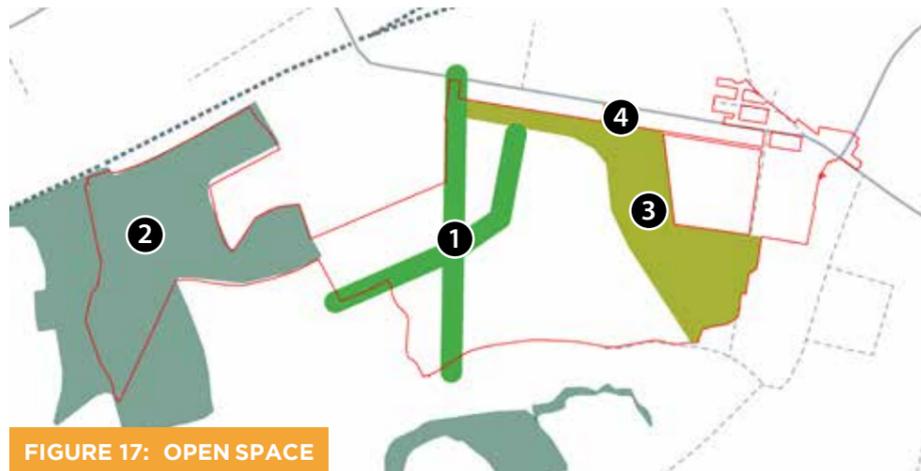


FIGURE 17: OPEN SPACE

5.2. DRAINAGE

- 1 Provide land for Sustainable Urban Drainage (SuDS) at the Site's lowest point (southern catchment).
- 2 Provide land for Sustainable Urban Drainage (SuDS) at the Site's lowest point (northern catchment).
- 2 Deliver controlled drainage discharge rates into the public sewer located along Ravensthorpe Road.

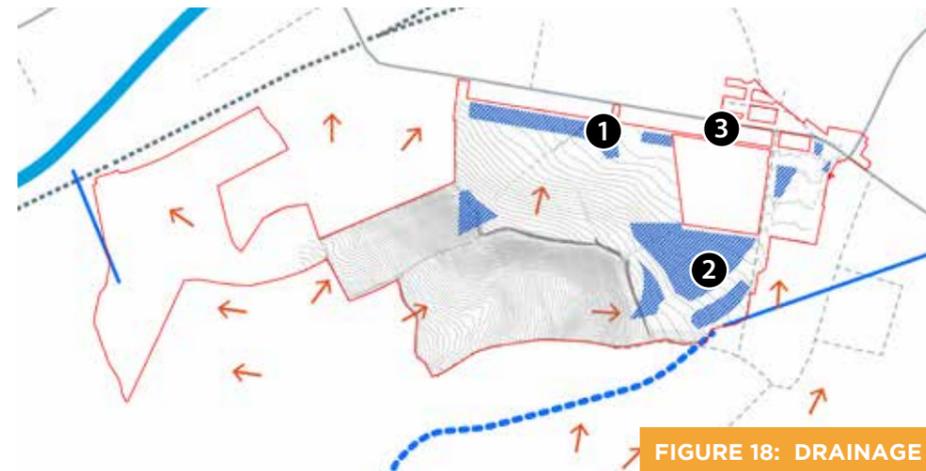
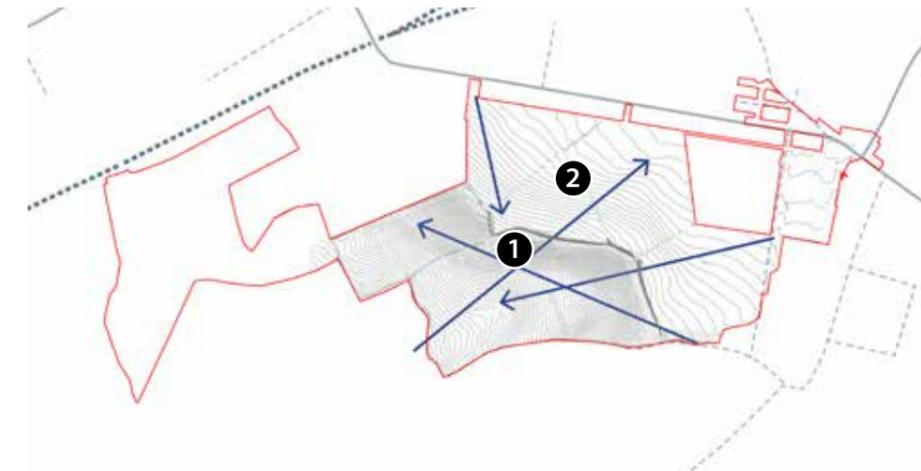


FIGURE 18: DRAINAGE

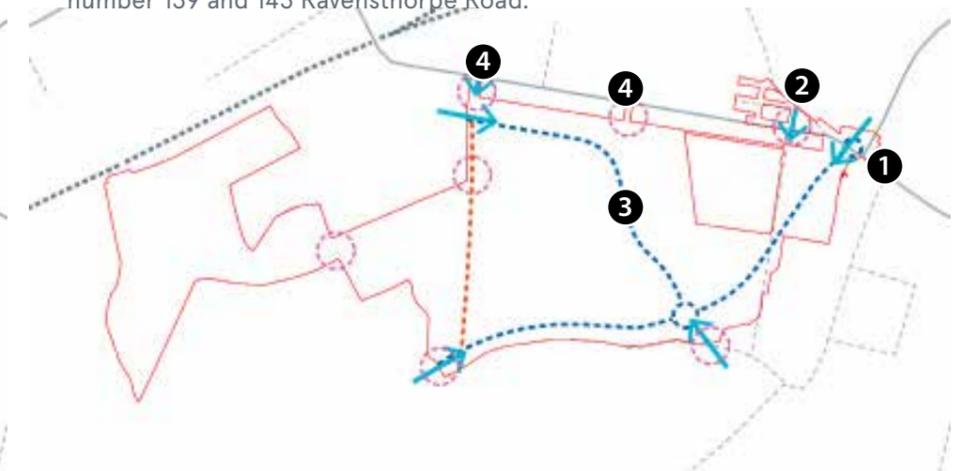
5.3. TOPOGRAPHY AND VIEWS

- 1 Carefully consider views across the Site from the south and from within the Site towards Dewsbury town centre.
- 2 The potential for view corridors to be established within each of the development parcels which will support placemaking principles and legibility.



5.4. ACCESS AND MOVEMENT

- 1 Provision of primary vehicle access from Ravensthorpe Road/ Forge Lane/ Lees Hall Road. The delivery of this access point would require the relocation of Masjid Abubakr Mosque and Lees Hall Playgroup (555, Lees Hall Road).
- 2 Provision of an initial vehicle access point from Ravensthorpe Road(S), accommodating up to 150 dwellings.
- 3 Provision of Spine Road to serve the Site and help facilitate the delivery of the wider allocation.
- 4 Pedestrian access points are to be provided directly onto Ravensthorpe Road via the new allotment access and a new pedestrian access located between number 139 and 143 Ravensthorpe Road.



6 OUTLINE DESIGN

This chapter describes the proposed design response, through concept graphics, parameter plans, and an Illustrative Masterplan.

6.1. DESIGN CONCEPTS

Figure 19 to 22 Illustrates the underlying rationale for the masterplan that have arisen from the site assessment, design evolution and involvement stages

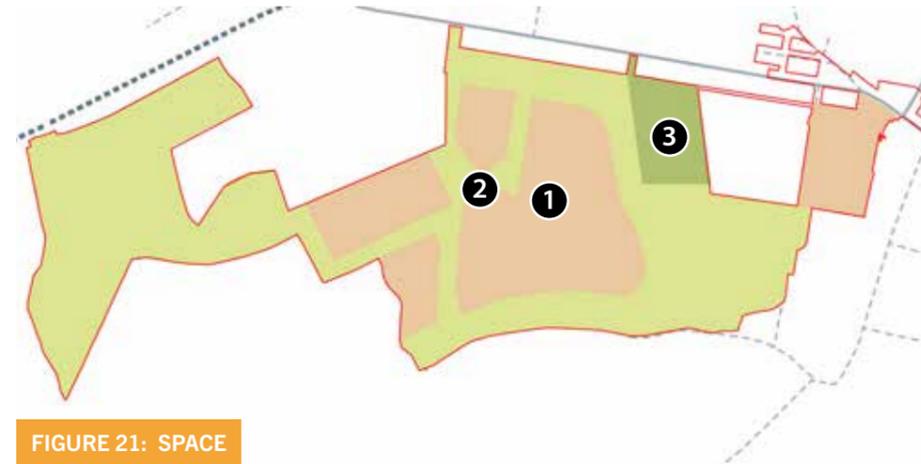


FIGURE 21: SPACE

6.1.1. Space

- 1 Developable area shaped by the provision of strategic road infrastructure, site topography and the provision of a large area of public open space to the east of the Site to accommodate Sustainable Urban Drainage Systems (SuDS)
- 2 Provision of public open space/ green corridors, accommodating active travel routes, existing and new planting, potential children's play and drainage
- 3 Allocation of land for allotments (Reference 2021/62/90552/E)



FIGURE 22: MOVEMENT

6.1.2. Movement

- 1 Primary vehicle access via a new junction at Forge Lane.
- 2 Initial/ secondary vehicle access via Ravensthorpe Road (s), adjacent to Ravenshall School (providing the potential to deliver vehicle access to the Site in the shorter term)
- 3 Active travel access via the allotment access and an existing farm track connecting to Ravensthorpe Road
- 4 Provision of a strategic road/ bus route that provides vehicle connectivity to the wider strategic masterplan, including the proposed Network Rail junction (Western Gateway)
- 4 Provision of off road pedestrian and cycle routes.



FIGURE 23: FORM

6.1.3. Form

- 1 Perimeter residential blocks will provide clear distinction between public and private space
- 2 New homes will positively address the new green spaces throughout the development.
- 3 Feature buildings (defined by scale, detailing and materials) will help create an attractive residential development whilst supporting legibility through emphasising spaces, routes and views.
- 4 All streets, spaces and paths will be overlooked by new development.

6.2. PARAMETER PLANS

This section presents parameter plans that create a framework that future reserved matters applications will be required to broadly follow.

6.2.1. Land Use Parameter

Residential: Up to 9.7 hectares of residential land is proposed, plus an additional 0.96ha identified for residential or community use (plus road infrastructure). The proposed residential development area will deliver green infrastructure (incl. a landscape corridor alongside the Spine Road) and is consider capable of accommodating upto 350 dwellings. Future Reserved Matter applications will be expected to provide a detailed explanation of their intended density, which considers the layout and urban form requirements described within this document.

Green Infrastructure and Open Space: A well-connected and integrated area of approximately

16.51 hectares of green infrastructure/ open space is proposed, comprising retained and enhanced landscape features, new planting, drainage features, and pedestrian and cycle routes.

6.2.2. Access Parameter

Vehicular Access: In accordance with the Cabinet Approved Masterplan, the Site will be accessed via a redesigned roundabout access at the junction of Ravensthorpe Road/ Forge Lane/ Lees Hall Road. The delivery of this access point would require the demolition and relocation of the Masjid Abu bakr Mosque and Lees Hall Playgroup building (555 Lees Hall Road).

To allow the delivery of development prior to the mosque relocation, a preliminary access point can be provided from Ravensthorpe Road(S), accommodating up to 150 dwellings.

The proposed development includes the provision of

a new Spine Road, for which full planning permission is sought (see Chapter 7 for further details). This road will provide opportunities for vehicle connectivity to the wider allocation.

Pedestrian/Cycle Access: The parameter plan opposite identifies pedestrian/cycle access points into the Site. This includes:

Use	Amount
Residential	c.9.7ha
Residential or Community	c.0.96ha
Indicative Extents of Green Infrastructure with the Development Area	c.1.08ha
Green Infrastructure	c.16.51ha



FIGURE 24: LAND USE AND ACCESS PARAMETERS PLAN

6.2.3. Green Infrastructure Parameter

The parameter plan opposite defines the areas of green infrastructure/ open space to be provided across the proposed development.

Areas of green infrastructure/ open space extend to 17.59 hectares and principally include public open space, drainage features, retained and new planting, electricity pylons and easement, and off-road pedestrian routes/ public footpaths.

The provision of open space exceeds the requirements of Policy LP63 in the Kirklees Local Plan which requires all at least 0.8 hectares of usable green space per 1,000 people.

Based on average of 2.2 people per household, 350 homes would require c.0.6 hectares of open space.

The Kirklees Local Plan states that the following can be included within greenspace:

- » Parks;
- » Recreation grounds;
- » Amenity green space;
- » Public and private playing fields;
- » Play areas for children and young people;
- » Nature areas;
- » Woodlands;

- » Allotments; and
- » Opportunities for local food growing.

Grass verges should not be included in any calculations and heavily engineered SuDS solutions will not be considered acceptable within greenspace.

The table below highlights the green infrastructure typologies included within the proposed development.

Category	Proposal
Allotments and Community Gardens	Induced
Amenity Green Space	Induced
Natural and Semi natural Open Space (incl. Suds)	Induced
Provision for Children and Young People	Potential to Include
Woodland (Lady Wood)	Retained

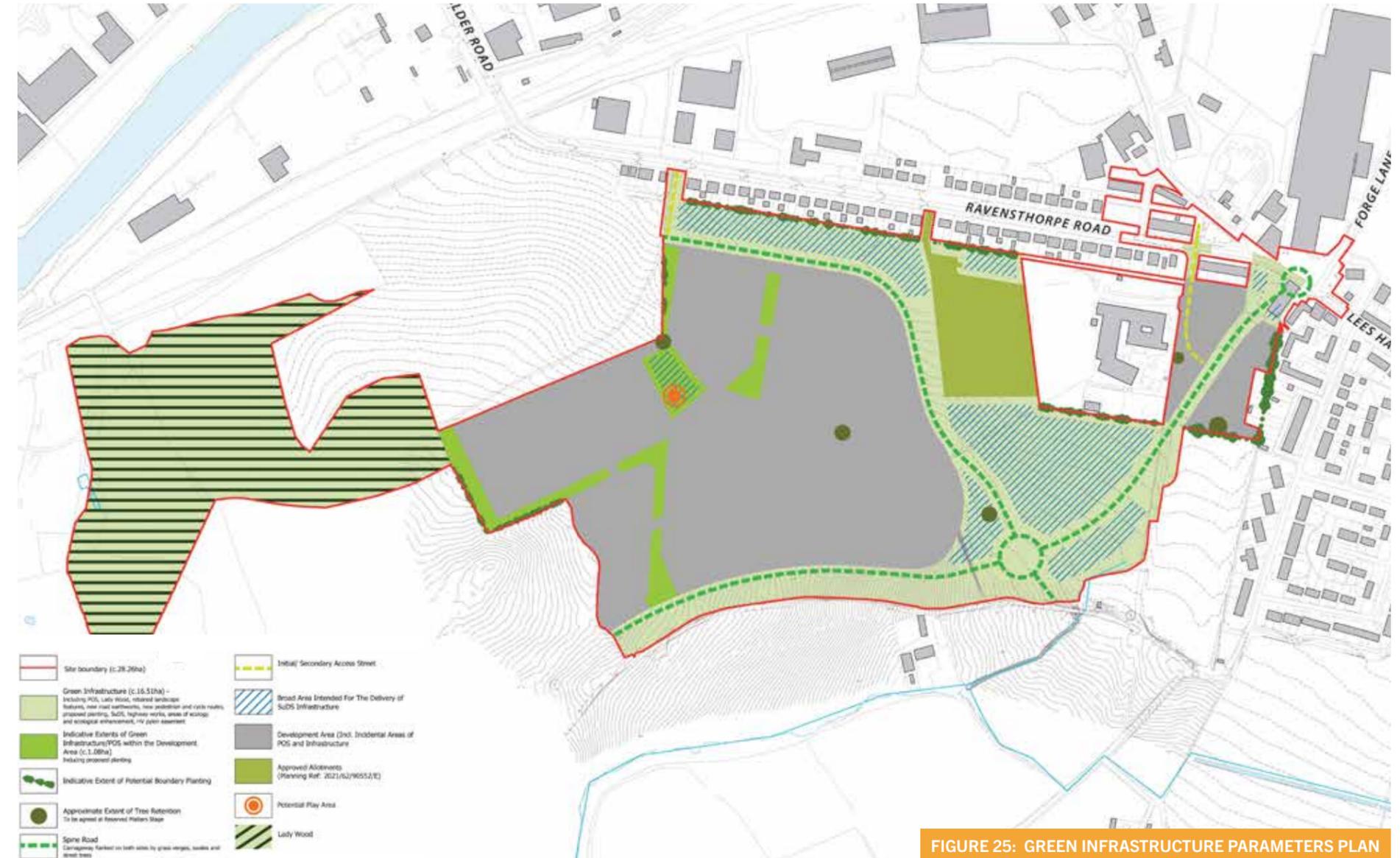


FIGURE 25: GREEN INFRASTRUCTURE PARAMETERS PLAN

6.2.4. Scale Parameter

The parameter plan opposite defines the scale of the development.

The residential development area will accommodate predominantly 2 storey housing. The occasional use of an increase in storey heights (up to 2.5 storeys) could be used to aid legibility and provide articulation within the street scene. Moreover, there is also the option to deliver up to 3 storey apartments at the Site gateway near to Forge Lane, subject to a more detailed design exercise.

Variety in the heights and massing of the residential buildings will be achieved through the use of a range of house types and sizes, ranging from smaller 1 and 2 no. bed apartments, through to larger detached houses.

The Site's rising topography will also help create variation in scale across the proposed development.

Key development frontages, such as those overlooking areas of public open space and following the primary movement route, will be particularly prominent and critical to the appearance of the development.

Indicative storey heights are as follows:

- » 2 Storey (up to c.9.5m)
- » 2.5 Storey (up to c. 10.5m)
- » 3 Storey (up to c.12.5m)

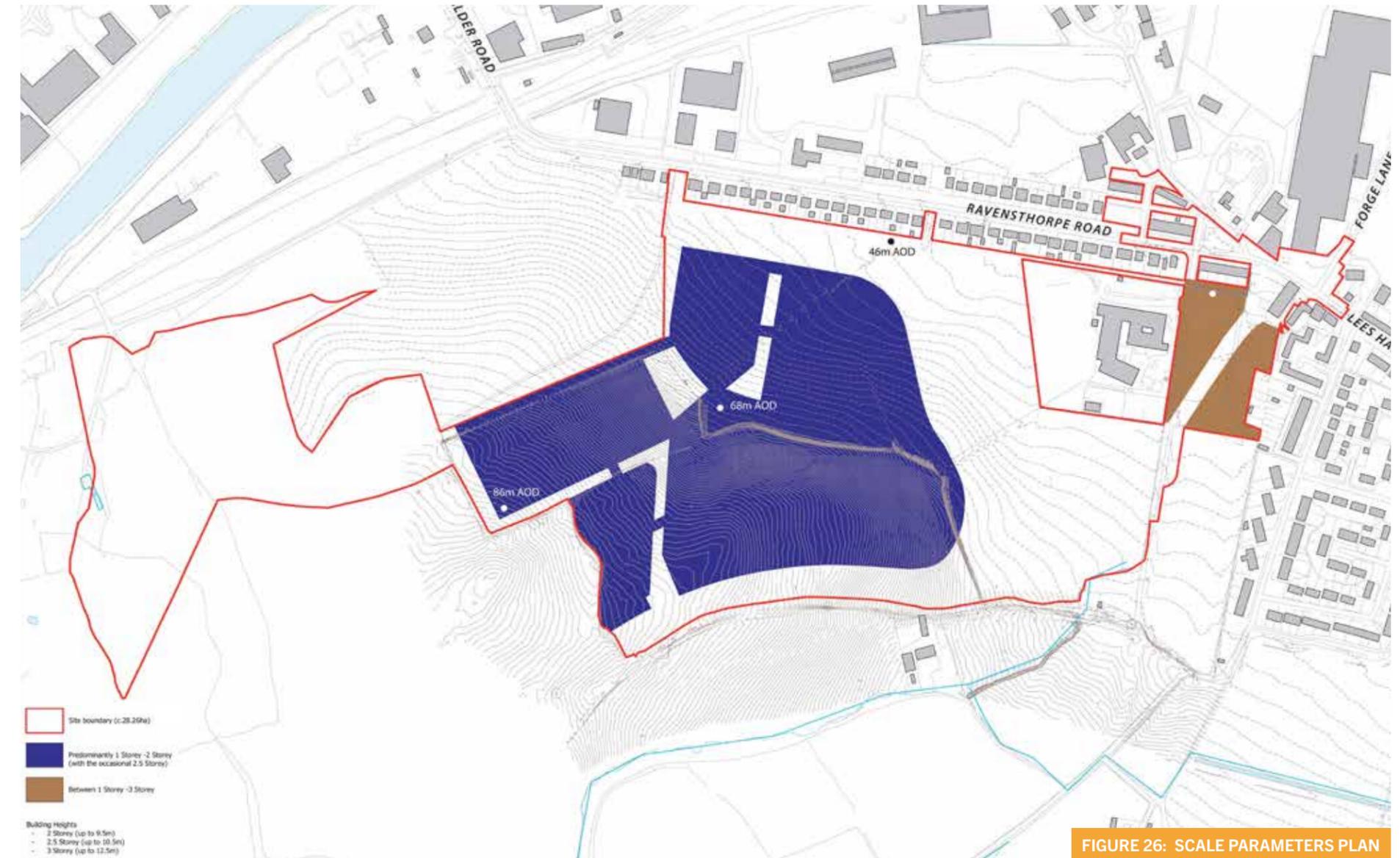


FIGURE 26: SCALE PARAMETERS PLAN

6.3. ILLUSTRATIVE MASTERPLAN

The following section provides design strategies and principles to demonstrate how the previously described Parameter Plans may be applied in practice to create a high-quality masterplan that responds to the Site's context.

The plan opposite shows an Illustrative Masterplan to demonstrate how development can be provided across the Site. Development proposals that differ from the Illustrative Masterplan may also be acceptable at the reserved matters stage, provided they broadly adhere to the development parameters and design principles/ strategies set out within this DAS.

The Illustrative Masterplan has been informed by the site assessment and engagement process set out within this document.

The Illustrative Masterplan indicates:

- 1 Primary vehicle access from Forge Lane, including the removal/ relocation of Masjid Abubakr Mosque and Lees Hall Playgroup building from 555, Lees Hall Road (2021).
- 2 Alternative/ secondary vehicle access from Ravensthorpe Road (s), adjacent to Ravenshall School. If necessary, this access point provides the potential to deliver development in advance of the Masjid Abubakr Mosque relocation.
- 3 Pedestrian access points are to be provided directly onto Ravensthorpe Road via the new allotment access and a new pedestrian access located between number 139 and 143 Ravensthorpe Road.
- 4 Provision of Spine Road/ bus route, delivering access to the proposed development and helping to facilitate vehicle connectivity to the wider allocation.
- 5 Allotments approved via planning application ref: 2021/62/90552/E
- 6 Land identified for a community use or residential development.
- 7 Provision of accessible open space, including a large area of semi-natural landscape to the west of the Site.
- 8 SuDS and new wetland planting to be provided at the Site's lowest point, adjacent to the eastern most boundary with an controlled outfall to a public sewer running along Ravensthorpe Road.
- 9 Retention of mature trees and the provision of new planting.
- 10 Retention and enhancement of Lady Wood.



FIGURE 27: ILLUSTRATIVE MASTERPLAN

6.4. WIDER ALLOCATION

The Illustrative Masterplan has been designed with reference to the existing Dewsbury Riverside Masterplan Framework, as endorsed by the Council's Cabinet on 19th March 2019.

The plans opposite demonstrate how the proposed Spine Road and indicative block structure combines with the wider allocation masterplan. There following minor variations are noted:

- » The position of the Spine Road has varied slightly in response to topography and the gas main running north to south. Notwithstanding this, the Spine Road proposed seamlessly connects with the future Loop Road which will ultimately circulate the wider allocation.
- » The original Masterplan showed a new primary school located within the Site. The school has now been repositioned adjacent to the future local centre.

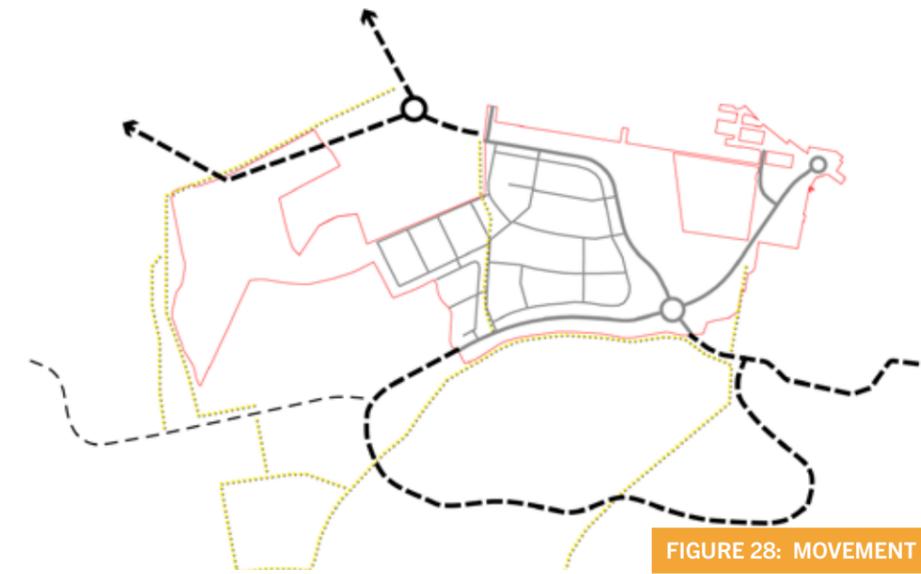


FIGURE 28: MOVEMENT



FIGURE 29: LAND USE

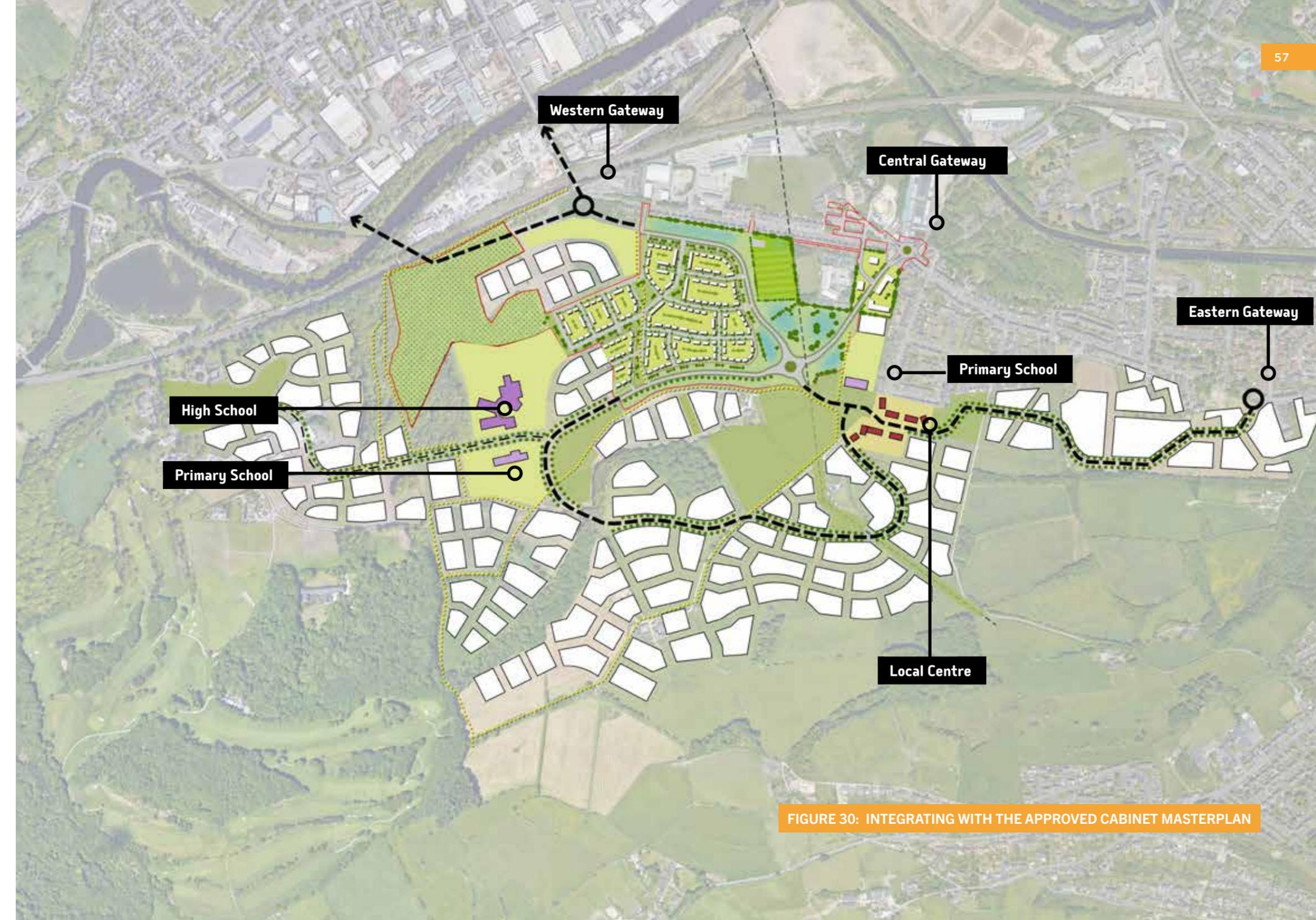


FIGURE 30: INTEGRATING WITH THE APPROVED CABINET MASTERPLAN

6.5. LANDSCAPE STRATEGY

The framework for the public open space and green infrastructure will set the scheme into the existing landscape, including a sympathetic and successful response to the landform.

Central to the landscape strategy is the creation of a well landscaped and green development, through the provision of interconnected areas of public open space.

Opportunities exist to create a variety of green infrastructure typologies across the Site, including semi-natural open space, formal amenity space, wetland areas, street trees within grass verges, structural planting and residential streets lined with hedgerow planting. Areas of green infrastructure will be connected by landscape corridors that provide a network of pedestrian friendly attractive spaces.

Whilst the Site has been intensively farmed, the proposed development will also include the retention of existing landscape features, where possible (including trees and hedgerows). Retained landscape features will be reinforced and complemented by new planting, guided by a considered landscape design rationale and informed by the landscape character and visual characteristics of the Site and its context.

The key points of the landscape framework are:

- 1 New homes will be positioned in response to the Site's rising topography, ensuring accessible streets that allow for views towards the surrounding area.
- 2 A network of interconnected green spaces that enable pedestrian friendly routes.
- 3 The proposed Spine Road/ bus route will be flanked by a grass verge, accommodating earth works, drainage features and new planting.
- 4 A 'wetland park' on the low ground, accommodating SuDS, wetland planting and off-road pedestrian connection.
- 5 Potential children's play area, integrated with SuDS.
- 6 Residential streets that are softened with street trees.

- 7 Where possible, retain and enhance existing features, including healthy trees and hedgerows.
- 8 Enhance the biodiversity and ecological value of the Site, through establishment of a network of species rich habitats (see Section 6.7 Ecology).
- 9 Utilise open space and green infrastructure to reduce the visual prominence of the overhead power cables.
- 10 Retention and enhancement of Lady Wood.



FIGURE 31: LANDSCAPE ILLUSTRATIVE MASTERPLAN

6.6. LANDSCAPE CHARACTER AREAS

In order to provide variation and interest across the Site, and to enable a strong landscape response to the existing characteristics and future uses, a landscape character zone strategy has been established, with 4 zones identified: The aspirational design strategies for these zones are set out on the following pages.

6.6.1. Allotments/Wetland Park

An accessible and attractive wetland park area comprising SuDS, meadow planting and pathways to positively integrate with the proposed development and provide opportunities for recreation and relaxation.

SuDS to be designed as a functional flood attenuation area, incorporating wetland habitat to create a rich biodiverse landscape of ponds and wetland.

The landscape character zone will incorporate:

- » Allotments
- » Reed bed planting
- » Marsh meadow grassland
- » Species rich dry grassland
- » Footpath linkages
- » Orchard

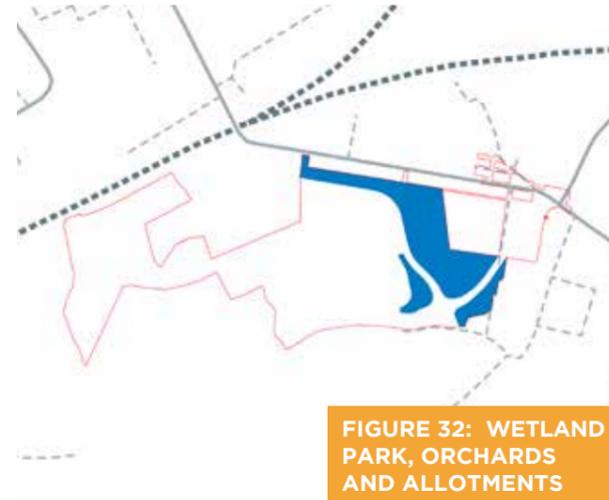


FIGURE 32: WETLAND PARK, ORCHARDS AND ALLOTMENTS

6.6.2. Green Corridors

Green corridors that provide an attractive amenity area and retains views through the Site. This will be designed to incorporate trees, shrubs and native hedgerows to frame and articulate views and provide connected wildlife habitat. This area will have a semi-formal character comprising a mixture of native hedgerows, low-growing trees, meadow and amenity grassland structured around public space.

The landscape character zone will incorporate:

- » Native hedgerows
- » Species rich meadow
- » Shrub and tree planting
- » Footpaths/cycle routes

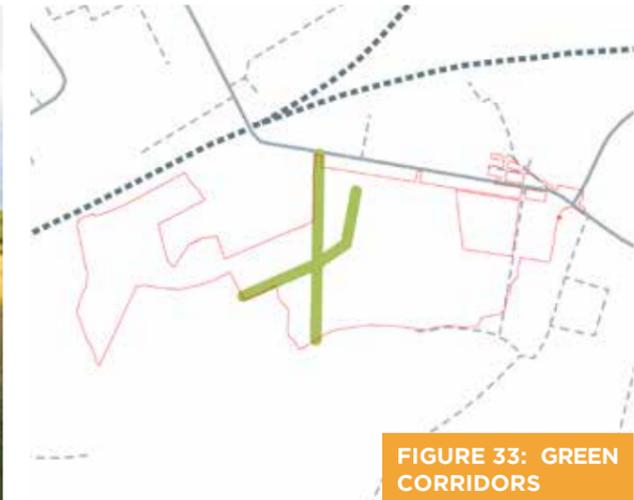


FIGURE 33: GREEN CORRIDORS

6.6.3. Lady Wood

Lady Wood will be retained and enhanced, through a Woodland Management Plan.

The landscape character zone will incorporate:

- » Protect, restore and expand area of woodland
- » Enhance ecological network of habitats

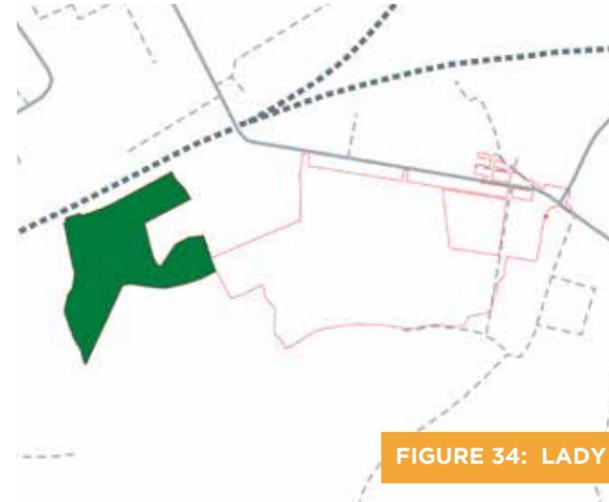


FIGURE 34: LADY WOOD

6.6.4. Spine Road

The Spine Road will be flanked by green infrastructure, including swales, grass verges new planting and stone wall detailing. This will help to soften the impact of the Spine Road when viewed from the proposed new homes, whilst also creating frontage to the new neighbourhood.

The landscape character zone will incorporate:

- » Hedgerows and shrub planting
- » Low density tree planting
- » Species Rich Meadow
- » Footpaths
- » Stone wall detailing

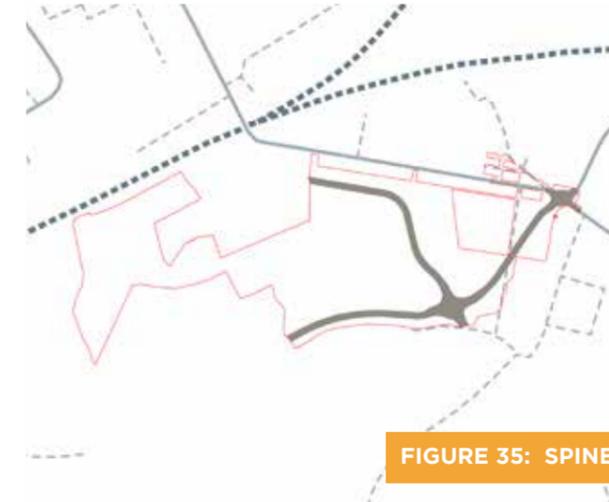


FIGURE 35: SPINE ROAD

6.6.5. Responding to Site Topography

The Illustrative Masterplan has been designed in response to site topography. This includes positioning roads to follow contour lines and accommodating more significant level changes within rear gardens.

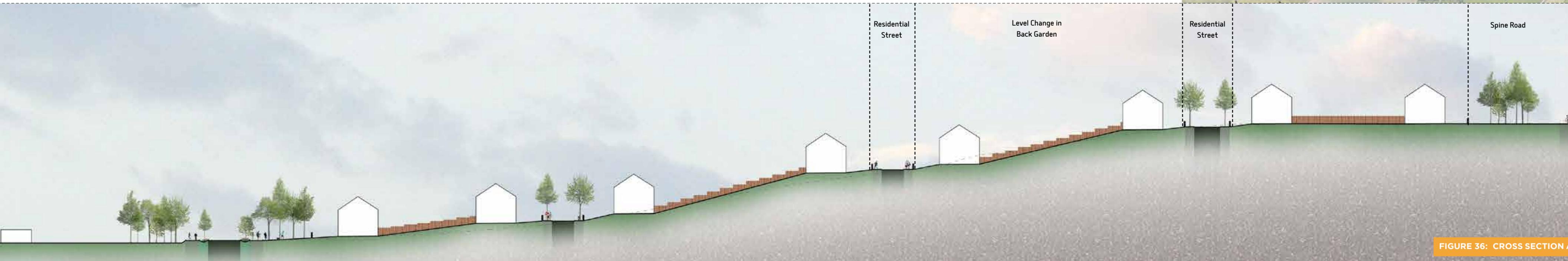


FIGURE 36: CROSS SECTION A-A*

6.7. ECOLOGY STRATEGY

Whilst the proposed development will result in the loss of arable fields and other low value habitats, extensive areas of green infrastructure will be provided, including the retention of the high quality habitat, namely the broadleaved woodland and plantation.

The extensive provision of green infrastructure will incorporate a mosaic of habitats including grassland, mixed scrub, orchards, allotments and native hedgerows. Habitat types and species have been selected with consideration to the Pennine Foothill Biodiversity Opportunity Zone objectives and to achieve a net gain in biodiversity.

Moreover, an the extensive area of land identified for to accommodate Sustainable Drainage Systems will be designed to offer opportunities for biodiversity and to aid in the delivery of net gain on-site, as well as improving connectivity. This will include well connected permanent waterbodies, wetland and ephemeral ponds.

In addition, there are opportunities to improve and enhance the condition and management of the woodland – a priority habitat and also listed within the Pennine Foothills Zone – and the plantation on-site. These enhancements will achieve a significant proportion of net gain for the Site.

The commitment to deliver these enhancements can be secured within a Woodland Management Plan, which will set out measures to ensure the habitats are appropriately managed to maximise their benefits to biodiversity.

Other tools to support the site future biodiversity, include:

- » Construction Environmental Management Plan will ensure that best practice mitigation measures are applied to avoid or limit impacts on wildlife and habitats during construction.
- » An Arboricultural Method Statement will be followed to ensure that retained woodland, trees and hedgerows are protected during construction. The proposals identified in this document offer substantial opportunities for habitats and biodiversity that can be achieved as part of the proposed development.
- » A Landscape and Habitat Management Plan (LHMP) will cover all open spaces within the Site, ensuring that retained and created habitats are designed and managed primarily for biodiversity and to engage the residents with nature. The plan will also ensure other landscape features such as sustainable drainage system (SuDS) basins, public rights of way and boundary treatments are inspected routinely and maintained to ensure safety and function.



6.8. TREE STRATEGY

Tree loss is limited to that which is strictly necessary, whilst also ensuring the condition and safety of all remaining trees would not be compromised by the development.

Measures to improve the arboricultural quality will include:

- » New tree planting within areas of public open space and within the proposed development area, including along the Spine Road.
- » Selective tree planting around retained trees and landscape features
- » Replacement of removed and poor quality trees

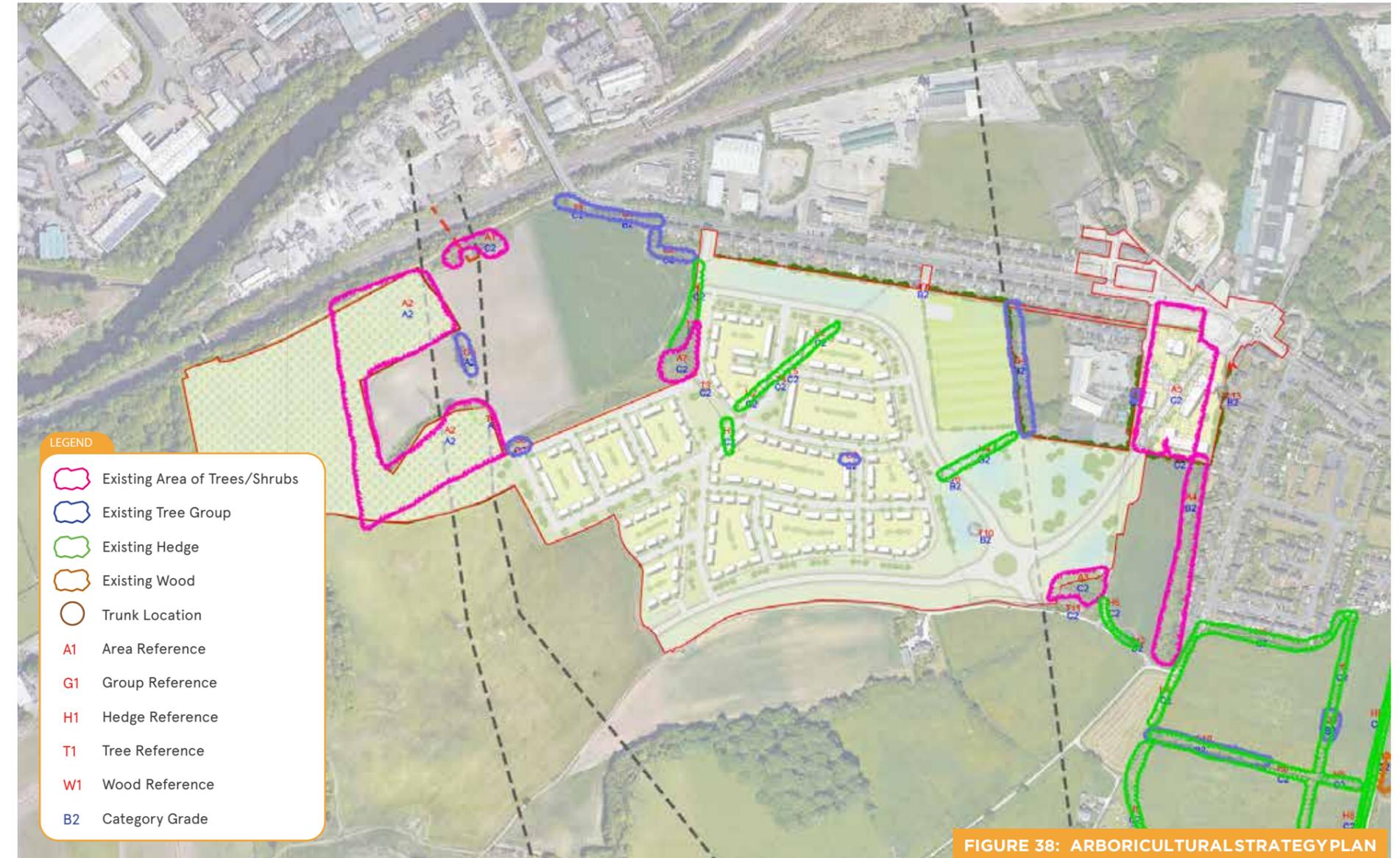


FIGURE 38: ARBORICULTURAL STRATEGY PLAN

6.9. DRAINAGE STRATEGY

The future detailed surface water drainage design should ensure that the surface water drainage system meets the following criteria:

- » Protect against flooding
- » Collect and convey surface water away from developed areas in a safe and controlled manner
- » Provide measures to improve the quality of runoff prior to discharge
- » Be sustainable and maintainable
- » Be appropriate for and compliment a developed, urban space
- » Ensure structural integrity over the duration of the development design life

The proposed surface water drainage network will provide the following levels of protection:

- » All return periods up to and including 1 in 30 + 40% Climate Change – no above ground flooding.
- » All return periods up to and including 1 in 100 + 40% Climate Change – above ground surface ponding allowed; provided flood water does not leave the site, flood water is not a hazard, building plots are not flooded, and any key infrastructure is not flooded.

It is proposed that the Site will be developed in 2 phases. Phase 1 will include the northern area of the site and Phase 2 will include the rest of the site.

6.9.1. Northern Catchment Drainage Strategy

The northern Site runoff will be conveyed by gravity via a swales and other drainage routes, such as sewers, towards the northern end of the Site where detention basins will be used to provide attenuation and water quality treatment. The detention basins will discharge to the sewer located under Ravensthorpe Road at a discharge rate of 3.5 l/s.

6.9.2. Southern Catchment Drainage Strategy

The southern site runoff will be conveyed by gravity via a swales and other drainage routes, such as sewers, towards the east of the site where detention basins will be used to provide attenuation and water quality treatment before discharging to the existing culverted watercourse at a discharge rate of 5 l/s.

6.9.3. Detention Basins

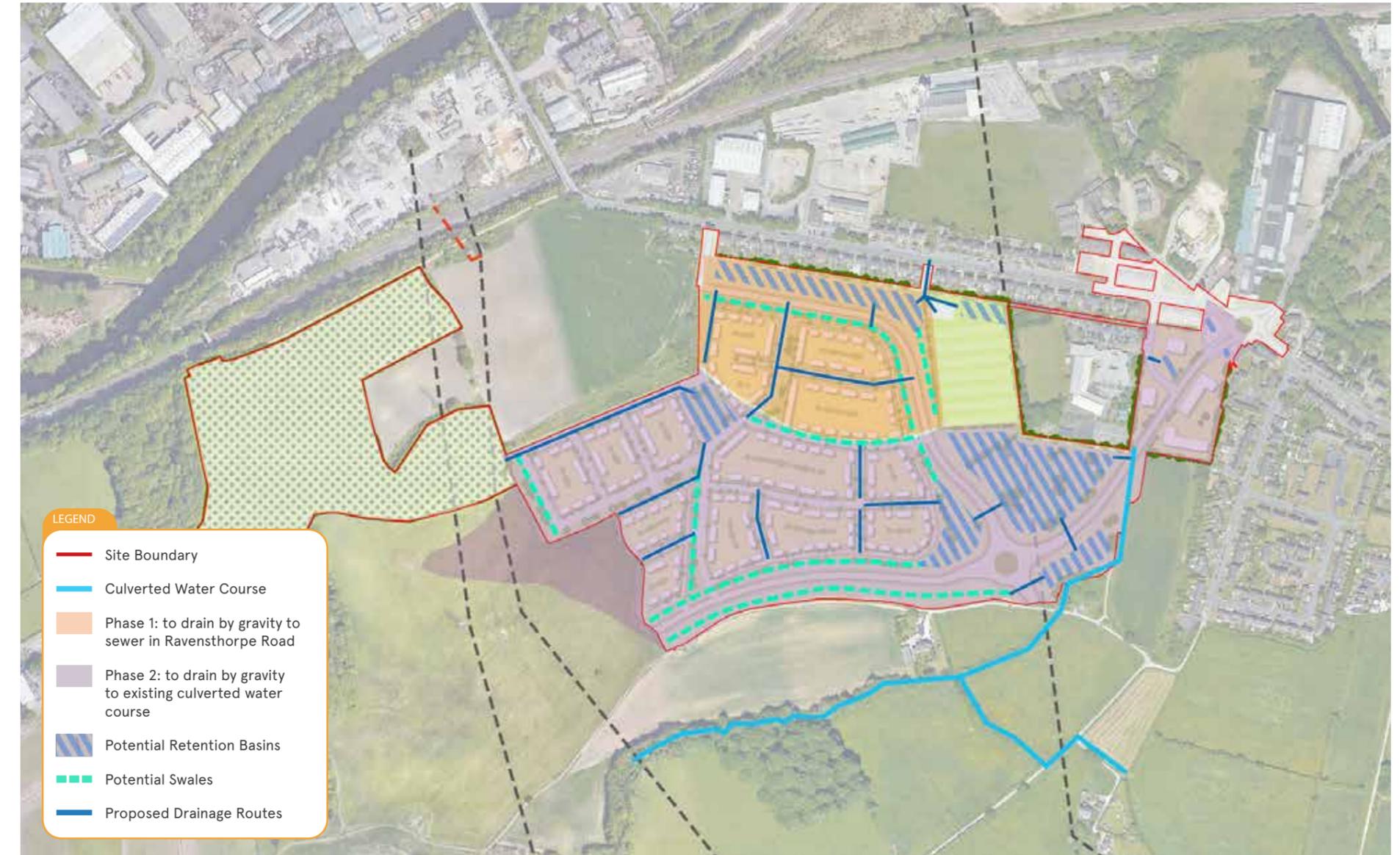
The detention basins are proposed to be landscaped depressions that are normally dry except during and immediately following storm events. To provide additional storage each basin is proposed to have a granular storage layer below the basin. An allowance for topsoil/planting medium, between the surface and the granular material, will be provided similar to a bio-retention system. The potential amenity/ecological use of the detention basin system allows this space to be flexible and provide multiple benefits to the development.

6.9.4. Swales

Swales are linear grassed features in which surface water can be stored or conveyed. Where suitable, swales can be designed to allow infiltration.

The Site will include a series of swales to create green routes that will receive the water from the closer plots and convey it to the different proposed attenuation basins.

The swales across the Site are proposed to have a filter trench below to provide additional attenuation and water treatment capacity.



6.10. ACCESS AND MOVEMENT STRATEGY

Vehicle access drawings for the proposed vehicle access points have been provided with the Transport Assessment submitted in support of this application. This includes vehicular access drawings for:

- » Primary vehicle access from Forge Lane, including the removal/ relocation of Masjid Abubakr Mosque and Lees Hall Playgroup building from 555, Lees Hall Road (2021).
- » Alternative/ secondary vehicle access from Raventhorpe Road (s), adjacent to Ravenshall School. If necessary, this access point provides the potential to deliver development in advance of the Masjid Abu bakr Mosque relocation.

The proposed development includes the provision of a new Spine Road, for which full planning permission is sought (see Chapter 7 for further details). This road will provide opportunities for vehicle connectivity to the wider allocation

6.10.1. Street Hierarchy

The principles for the design of streets set out over the following pages have been prepared to be in accordance with the 2018 Kirklees Council Highway Design Guide Supplementary Planning Document (SPD).

The proposed development will comprise a range of different street types, creating a distinctive residential neighbourhood, with a legible and permeable environment that supports the needs of all users

Across the Site the following design principles apply:

- » The creation of a permeable network of streets to facilitate the creation of a 'walkable neighbourhood'.
- » A network of quiet lanes at the edge of the proposed developable area.
- » The design of streets will be integrated with the surrounding area.
- » Measures such as shared surfaces, changes in surface materials, horizontal alignment, lighting and the design of the street will be used to encourage slow speed.

The proposed development consists of the following street types:

- » **Spine Road/ Bus Route** - Main movement route connecting the site with the existing settlement and the wider allocation.
- » **Secondary Street**- Providing access within the development and connections between the Spine Road and proposed residential area
- » **Residential Street** - Lower category streets which connect to the Secondary Street
- » **Private Drives/ Lanes** - Lower category streets which generally run along the perimeter of the development parcels where one-sided development occurs

Figure 40-44 illustrate the street types proposed and explain the dimensions and detailed elements of each.

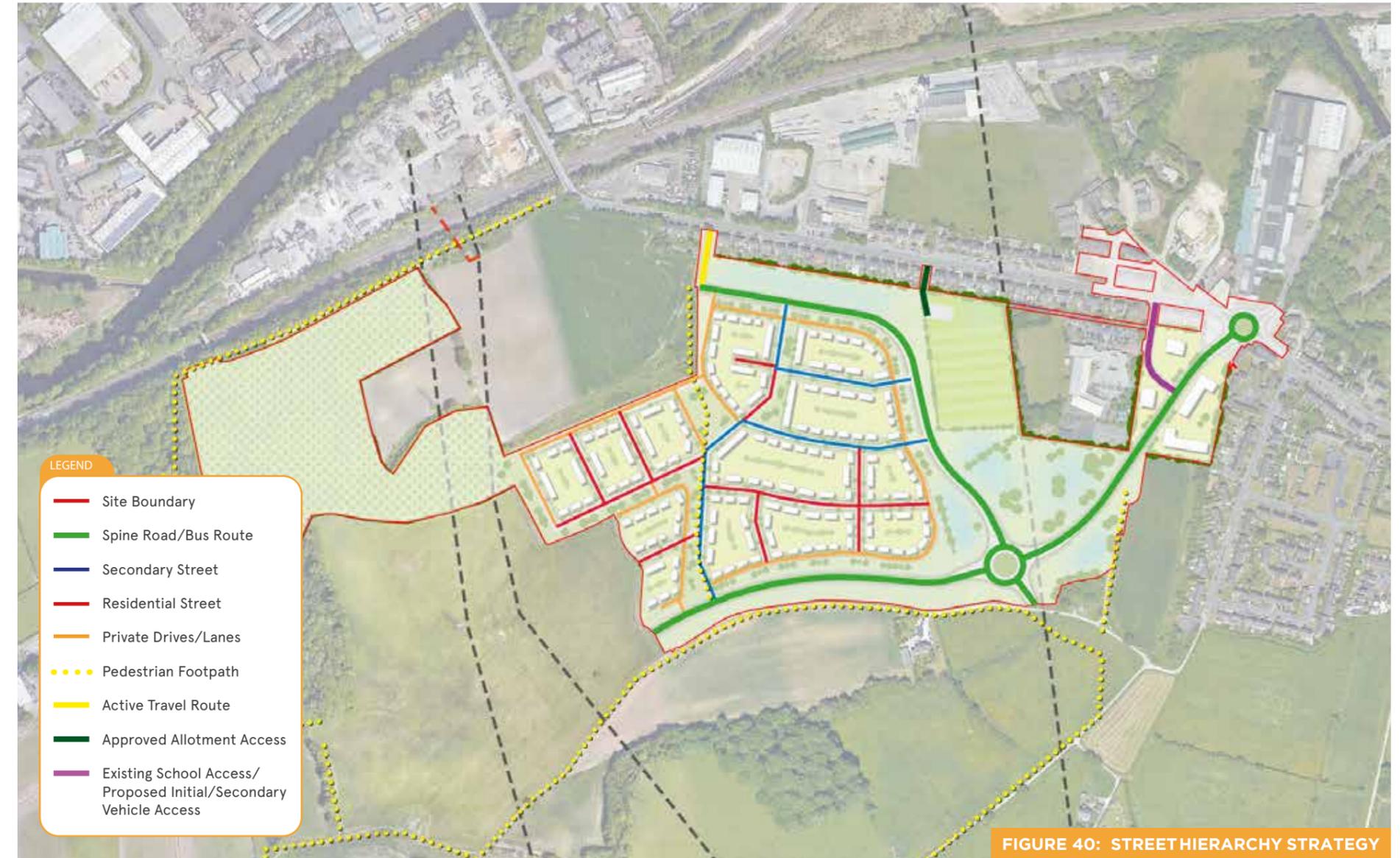


FIGURE 40: STREET HIERARCHY STRATEGY

Spine Road/ bus route (see Chapter 7)

Place: The Spine Road provides a distinctive gateway green spine gateway, providing a connection between the existing settlement and the proposed residential area.

It comprises a 6.7m–7.3m carriageway with a 3m footpath / cycleway (both sides) and a 2m swale (both sides).

Additional landscaped areas will be provided either side of the road, subject to design requirements relating to earthworks, drainage, and planting.

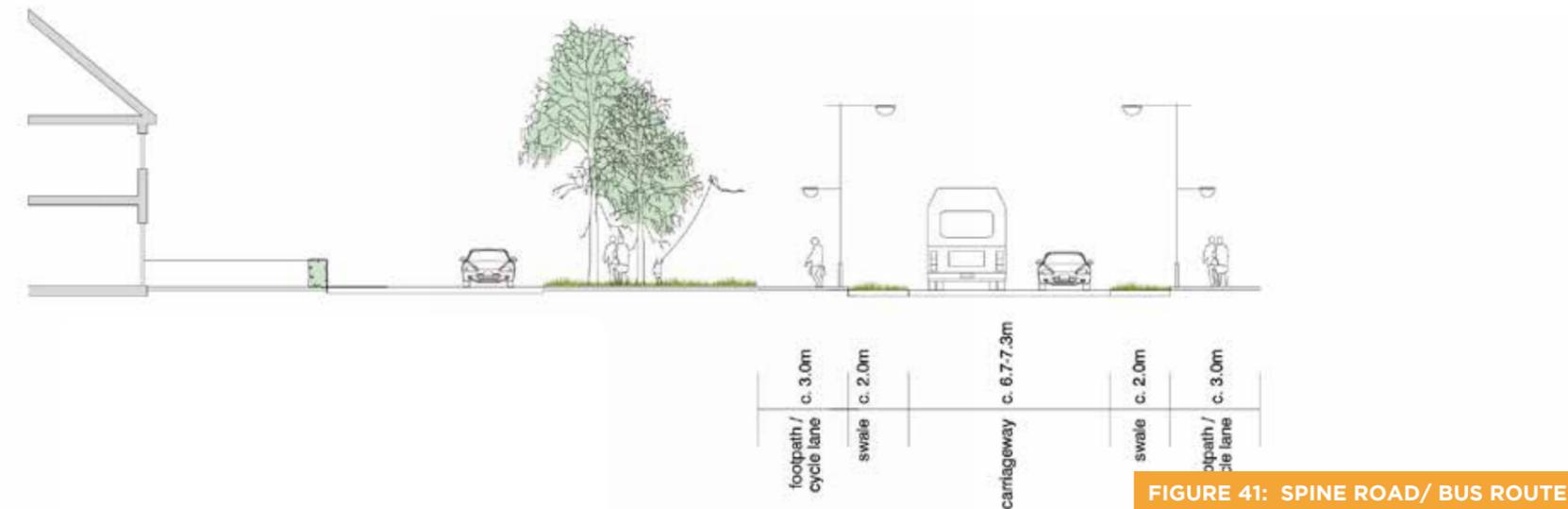
Housing will overlook the Spine Road and mostly be 2 storey, however, the occasional 2.5 storey building will also be provided to hold key views and aid legibility. New homes overlooking the Spine Road will mostly be access via Private Drives.

Movement: The Spine Road, which will accommodate a bus route, provides an efficient route in and out of the proposed development, securing vehicle access to the proposed development and helping to facilitate vehicle access to the wider allocation.

Access: The Spine Road is accessed via two new junctions at Forge Lane and Ravensthorpe Road(s).

Parking: Parking will be provided on-plot, accessible via Private Drives.

Gradient: 1:20 gradient max/ 1:200 gradient min.



Secondary Street

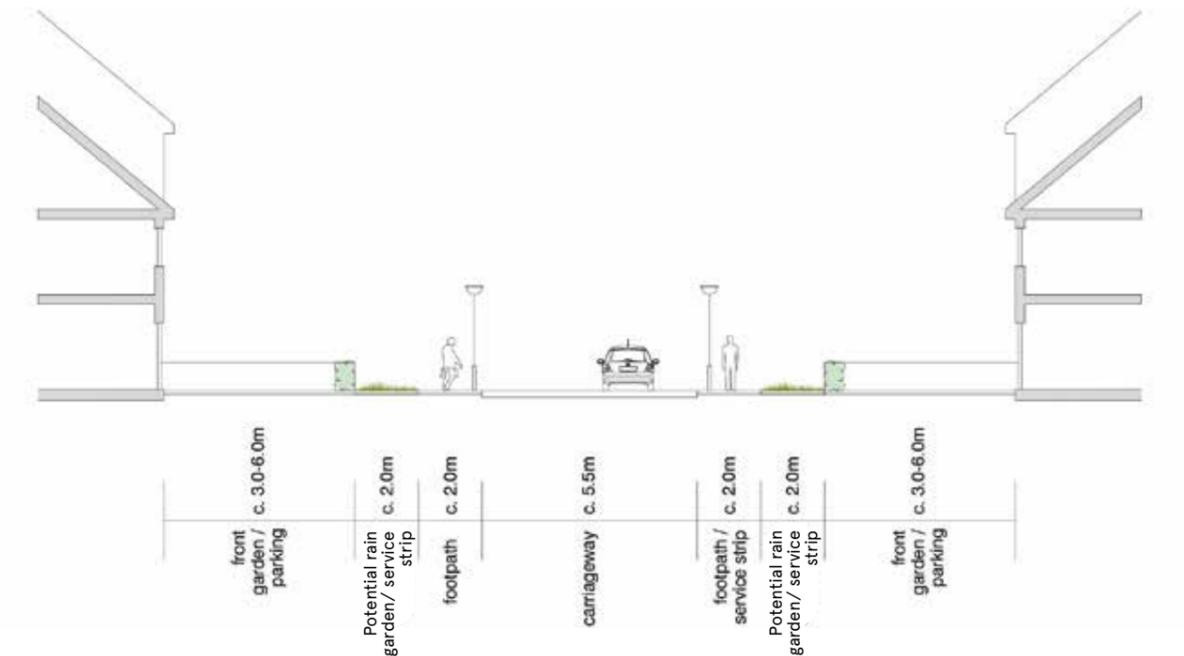
Place: The secondary streets have a less formal character, prioritising the movement of cyclists and pedestrians within a safe environment, and are defined by 2 storey buildings of varied typologies. It comprises a 5.5m carriageway, flanked by 2m pavements. Hedgerow/tree planting will be provided within front gardens. The secondary streets have the potential to accommodate a c.2m

rain garden within the public realm (on one or both sides of the street), subject to the preferred parking strategy.

Movement: The Secondary Streets will accommodate low traffic flows allowing for safe interaction of people and vehicles. This is achieved by slowing vehicle speeds through road alignments, landscape and the use of shared surfacing.

Access: Secondary Streets will connect to the Spine Road. Houses will have street frontage access.

Parking: Parking is provided to the front or side of dwellings, with visitor parking accommodated in the carriageway.



Residential Street

Place: The Residential Street will have a varied and green character with hedgerow/tree planting in front gardens.

Building heights along this route will predominantly be 2 storeys with occasional 2.5 storeys. The street is part of the secondary network and will comprise some variation in building forms and the building line to emphasise a more informal identity.

Movement: The street will provide access from the Secondary Street to the residential areas. They will be designed to encourage pedestrian and cycle movement.

Access: Direct access to dwellings will be provided along the length of the route.

Parking: Parking is provided either to the front or side of dwellings.

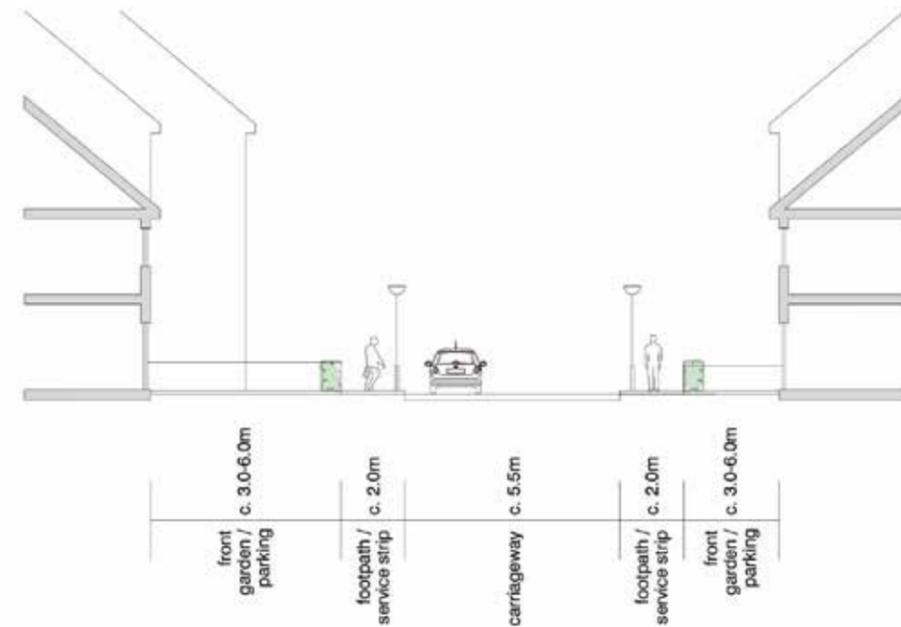


FIGURE 43: RESIDENTIAL STREET

Lanes / Private Drive

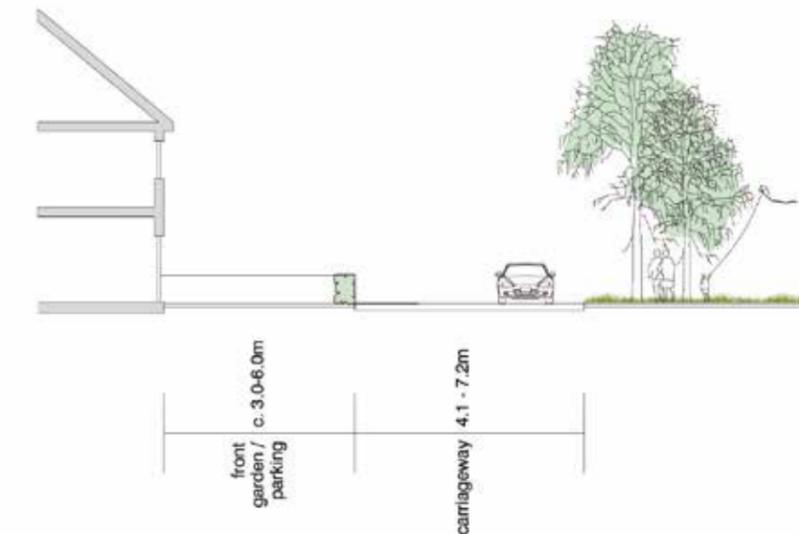
Place: Lanes (shared surfaces) and private drives are intended to be informal community 'places' within the development and adjacent to green spaces. They are designed as places for people living next to them to use to walk, play, cycle and interact with neighbours. The design seeks to encourage very low vehicle speeds with 'ownership' of the space belonging to the pedestrian. The provision of a more informal character through planting and shared surfaces aims to create a pedestrian focused experience.

Lanes will be 7.3m in width and built to an adoptable standard. Shared/private drives will service a maximum of three dwellings and will be 4.1m.

Movement: This street type is part of the tertiary street hierarchy. These streets will provide direct access to dwellings and incorporate low traffic movements.

Access: Direct access to dwellings is provided.

Parking: Parking is provided to the front or side of dwellings, with visitor parking accommodated in the carriageway.



6.11. APPEARANCE STRATEGY

This section provides guidance on the urban form principles, character areas and materiality of the proposed development.

The development will comprise a distinctive urban form including well defined perimeter blocks, with new family homes positioned to create attractive and legible residential streets, complemented by existing and proposed landscape features.

The Illustrative Masterplan has been designed with regard to the following urban form principles.

6.11.1. Key Frontages

Frontages are emphasised along the Spine Road, Secondary Street and adjacent to open space and amenity areas.

The Spine Road will comprise a continuous formal frontage, with regular intervals between built form, complemented by generous grass verges, accommodating proposed landscape and drainage features.

The Secondary Street frontage will comprise a predominately formal frontage, with some minor variations in the building line. Buildings enclosing the street will comprise a mix of detached, semi-detached and terraced housing with variety of parking typologies.

The Landscape Frontage will generally be characterised by an organic edge, comprising an informal building line with generous front gardens.

6.11.2. Key Junctions

A sequence of raised junctions with changes in material to create variation in character, aid traffic calming, and assist with legible movement.

6.11.3. Landmark Buildings

Landmark/key buildings to emphasise important views and spaces. These buildings are likely to include subtle changes in materiality and /or scale and massing.

6.11.4. Character Areas

The proposed development includes four different character areas (see Section 6.11.7 Character Area).

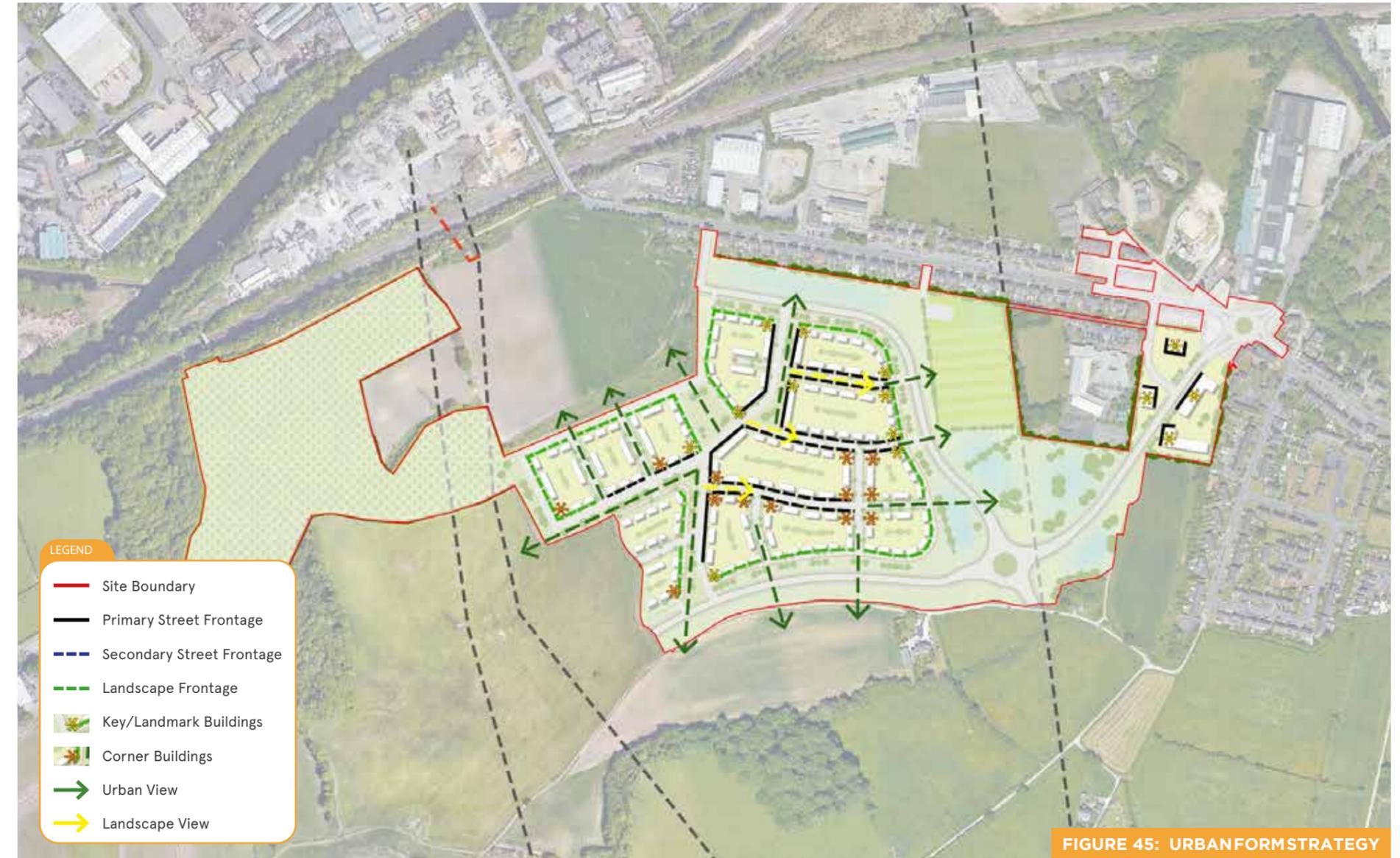


FIGURE 45: URBANFORMSTRATEGY

6.11.5. Block Principles

The following section provides guidance on the best practice design principles underpinning the design of residential blocks across the Site.

The use of block principles provides some flexibility for designers to enable successful detailed layouts providing they achieve the principles.

The proposed development will comprise clearly defined perimeter blocks, incorporating the following design principles:

- 1 Clear distinction between public and private space.
- 2 Mix of on plot parking solutions, including front, side, integral garages and detached garages.
- 3 All cars to be surveilled from ground or upper windows.
- 4 No more than 5 car parking spaces without a landscape break.
- 5 Amenity standards between facing elevations to be in accordance with the Council's requirements.
- 6 Buildings will face the public realm.
- 7 Provision of adequate space for refuse and recycling with suitable drag distances
- 10 Each dwelling will have secure storage for at least one cycle. Cycle parking provision should, in all instances, be secure, easily accessible and convenient to use.
- 11 Corner elevations will have windows, avoiding long sections of blank walls.

- 12 The streets should be designed to give priority to the disabled, pedestrians and cyclists. High quality materials are to be used in the streets.
- 13 Buildings should be provided around the perimeter of the block to define the public realm.
- 14 Selection of high quality surface materials, street trees and furniture to create a pleasant environment for residents and visitors.
- 15 Provision of a permeable network of blocks, providing opportunities for legible connectivity through the proposed development.

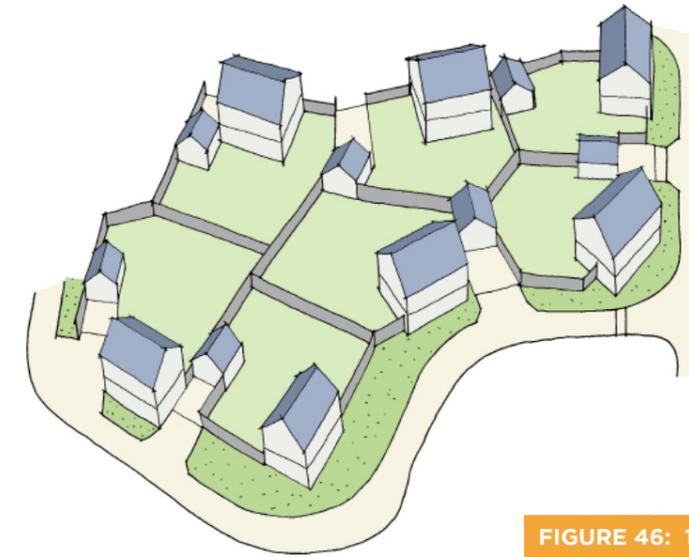


FIGURE 46: 10-15DPH



FIGURE 47: 15-20 DPH

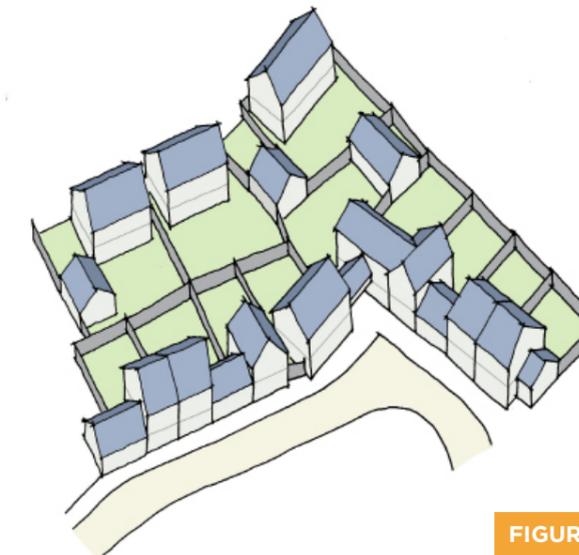


FIGURE 48: 20-30 DPH



FIGURE 49: 25-35 DPH

6.11.6. Car Parking

The overall objective is to provide streets which are attractive and functional places for pedestrians, cyclists and cars in an environment where streets are kept clear for movement by cars and buses.

The following principles should be applied wherever possible:

- Generally on-plot in a location that is convenient and overlooked. The majority of the plots will have parking to the side or front of dwellings, but for some courtyards may be appropriate.
- At least 2 on-plot parking spaces will be provided for all dwellings (except 1 bedroom flats which will have 1 space per dwelling).
- The visual impact of cars will be softened by the provision of street trees (where appropriate) and front gardens.
- Parking will be provided in a location overlooked by the property and close to the main entrance.
- Adjacent to the flats, parking courts may be used.
- Parking provision will also be specified at reserved matters stage and so the quantum will not be fixed through this outline planning application.

On Plot - Detached, Semi Detached or End Terrace

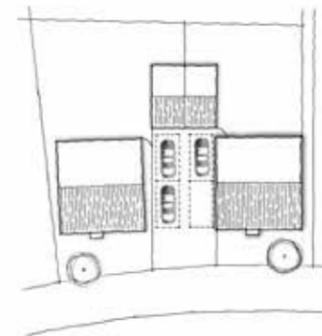
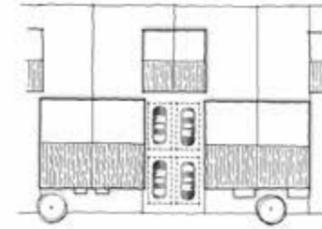
General principles to be considered

- 2 on-plot parking spaces with hard surface area as well as double garage;
- Spaces overlooked by windows on front and side of property;
- Front garden softens visual impact.

On Plot - Detached, Semi Detached or End Terrace

General principles to be considered

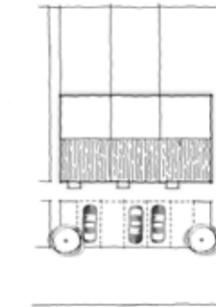
- 2 on-plot parking spaces with hard surface area as well as single garage;
- Spaces overlooked by windows to side of property where possible;
- No visual impact, all cars are hidden on the side of properties.



On Plot to the Front of Detached, Semi-Detached or Terraced Dwellings

General principles to be considered

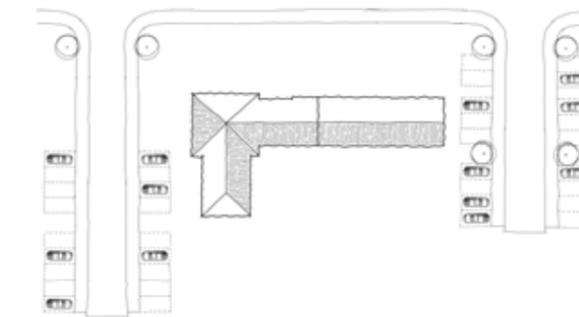
- Up to 2 on-plot parking spaces with hard surface area;
- Spaces overlooked by windows on front of property;
- Street tree planting and occasional planted raised beds soften visual impact.



On Plot to the Front of Apartments

General principles to be considered

- 1 on-plot parking space with hard surface area per apartment;
- Spaces overlooked by windows on front of apartment block;
- Tree planting softens visual impact.



6.11.7. Materiality

The new homes will be built using a simple palette of materials that are reflective of the local context, creating a strong sense of unity. This section provides an emphasis on the use of colour, as opposed to specific materials, highlighting the importance of flexibility for future designs at the reserved matters stage.

Building Materials

The townscape study revealed a range of materials and finishes used throughout the area, this included the use of red/orange brick for walls and grey or red roof tiles.

New homes and the public realm will comprise a cohesive and succinct materials palette to ensure a sense of place, with hues and colours to reflect the wider settlement.

Where possible, traditional materials should be combined with the latest innovations in building technologies to produce locally responsive development. Natural materials and recycled materials should be considered where possible.

Suitable variations in materials across the Site, including the provision of different bricks and roof tiles will help define character areas

Building features and details

The proposed architectural style could reference more modern precedents.

Richness of detail can add to the environment but it is equally important to have a controlled approach to variety throughout the development.

Public Realm

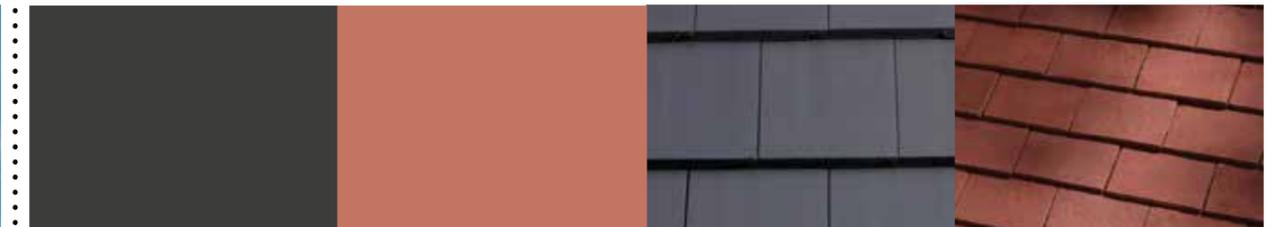
Public realm materials will provide a robust and high quality landscape aesthetic which is readily maintainable, whilst providing a strong sense of identity to the proposed development.

Materials will complement the architectural finishes and present a legible hierarchy across the network of public realm across the proposed development. Variation in materiality will combine with new green infrastructure to deliver a coherent range of landscape and public realm across the proposed development.

The hard landscape palette will address the functional requirements of the scheme.



WALL: ORANGE/ RED/BUFF/STONE



ROOF: GREY SLATE/ RED TILES



FEATURE PAVING: GREY SETTS



FEATURE RENDER: WHITE/OFF WHITE/GREY

7 DETAILED DESIGN

This chapter provides an explanation of the Phase 1 detail proposals for 116 dwellings

7.1. ROAD DESIGN

In accordance with Council guidance, the following road design criteria has been used:

Primary Road (Spine Road)

- » 7.3m carriageway (2 x 3.65m lanes)
- » 2.0m swale (both sides)
- » 3.0m footpath / cycleway (both sides)
- » 1:20 gradient max/ 1:200 gradient min
- » Forward visibility 33m/ Min curve radii 35m

7.1.1. Spine Road Landscaping

The Spine Road establishes a distinctive gateway and green corridor network, providing a connection between the existing settlement and the proposed residential area. It comprises a 6.7m-7.3m carriageway with a 3m footpath / cycleway (both sides) and a 2m swale (both sides). Additional landscaped areas will be provided either side of the road, subject to design requirements relating to earthworks, drainage and planting.

These green corridors will provide an attractive amenity, designed to incorporate trees, shrubs and native hedgerows to frame and articulate views and provide connected wildlife habitat. The Spine Road will have a semi-formal character comprising avenue trees lining the main road corridor, a mixture of native hedgerows, low-growing trees, meadow and amenity grassland to verges.

The landscape of the Spine Road and the proposed development will be sensitively designed with substantial set-backs of built form to preserve views towards Ravensthorpe Road, across the wider

allocation site and create an attractive frontage to the new neighbourhood through the use of low planting, proposed tree planting and stone wall detailing.

The Spine Road landscaping will incorporate:

- » Hedgerows and shrub planting
- » Low density tree planting
- » Species Rich Meadow
- » Footpaths
- » Sustainable drainage swales
- » Stone wall detailing

Planting: The Spine Road will be flanked by grass verges accommodating drainage swales. These swales will be sown with wildflower seed mix to the embankment sides and lower swale seed mix to the bottom.

Landscape structure will be established through the introduction of avenue tree planting. Heavy standard trees will be planted at 10m centres to the back of the footways within grass verges. These verges will be sown with wildflower seed mix.

Where set-backs and space allow, margins of native species shrub and tree mix will be planted, with specimen trees planted as standards.

Native species hedgerows will be established along boundaries and fence lines, forming green corridors and providing connectivity with existing habitats.

Roundabouts will be sown with wildflower seed mix and low growing shrubs/ground cover planted to centres, avoiding obstruction of visibility sightlines.

At key feature areas, low maintenance ornamental

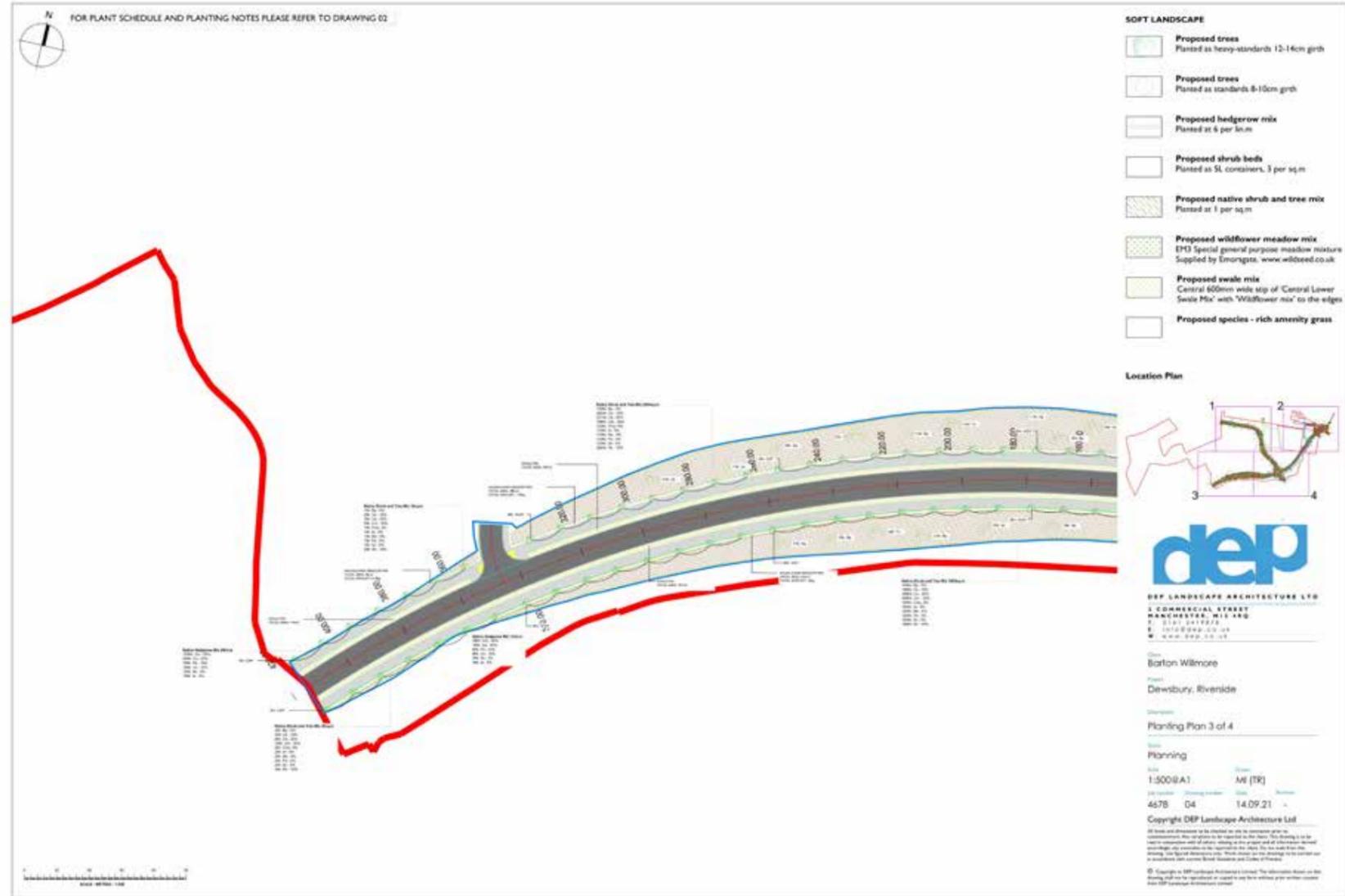
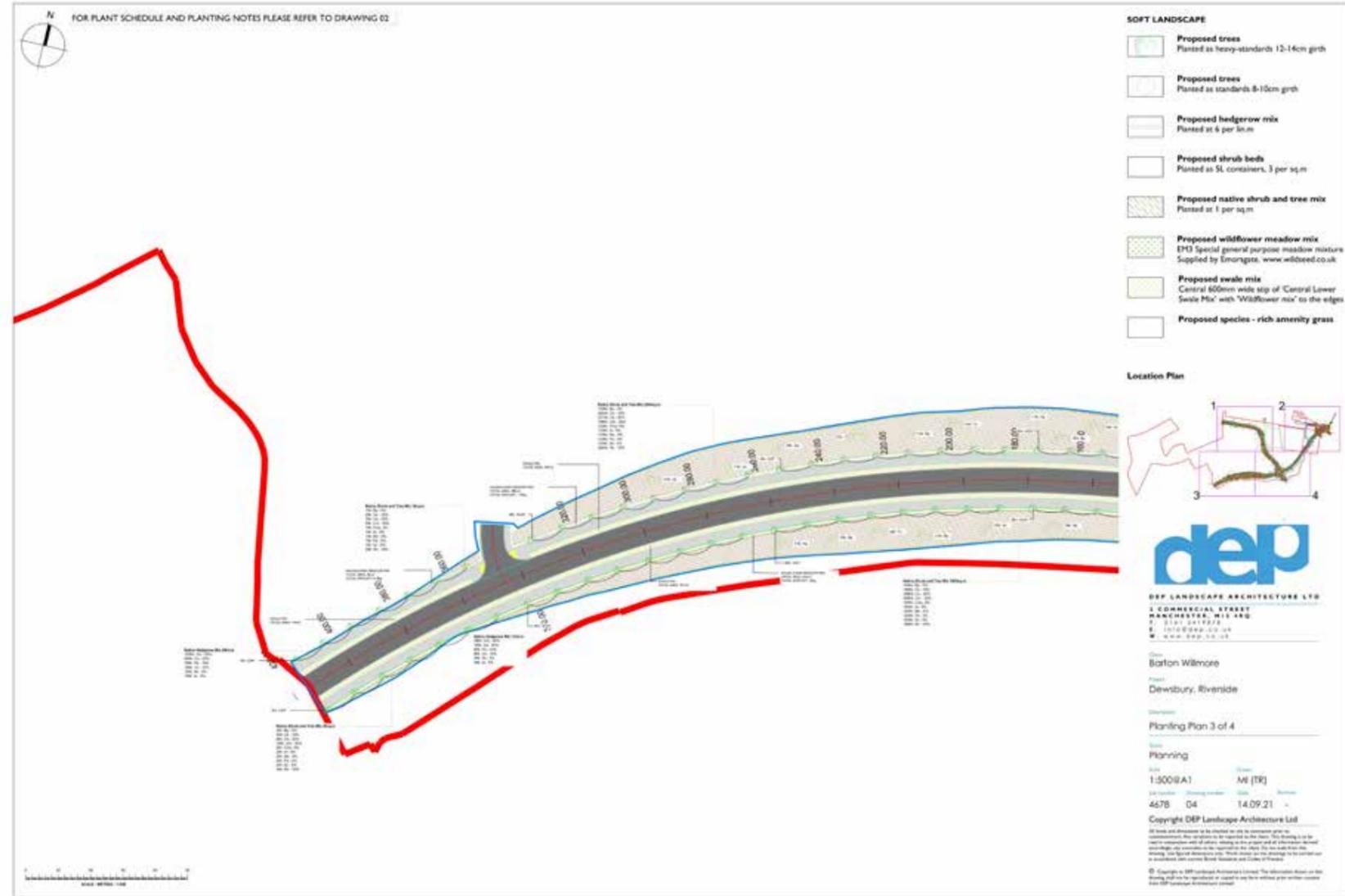
shrubs and groundcover planting will provide visual amenity.

Refer to DEP drawings 4678/02-05 for details of the Spine Road planting proposals.

Biodiversity: A well-connected and integrated network of green infrastructure will be created through the Spine Road landscaping. Native species planting will be designed to enhance the biodiversity and ecological diversity of the site through the establishment of a network of species-rich habitats, aimed at achieving a net gain in biodiversity.

Swales: Swales are sustainable drainage features comprising linear grassed features in which surface water can be stored or conveyed. Where suitable, swales can be designed to allow infiltration. Along the Spine Road verges there will be a series of swales to create green routes that will receive the water from surface run-off and convey it to proposed attenuation basins within the wider development. The swales across the site are proposed to have a filter trench below to provide additional attenuation and water treatment capacity.

Landscape Management: A Landscape and Habitat Management Plan (LHMP) will cover the Spine Road landscaping, ensuring that retained and created habitats are designed and managed primarily for biodiversity and to engage residents and site users with nature. The plan will also ensure other landscape features such as sustainable drainage system (SuDS) basins, public rights of way and boundary treatments are inspected routinely and maintained to ensure safety and function.



8 CONCLUSION

In bringing forward plans for the Site, Barton Willmore and the supporting technical team followed the Council's development principles and parameters, as well as best design practice to ensure the proposed development will establish an attractive new neighbourhood which complements its landscape and existing context.

The design approach presented through this document has been developed through engagement with Kirklees Council, key stakeholders and the local community.

The development proposals will be achieved in the following way:

- » The creation of an integrated residential community with a sensitive relationship to the existing settlement and the wider allocation;
- » Providing a development that is well connected, readily understood and easily navigated, promoting a layout which reduces dependence on the car, while enhancing the cycling and walking networks;

- » The creation of a strong landscape and open space structure;
- » Providing a range of dwelling sizes, types and tenures that offers an accessible and acceptable choice of lifestyles; and promoting the objectives of sustainable development through layout and design.

We are grateful to the Council and the community for their input and technical advice, and to all those who took the time to participate in the public consultation and submit feedback on the draft plans. The feedback received has informed the development proposals submitted as part of this application.



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