

Bradley Park Phase II Masterplan

Delivery Statement

September 2016



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CONTENTS

- 1.0 Introduction
- 2.0 Site Description
- 3.0 Site Area
- 4.0 Site Constraints
- 5.0 Infrastructure and Development Requirements
- 6.0 Preferred Masterplan
- 7.0 Market Commentary
- 8.0 Phasing Strategy
- 9.0 Summary and Recommendations

1.0 Introduction

- 1.1 This report has been prepared on behalf of Kirklees Council in their role as landowners of Bradley Park Golf Course and Driving Range, which lies to the north of Bradley Road in Huddersfield. The site, along with the adjacent agricultural land to the west, is allocated for housing development in the Draft Local Plan for Kirklees. It covers 68.35 hectares in total, 56.28 hectares of which is owned by the Council (Draft Housing Allocation H1747) with the rest in private ownership (Draft Housing Allocation H351).
- 1.2 In late 2015, O'Neill Associates led a team of consultants in preparing five options for the redevelopment of the entire 68 ha landholding during the first phase of the masterplanning process. Four of the options were based around a more innovative approach to the layout, scale and form of development, using strong urban design principles and best practice examples elsewhere. The fifth option adopted a more conventional approach, looking at the overall capacity of the site by applying standard layouts and densities more typical of volume housebuilders. The potential for retaining some golf provision was considered as part of the overall mix of uses in some of the options. The team has also looked at the opportunities for providing other sports and recreational facilities in liaison with the Council's Sport and Physical Activity Development Manager, who in turn has held discussions with Sport England. Based on an initial assessment of the site's main physical and environmental constraints, the phase 1 masterplanning exercise demonstrated that it had the potential to deliver up to 2,000 new homes.
- 1.3 There are a number of inter-related elements to the second phase of the masterplanning work. The key stages are outlined below and following the description of the site in section 2, the report is structured as follows:
- a) Clarifying and confirming the development parameters:
 - o Refining the masterplan site area (section 3)
 - o Further assessing physical and environmental constraints and opportunities, specifically noise and archaeology (section 4)
 - o Confirming infrastructure needs, including transport and access, and development requirements (section 5)
 - b) Developing a preferred detailed masterplan for the site:
 - o Preparing a 1:1000 scale Master Plan Drawing and a supporting Urban Design narrative (section 6)

- o Preparing movement diagrams and 1:500 access designs and identifying sustainable transport measures (section 6)
 - c) Delivering the masterplan:
 - o liaising with the landowner of allocation H351 and carrying out soft market testing of the masterplan proposals with housebuilders and the development industry (section 7)
 - o producing a phasing strategy, which is based around the delivery of key infrastructure, transport and the remediation strategy (section 8)
 - o drawing out overall conclusions and key recommendations (section 9)
- 1.4 This delivery statement summarises the steps involved in the second phase of the project and reports on the results of the above assessments. It is supported by a series of supplementary reports and technical studies, including the detailed masterplan for the site. Together, the package of reports will form part of the evidence base for the publication version of the Local Plan, which will be tested by an Inspector at a forthcoming Examination in Public.

2.0 Site Description

- 2.1 The proposed housing allocations (H1747 and H351) cover 68.35 hectares of land at the northern edge of Huddersfield, approximately 4km to the north-east of Huddersfield town centre. The site is bounded by residential properties along Bradley Road (A6107) to the south, Park Hill to the east and Bradford Road (A641) to the west. Bradley Wood lies immediately to the north of the site and runs to the edge of the district's boundary with Calderdale. The woodland is dissected by the M62 motorway as it sweeps around in a north-easterly direction towards Junction 25. It contains a series of electricity pylons, which emerge at the southern edge of the woodland and cut across the site's north-eastern corner. The aerial photograph of the site in the accompanying Urban Design Strategy shows the extent of the allocated area.
- 2.2 There is an operational landfill site to the east of the proposed housing allocation and a former quarrying area beyond it. The quarry has not been backfilled but is overgrown with trees and shrubs. It will be restored in the future, creating a mixture of amenity woodland and grassland.
- 2.3 Of the 68.35 hectares of land allocated for housing, 56.28 hectares is currently occupied by Bradley Park Golf Club and the remainder is in agricultural use. The 18-hole course opened in 1977 and there are now a range of supporting facilities including a driving range, a par 3 / footgolf course, separate practice greens and short game areas, a club house, changing

facilities, a golf-pro shop and a customer car park. The majority of holes run on an east to west alignment and range between 122 – 491 yards in length. There are varying levels of tree cover throughout the site, mainly along the fairways and at the woodland edge to the north. The general topography of the land slopes down towards the woodland and undulates west to east across the golf course. There are 3 man-made waterbodies at holes 2, 7 and 8.

- 2.4 At the north-west corner of the golf course, there is a small cluster of agricultural buildings at Shepherds Thorn Farm. They include a farm house, a grade II listed stone barn and a series of storage buildings. Vehicular access to the farmstead is available via Shepherd Thorn Lane, a single lane track which separates the golf course to the east with Bradley Villa Farm to the west. The land and buildings at Bradley Villa Farm also form part of the site allocated for housing development. They cover approximately 12.07 hectares of the wider landholding.
- 2.5 There are three principal points of access to the site, two off Bradley Road to the south and one off Bradford Road to the west. The routes are not connected internally and serve the golf course, Shepherd Thorn Farm and Bradley Villa Farm respectively. There are also several Public Rights of Way (PRoW) that traverse the site. The main one is the Kirklees Way, which runs north along Shepherds Thorn Lane, heads across the golf course towards the M62 and comes back south to connect with Park Hill and Park Lea. There is an additional PRoW along the driveway for the golf course and this intersects with the Kirklees Way towards the centre of the course.

3.0 Site Area

- 3.1 The extent of housing allocation H1747 has been reduced since the phase 1 masterplanning exercise. The main change is along the northern boundary, where the allocated area now runs consistently with the woodland edge. The impact on this change on the combined site area of the neighbouring allocations has been to reduce it from 77.89 hectares to 68.35 hectares. As previously explained, 56.28 hectares is within the ownership of the Council and is occupied by Bradley Park Golf Course and Driving Range (Draft Housing Allocation H1747). The remaining 12.07 hectares is owned by the adjacent farmer and is in agricultural use (Draft Housing Allocation 351).

4.0 Site Constraints

4.1 A series of technical assessments were undertaken during the first phase of the masterplanning exercise in order to gain an understanding of the physical and environmental features of the site, including its ecological value and role in the wider landscape, existing ground conditions and the local drainage regime. The purpose of these assessments was to identify any significant constraints and opportunities that would influence the way in which development could be brought forward. A summary of the technical assessments was included within the Phase I delivery report. The physical and environmental constraints of the site, which had the potential to influence the overall quantum of development that could be achieved were:

- The presence of a former landfill area, covering approximately 6 ha in the eastern section of the site
- the presence of 4 coal seams at a shallow depth, underlying the site and the extent of recorded and unrecorded mineworkings
- the essential requirement for off-site highway improvements at Cooper Bridge and improvement to the wider highway network to relieve the pressure on Bradley Road, reduce congestion at the Cooper Bridge AQMA and facilitate the development of 2,000 homes (and the desirability of establishing a fourth western access point for the site)
- the position of electricity pylons running through the site both as a physical constraint and a source of noise pollution
- the need to maintain an appropriate buffer between the M62 and residential development in order to create an acceptable noise climate
- the retention of existing waterbodies and the potential need to provide compensatory habitat for existing wildlife in designated parts of the site.

4.2 The plan of the site's main physical and environmental constraints is provided on page 5 of the Urban Design Strategy attached to this report.

4.3 Beyond the constraints identified above, the Phase I report also highlighted the need to consider the impact of development on air quality, the local noise climate and the historic environment in working towards a detailed masterplan for the site. During the second stage of the project:

- The issue of air quality has been considered in developing the transport strategy for the site.
- A noise survey has been undertaken in order to establish the local acoustic environment and the need to mitigate noise emissions from the local and strategic

highway network, surrounding land uses and the operational power lines running through the north east quadrant of the site.

- An archaeological desk based assessment and walkover survey has been carried out to identify the potential for archaeological remains

Noise Assessment

- 4.5 In June 2016, Environmental Noise Solutions (ENS) were commissioned to undertake noise impact assessment at the site in order to determine the ambient noise level during representative daytime and nighttime periods. The principal objective of the survey was to assess whether there are any parts of the allocated area that are not capable of accommodating housing development and to identify those areas of the site where a form of noise mitigation is required in order to achieve an acceptable standard of residential amenity.
- 4.6 A copy of the acoustic report is included within the suite of documents submitted alongside this delivery statement. It explains that a baseline survey was undertaken between 22 and 24 June 2016, using 10 monitoring stations set up around the periphery of the site. During the course of the survey, local and distant road traffic noise was identified as being the dominant source of noise across the site. It was noticed that noise emissions from the M62 motorway were subject to a variation of around 10dB with upwind and downwind conditions. There were no significant audible noise emissions from the landfill operations to the north east of the site or from Bradley Villa Farm to the south west. The high voltage power lines were audible and distinctive during the night time period although in absolute terms, they were not considered to be significant.
- 4.7 The noise measurement data recorded readings of between 45 and 67 LAeq,T (dB) across the ten monitoring stations, with the most sensitive area being along the north-west boundary of the site. Here, a 150m buffer zone is recommended between any future development and the M62 motorway, which is the most dominant noise source in the area. The buffer zone is broadly consistent with the Green Belt boundary established within the Draft Local Plan. The survey reports that the following noise levels should be adhered to in order to meet regulatory guidance and to achieve an acceptable level of residential amenity:
- 35 dB LAeq in living rooms during the daytime
 - 30 dB LAeq in bedrooms at night
 - 45 dB LAFmax not normally exceeded in the bedrooms at night
 - Guideline range of 50 – 55 dB LAeq in gardens during the daytime and where this is not achievable, design to achieve the lowest practicable levels
- 4.8 In order to achieve these levels in properties located along the northern boundary, it is recommended that the layout is designed so that the garden areas are located to the rear

of building, which should face towards the motorway. Habitable rooms which either face towards or are perpendicular to the M62 will need to be fitted with an enhanced glazing specification with acoustic trickle ventilation. For houses within the recommended 150m buffer zone, a higher standard of glazing is required and a mechanical ventilation strategy will need to be adopted. Based on the measured noise levels, standard double glazing and trickle ventilation is appropriate across the rest of the site, as the properties in these areas will benefit from the screening offered by the first line of houses. The conclusion of the survey is that the entire site is considered to be suitable for residential development, subject to providing a judicious layout and appropriate sound insulation to the building envelope in the most sensitive areas.

Archaeology

- 4.9 An archaeological desk based assessment of the site, including a site walkover, was undertaken by On Site Archaeology in June 2016. Archaeological and historical data was collected over an area extending approximately 500m from the site boundary. This included cartographic evidence, the West Yorkshire Historical Environment Record and archaeological catalogues held by the Archaeological Data Service, the Historic England Archive and published reports.
- 4.10 The records search identified a grade II listed building, the barn at Shepherd Thorn Farm, within the boundary of the allocated area and a further fifteen grade II and grade II* listed buildings within 500m of the site boundary. There are also a number of important designated heritage assets just beyond the study area, in Kirklees Park, to the north east of the site. The walkover survey considered the potential impact of the development on the assets which lie beyond the site boundary and found that they were sufficiently separated by either topography or vegetation to be affected by such development. Importantly, Historic England's consultation response to the draft allocation did not raise any concerns regarding the impact of development on designated assets outside of the site boundary.
- 4.11 The Historic England response did identify the need to consider the setting of the grade II listed barn at Shepherd Thorn Farm and recommended that a separate heritage assessment be undertaken to understand the impact of the development. At this point, a full heritage assessment has not been carried although this could be undertaken as part of a future exercise (for example at any planning application stage). The farmstead itself is depicted on maps as early as 1771 although the listed barn is thought to be the only early surviving building, with the adjacent stone barn and dwelling being of no real heritage significance. These buildings do play a role in contributing to the setting of the listed barn and will not be directly affected by the future development of the site as the allocated area only extends up to the southern boundary of the farmstead. The interface with new development to the south will need to be carefully considered in order to preserve the

setting of the barn. The layout of buildings in this area has the potential to better reveal its significance.

- 4.12 In terms of below ground archaeology, LIDAR data was obtained to provide a highly detailed and accurate model of the land surface at meter and sub-meter resolution. The results show few features of interest on the ground surface with mounds and depressions likely to be of modern origin, representing features of the golf course. The desk-based assessment revealed the presence of Roman Road 712, which passes through the general area. However, the exact course of the road is not known. It has been excavated at several points to the west, with the closest excavated section being at Lindley Moor, approximately 5km to the south west. The course of the road to the east of that point is highly conjectural. If it is close to the site then there is the possibility of Roman remains although there is no indication of this at present, either in terms of the identified features or the LIDAR data.
- 4.13 Beyond the site boundary, Bradley Grange is thought to occupy the site of a medieval grange known as Fountains Abbey. The medieval grange encompassed areas rich in potting clay, iron ore, and woodland (for the creation of charcoal) and it is likely that industrial activity, notably ironstone mining and iron smelting was a major facet of the grange's operations. There are known sites associated with the grange within the study area at Bradley Wood and documents also indicate that a forge may have been present within the woodland. It is possible that sites associated with iron ore extraction and smelting may have been present within the boundary of the allocated area and the extensive mining remains recorded by the Coal Authority may include ironstone workings associated with the medieval grange. On this point, the report states that there is a low to moderate possibility that remains associated with the industrial activity of the former monastic grange are present within the subject site. However, the conclusion is that there is no-indication that below-ground archaeology is of sufficient significance to prevent development taking place. The level of ground disturbance associated with past mining activities, the landfill site and creation of the golf course is likely to depleted or destroyed any remains in these areas. The report recommends a further geo-physical survey to be carried out at the time of any future planning application.

5.0 Infrastructure and Development Requirements

- 5.1 The provision of up to 2,000 new homes across the two adjoining allocations will create an opportunity to improve the existing transport and community infrastructure in this area of north Huddersfield. In consultation with officers at the Council, the team has considered the basic infrastructure requirements of the development and the opportunities that exist to create enhanced facilities in order to serve future residents at the site along with the existing community.
- 5.2 In 2014, the Council commissioned the consultants, Arup, to produce an Infrastructure Delivery Plan for the District, which provides part of the evidence base to support the ongoing work that is taking place on the preparation of the Local Plan. The purpose of the IDP is to establish the links between plan-making and infrastructure provision across the District. It considers the issues relating to the implementation of the Local Plan and, specifically, the means by which the required levels of infrastructure will be delivered, by whom and to what timescales. For the strategic housing allocations such as Bradley, section 15 of the report includes a site specific assessment.

Utilities

- 5.3 The IDP confirms that there are no capacity issues with gas, water supply or treatment affecting the Bradley Park site. The report states that the projected electricity demand for the development is 3.55 MW and the closest substation at Brighouse has the capacity to accommodate this, reporting 3.61 MVA of spare capacity in 2018/19.
- 5.4 However, since the publication of the IDP further discussions have been held with Northern Powergrid in order to establish the current position. They have confirmed that the nearest available cables for connection are up to capacity and supplied from the nearest primary substation (Deighton) which is also up to capacity due to recent load connections. The Powergrid's Emerald Street substation is a dedicated generation connection for the Huddersfield Incinerator and therefore is unavailable. The spare capacity at Brighouse is not available locally within cables which are convenient for the Bradley Park site. It is also a significant distance from the site and without there being any clear cable route, it may mean crossing the motorway, railway and river in order to be able to utilise the capacity which is available.
- 5.5 Northern Powergrid has confirmed that the early phases of development could be considered for connection from any local assets subject to availability at the time. Longer term, they have identified a potential source of the capacity from their Birkby substation. This is likely to require some extension works and the provision of cables from the substation to the boundary of the site and indicative costs have been secured for these works.

Education

- 5.6 The UDP for Kirklees identified an area of land to the north of Bradley Road for the provision of new school facilities, although this has not been brought forward within the plan period. During the first phase of the masterplanning exercise, discussions with the Council's Education Services team established that primary schools within Huddersfield North are already over-subscribed. In 2014 and 2015 there were insufficient places to meet demand in the area and parents were required to secure places in neighboring zones. The strategic housing allocation will exacerbate the need for additional primary school places and it is likely to result in a requirement for an additional 2-form entry primary school on the site.
- 5.7 During the second phase of the masterplanning exercise, further discussions have taken place with the Council's Capital Development and Delivery team to confirm the space standards for both 2-form and 3-form entry primary schools, based on the advice in national building bulletin 99 and the team's experience in delivering a number of recent school facilities within the District. The purpose of exercise is to enable an area of the site to be reserved for future school provision, to be phased with the evolution of the new residential community at Bradley but also to cater for existing needs. The space standards for the new school site, taking into account buildings and associated playing fields, is set out below:
- 420 place school (2 form entry) - 1.6 hectares (min) to 2.0 hectares (max)
 - 630 place school (3 form entry) – 2.3 hectares (min) to 2.86 hectares (max)
- 5.8 At the moment, the level of secondary school provision in the area is sufficient to meet demand over the medium term. The IDP advocates a strategic approach to sufficiency planning, which should take place across a wider geographical area. It confirms that at the point of any future planning application, should there be insufficient capacity to meet demand then a financial contribution will be required to cover the number of additional places that are required beyond existing capacity. This requirement will need to be factored in to the cost appraisal for the development but for the purposes of the masterplanning exercise, there is no requirement to allow for the provision of secondary school facilities on the site.
- 5.9 Finally, the development of up to 2,000 homes on the site will result in the need for additional early learning and childcare places in the area. Whereas there are already facilities in the Ashbrow ward, they are currently operating at capacity and either a nursery class in a new school or a private early learning facility will be required to cater for the new resident population.

Open Space and Sports Facilities

- 5.10 In 2015, the Council produced an Open Space Study and a separate Playing Pitch Strategy for Kirklees. The strategic housing allocation at Bradley Golf Course falls within the Ashbrow ward, where the open space study identifies a surplus of open space within all categories, with the exception of 'parks and gardens'. The provision of a further 2,000 new homes at the site will increase the population of the ward by around 5,000 people, placing greater pressure on existing facilities. In accordance with the space standards set out in the open space study (per 1,000 population), the proposed development will create a need for around 9 hectares of open space within the various typologies. This calculation takes into account the current surpluses and deficiencies identified within the ward.
- 5.11 In terms of playing pitches and sports provision, the project team has been in contact with the Council's Sport and Physical Activity Development Manager regarding the type, size and standard of sports facilities that would be most appropriate for this site. The analysis takes into account the level of existing provision within the local area and future plans to enhance it through the introduction of new facilities, such as 3G pitches, of which there is an identified shortfall within the District. Within the masterplan area, the following facilities should be accommodated:
- At least 1 (preferably 2) plot to meet the space requirements of a cricket pitch (150m x 130m)
 - If only 1 cricket sized pitch can be provided, a further plot to accommodate either a rugby, hockey or football pitch (130m x 80m)
 - 2 playing pitches associated with the proposed primary school, which are sufficient to accommodate the 7 v 7 and 9 v 9 forms of the game.
- 5.12 For the full sized pitches (i.e. not those associated with the primary school) additional space should be provided for the development of changing / sports pavilion facilities. The type of pitches, in terms of surfacing and floodlighting, will be revisited in the future based on demand at the time and the funding that is available. The provision of sports facilities at the site will be a key component of the wider sports strategy to be developed for North Huddersfield.

Retail

- 5.13 The Retail Capacity Study for Kirklees (WYG Planning, 2014) highlights that there is a substantial need for additional convenience goods retail facilities in the short term in North Huddersfield (retail zone study zone 2). With existing stores overtrading, the retail study identifies that in the longer term, to 2028 *"the identified need is very substantial and could possibly support around 2 food superstores over the short term and 3 in the longer term"*.

5.14 During the second phase of the project, the team has held further discussions with officers regarding the retail needs of the area and the requirement for additional provision to serve the new sustainable community at Bradley Road. The outcome of these discussions is that an area of the site will be identified for the provision of a local convenience store.

6.0 Preferred Masterplan

- 6.1 During the first phase of the project, the team prepared 5 high level masterplan options, which were based on a different approach to the layout, scale and density of development. The options included either no golf course or reduced 9-hole and 18-holes courses and demonstrated the impact of maintaining a level of provision on the overall density of development. In each case, there was the potential to provide up to 2,000 homes although an ambitious, innovative approach would be required in order to achieve this quantum. The option which provided a reduced 18-hole golf course also relied on the inclusion of additional private land, which sits outside of the allocated area.
- 6.2 In order to establish a baseline, the fifth option showed that the site could accommodate a more typical suburban layout at around 35 homes to the hectare and still achieve the level of development projected in the draft allocation (2,000 houses) albeit with no golf provision. The design concept for the other four options is explained below. Copies of the accompanying sketch layouts are provided within the masterplanning report for phase 1:
- **North Park** - This option involves the creation of a new settlement running along the southern part of the site with a new parkland area 'North Park' running in parallel along the northern edge. It offers the potential to accommodate a reshaped 18 hole golf course within the park integrating with the woodland edge to the motorway and the existing landscape spaces. The overall design tapers the densities of the neighbourhoods down from 80 dph in the centre, to 30 dph to the eastern and western edges where the scale of development will be at two storeys in order to integrate it with the surrounding suburban context.
 - **Urban Fingers** - The 'Urban Fingers' option involves the creation of central, eastern and western neighbourhoods interspersed with two wide landscape fingers of open space running north to south from the northern edge of woodland. Similar to the first option, the neighbourhoods are tiered in density and scale from low rise/density at the east and west ends to a mid-scale/density in the central neighbourhood. It is envisaged that the centre will function as a mixed use area to link southwards to the employment park on the other side of Bradley Road. The layout shows a large area of landscape open space in the northwest corner of the site, which could provide a small 9-hole golf facility or could be dedicated to other forms of community landscaped amenity.
 - **Central Park** - This option shows the provision of a new public park running linearly through the centre of the site. Three lower density neighbourhoods are placed along the southern side of the site, connected by a pedestrian, cycle shared bus route running east to west. Along the northern edge of the park, linear groups of

higher density housing are proposed with 3 high buildings forming identity points and capitalising on the 360 degree panoramic views that are available above the tree line. This mix of densities and house types would offer a variety of homes to meet the needs of different groups within the community. There is no golf course proposed with this option.

- **Eco-Boulevard** - In the final option, a new east/west landscaped spine integrates public amenity space with the major pedestrian, cycle and shared bus route as the central feature to the new settlement. The 'Eco- Boulevard' includes a sequence of water spaces, which offer ecological enhancement, opportunities for sustainable urban drainage and will also function as amenity areas. The housing on the south side of the Boulevard is laid out in 4 walkable neighbourhood, each centred around a landscaped square. The north side housing is higher density with some higher points to create a variety of scales. Across the site, the densities range between 30 and 50 dph. Again, there is no golf course provision as part of this option.

6.3 For the five masterplan options, the team performed a SWOT analysis, which identified the perceived strengths, weaknesses, opportunities and threats of each approach. A further assessment of the options was then carried out by the client team in developing the brief for phase 2.

6.4 In progressing the preferred masterplan during phase 2, the following points have been taken into account from the SWOT analysis and in refining the brief with officers:

- The high densities proposed in some of the options, specifically the high rise apartment blocks in 'Urban Fingers' and 'Central Park' may not be deliverable to the market.
- The provision of a public park, incorporating sports and recreational facilities to serve the wider community at Bradley was a positive aspect of the options appraisal although it would be better if this was integrated within the development rather than on its periphery.
- The phasing strategy for the development should be devised so that the existing 18-hole golf course can be retained for as long as possible
- A small neighbourhood centre, including a local convenience store, community facilities and a 2-form entry primary school should be provided, which is accessible to both the proposed housing and the existing residential community within Bradley
- The existing woodland belts are an important landscape and ecological feature of the site and should be incorporated with the housing layout
- Beyond the site constraints identified within the phase 1 work, the preferred masterplan should consider the additional impacts of noise, archaeology and the existing electricity pylons running through the site in the event that these cannot be grounded.

6.5 In order to address these points, a hybrid option is proposed. Fundamentally, this is based on the urban design principles of the 'central park' masterplan although positive elements of the other options also feature within the final design. A full commentary on the preferred approach is provided within the Urban Design Strategy attached to this report. A summary of the masterplan and the movement and access strategy for the development is provided below.

Urban Design Strategy

6.6 The urban design concept to the emerging Bradley Park masterplan is generated by the importance creating a new sense of place to the planned new settlement. The consultancy team shares the view that the development should be integrated into the existing mature landscape of the site and threaded into the existing residential areas around Bradley Road.

6.7 The urban design idea is to create a new urban village with a new community park 'Central Park' at its core. The park will run east to west taking advantage of the mature trees that presently form the shelter belts to the fairways of the 18-hole golf course. Together with the Park, 3 major elements would form the urban design structure; South Park Housing Clusters, the North Park Woodland Housing, and a Central Village Green.

6.8 **The Central Village Green** – The village green forms the main communal space at the centre of the new settlement. It opens off Lamb Cote Road and is the first place to be experienced as you enter into the development. The green introduces the landscape theme for the site and opens up sequentially to Central Park on its northern side. It is shaped around sun angles with a primary north-south axis to induce sunlight throughout the seasons and particularly the important low sun angle of the winter months. It is envisaged that the green will act as the mixed use 'centre' to the village with a workspace and learning hub, health centre, local convenience store and café's fronting on to it. It is the place where bus routes from the west and Bradford Road will interchange with bus routes from the east towards Cooper Bridge. Densities would rise up to 70 dwellings per hectare at the village centre.

6.9 **The South Park Housing Clusters** – These clusters will take the form of modern garden squares accommodating a mixture of house types including detached and semi-detached homes, family housing in terraces together with more compact starter homes, and homes for a senior generation and independent living in terraced apartments. The garden squares are planned in size with 1 minute (80metre) walking times across to feel easy and accessible whilst establishing territories with formal amenity close to homes, play for children and gathering space for events. The communal gardens provide views as well as giving privacy, and good passive security to individual dwellings. The garden squares are created in groups of 4 in a Cluster like miniature city quarters. Each Cluster has 2-minute walking time east to west and north to south and form easy walkable neighbourhoods

within the overall settlement. The clusters include low rise dwellings in semi-detached or detached two storey housing to the south in order to facilitate solar penetration. The scale builds up to 3-4 storey housing and apartments along the north east and north west corners. The overall resulting density is 50 homes to the hectare, although this is a net figure for each defined cluster and excludes the open space provision in Central Park.

- 6.10 **North Park Woodland Housing** – the woodland housing to the north of Central Park, will act as the counterpoint to the gridded garden square clusters to the south. Here, housing groups of mixed type are integrated into the edge of the main woodland belt that separates the park and the motorway gorge. The new homes are arranged like a 'string of beads' along the south edge of the woodland forming 'sun trap' spaces with primary views over the park. Mixed housing types are fitted in bespoke urban design form to suit the shape of each section of land and woodland edge with its natural crescents and nooks.
- 6.11 The general principle is to create terraces of housing in linear and curved forms along the edge of trees with southern aspect over the park and with their northern side facing the woodland. To the south of these, nestling into the existing fairways, there are groups of detached and semi-detached houses as if built into the park estate like mini hamlets. At three points to the backdrop of the woodland edge, the design team has identified locations to build higher apartment buildings, at the west and east end and in the centre. These will form new identity and orientation points on the park and take advantage of the panorama of views to all points of the compass. Densities range from 50-65 homes to the hectare. Again, this is a net figure which excludes the open space provision within Central Park.

Development Principles

- 6.12 The new settlement is envisaged as having a strong, continuous and permeable pedestrian character of the 'walkable district', encouraging residents to walk, cycle or scooter between neighbourhoods and the village green. The potential for promoting sustainable modes of travel is reinforced by the inclusion of new bus routes to and through the village, one routed westerly to Bradford Road and another easterly to Cooper Bridge. A 'Pedestrian Spine' is provided from east to west at the mid-point of the south housing clusters. This will integrate pedestrians, cycles and buses and exclude private cars, service vehicles, and motorcycles – all helping to realise Sport England's active design principles.
- 6.13 The masterplan will also be designed to give car access to individual car stores for homes and parking areas to apartment buildings as well as service, fire, taxi and blue badge accessibility. This is achieved in the south park housing by two parallel access roads north and south of the clusters which feed into the garden squares north and south giving car access to individual homes terraces and parking bays to apartments.

Movement and Access Strategy

- 6.14 The overriding strategy for the site has considered the following approach in relation to movement and access:
- 6.15 **External highway access** – It is envisaged that 3 access points will be required for the development, given the total number of dwellings proposed. From a traffic impact perspective, dissipating the additional trips arising from the development across the existing network would be advantageous, pointing towards access locations across a number of directions and feeding into a number of routes. The fact that there is a designated AQMA at the A62 Leeds Road/Bradley Road junction is a further reason to avoid loading large amounts of additional traffic at this location. Ensuring effective bus penetration of the site is also crucial, and so access points that allow the diversion of existing services through the site without adding significant extra mileage are also important. Therefore, the following access points have been included within the masterplan:
- An access to the western portion of the site that would allow the frequent bus services along the A641 to divert into the site with minimum diversion. It could also provide a link (either direct or indirect) to the Highways England proposal for a new junction on the M62 (Junction 24a) that is currently being investigated;
 - Upgrading of the existing accesses onto Bradley Road at Lamb Cote Way and Tithe House Way, allowing for local trips and providing access in the early phases of the development;
 - An access to the east facilitated by proposed highway improvements in the Cooper Bridge area and to the wider highway network.
- 6.16 **Internal highway layout.** The masterplan has been designed to provide vehicular links between the different development zones to provide residents a choice of walking/cycling/driving routes and to fulfil emergency access requirements. Linking the accesses within the site also provides greater flexibility and increases the number of dwellings that the site can support.
- 6.17 **An extensive multi-user internal network** is proposed as part of the green infrastructure provision within the site. This network, that includes a separate central pedestrian/cycle/bus spine, will enable future residents to make journeys to key locations on-site by foot or by cycle, including the local commercial centre and the on-site primary school, whilst also providing convenient access to off-site routes and nearby locations.
- 6.18 **High quality walking and cycling infrastructure.** Convenient connections for walking and cycling trips are a vital component of the transport strategy so as to minimise trips by motorised modes (including private car). Accordingly, the following measures have been included within the design:

- Provision of high quality, safe and convenient walking and cycling routes permeating the development site, including a separate central pedestrian/cycle/bus spine;
- Safe, convenient and direct links to the wider network of pedestrian and cycle routes;
- Retention and enhancement of existing Public Rights of Way through the site.

6.19 **Public transport solutions.** Given the scale and location of the proposed development, viable public transport connections will be essential. The development has therefore been designed to capitalise on existing bus services, ensuring that pedestrian connections to bus stops are direct and attractive, and supporting new bus stops and upgraded bus stop facilities where appropriate. Within the site, the bus services are supported by keeping the bus route close to the centre of residential areas and in the form of a double loop configuration so as to be more attractive to bus operating companies as it minimises additional mileage. This configuration will allow priority for buses and bus stops can be provided at regular intervals (approximately every 400m), conveniently located in relation to the development plots, local centre and other key attractors.

7.0 Market Commentary

Market Testing Exercise

- 7.1 An initial market testing exercise was carried out in August 2016. This involved sending a proposition document entitled 'Bradley Park – A Great Space' to ten organisations including a mix of large housebuilders, developers and enabler developers (who coordinate developments and release development parcels to landowners). The project team received five responses to the consultation exercise – a 50% response rate.
- 7.2 The proposition document explained the site, the planning context and the master planning exercise that had been undertaken by the team. The key components of the emerging master plan were set out including key development principles, house types, characteristics and resulting densities for the South Park Housing Clusters, Central Village Green and North Park Woodland Housing. The overall approach was described as creating a new urban village with a new community park 'Central Park' at its core.
- 7.3 The purpose of the market testing exercise was explained to the consultees – it was to consider whether the 'place making' approach to development at Bradley Park will ultimately be deliverable. It was made clear that the initial exercise was being undertaken in confidence. The organisations consulted were asked to review the proposition document and offer views on:
- The proposed 'place making' approach
 - The feasibility of this approach - on this site - in this location - given both the current Huddersfield market and a 'future' market linked to the future growth of Huddersfield and North Kirklees.
- 7.4 Overall, the responses highlighted that Bradley Park is in a strong market area, offers a sustainable location and it will attract interest from the market. The proximity of the site to the M62, to Huddersfield and Leeds and to some extent Manchester was considered to add to the appeal of the site. There is existing demand in this area.
- 7.5 In terms of the approach, there was wide support for the principles of 'place making'. Responses included that there is space to create different character areas, including higher density end users. The three separate elements of the emerging masterplan would lead to a vibrant and varied final development. It was also highlighted that basing the development principles around the existing mature landscape and tree line would provide an immediate impact for new residents.
- 7.6 It was evident from the responses that there are different views on the best way to achieve the place making approach and to deliver housing on the site. One of the responses

highlighted that creating a more attractive and desirable environment will enable higher sales values to be achieved. On the other hand, larger housebuilders expressed concerns that revenue ceilings for this location could make a scheme unviable with enhanced build costs (resulting from the place based approach). The national housebuilders also indicated that they generally work with standard house types and standard layouts. A 'different' scheme would be less commercially viable compared to traditional housing products and this would be outside the normal business/operating model of volume house building.

- 7.7 There were a number of views expressed on the proposed densities of the development, with comments that the higher densities proposed in some areas of the site “don't feel right at this time” and should perhaps be an aspiration for later. Respondents were also concerned that the surrounding housing is generally lower density and more traditional, including medium sized and large detached housing - the proposed development could conflict. The question of apartments was raised and whether this would be economic given the location (not next to or part of an economic centre). It was also indicated that the suggested densities and character would likely deter the larger housebuilders (tied to the comments about standard house types). One respondent quoted the “norm” is for 30-35 homes per hectare for the current market throughout Yorkshire. The comment that developers are unlikely to be exposed to higher density development “without taking a significant financial contingency in the guise of a lower purchase price” provided a helpful commercial insight. Pre-determined design and factory based products represent the standard approach.
- 7.8 A number of responses included examples of place making approaches that were serving to deliver new communities and high quality living environments elsewhere – northern examples included Waverley on the edge of Sheffield, Derwenthorpe in York (promoted by the Joseph Rowntree Housing Trust) and Lower Broughton in Salford.

Land Assembly

- 7.9 Discussions have also taken place with the promoters of housing allocation H351, which accounts for 12 hectares of the overall 68 hectare Bradley Park site (H351 and H1747). It is understood that Miller Strategic Land has an option on the site and is supportive of the master planning exercise that has been undertaken to date. They were in favour of a collaborative approach to the delivery of the two adjacent sites. A developer is therefore already actively involved in almost a fifth of the overall site. Allocation H351 is currently in agricultural use.

Summary

- 7.10 In terms of overall deliverability, the two phases of masterplanning work have demonstrated that there are no showstoppers to the development of the Bradley Park site.

A series of technical assessments have been undertaken, which support this view. The former landfill area can be avoided and other development constraints addressed. The ownership of the site and the long term nature of the development are critical factors in its deliverability.

- 7.11 The Phase I Bradley Park Masterplan Delivery Statement highlighted the growing focus on planning 'sustainable suburbs' with creative layouts supporting higher densities but still providing family housing with gardens. As the majority landowner, Kirklees Council can consider the scope, if required at all, to accept a lower financial return in the face of achieving greater community benefits, design standards and results – quality and legacy being key driving forces. Larger housebuilders provided their views in the context of their standard business model. Another developer highlighted that higher quality would drive higher values. The Council is in a position of major influence when striking a balance between development benefits and returns.
- 7.12 For a scheme of around 2,000 homes, the build out will be over a 15-year period. There is clear scope for the market to change and evolve during this period, in particular to the demands of an ageing population. In this respect, the phase I masterplan report highlighted that the population is ageing and household sizes are generally falling. The 2015 Strategic Housing Market Assessment for Kirklees identifies that the proportion of residents over the age of 65 is projected to increase by 43% between 2011 and 2031.
- 7.13 The development parcels included in the early phases are based on lower density detached and semi-detached family housing. For the South Park Housing Clusters, the masterplan sets out a development concept of housing clusters formed around modern garden squares with each cluster accommodating a mixture of housing types. The form of development provides scope for standard house types to be used to deliver the masterplan. Equally, it would facilitate innovative designs such as the house types used in the development of Derwenthorpe in York.

At this stage, the masterplan is not prescriptive about the specific house types in the layouts that are shown. It is presenting the vision for the Bradley Park site and is accompanied by this report, which demonstrates the deliverability of the housing allocation. Following future community consultation and detailed work in the lead up to an outline planning application, the design approach will continue to evolve. It will take in to account the way in which Kirklees Council seeks to progress the allocation, whether to work with a development partner or partners and ultimately bring the site to the market.

8.0 Phasing Strategy

- 8.1 Bradley Park is a large development area, designed to support a new community. The preferred masterplan identifies twenty development parcels which make up the three areas of built development – the South Park Housing Clusters, the North Woodland Housing and the mix use development around the Central Village Green. In addition, there are two parts of the development area that are open in nature – the Cricket Field/Sports Pitches to the west and Central Park, which runs between the north and south housing clusters and extends to the site's northern and eastern boundaries. In land use terms, the masterplan focusses the open space and play provision in these two areas. It seeks to create destination spaces as opposed to incidental provision throughout the site. The recreational facilities will help to meet the needs of the wider community in North Huddersfield.
- 8.2 The overall density of the proposed development is 29 homes per hectare – based on the number of homes within the total site area including the areas of open space. This density is further mediated by the large tracts of open land beyond the North boundary to the site that are unsuitable for development due to the topography and the desire to retain existing belts of mature trees. The Land Use Plan below identifies the proposed built and open areas of the development site

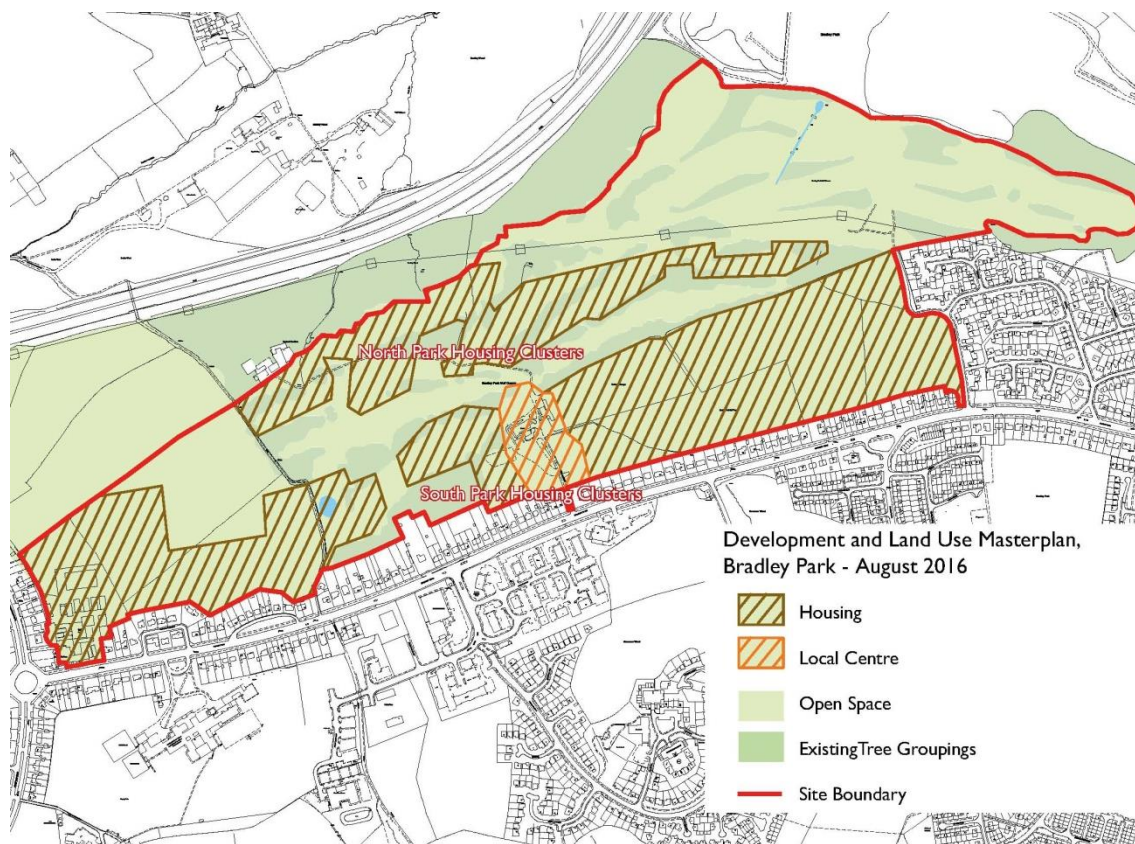


Figure 1: Land Use Plan

- 8.3 The average housing density within the built up areas of the south park housing clusters and the woodland housing is 50 dwellings per hectare (dph). This includes the space for private gardens and elements of public open space within the built housing areas themselves. However, given that this figure (50dph) excludes the main open space provision directly associated with both housing clusters (Central Park) the calculation is more akin to a ratio of the number of homes per development parcel rather than a site density.
- 8.4 The masterplan demonstrates an overall output of 1,958 dwellings. In terms of phasing, it is proposed that the site will be brought forward in three distinct phases, which are influenced by:
- The access strategy
 - The phase 1 masterplan work identified that up to 500 dwellings could be accessed via improvements to the existing Lamb Cote Road and Tithe House Way accesses with Bradley Road, where signal-controlled junctions could be installed with minimal land take. Initial traffic modelling work has demonstrated that this level of development could be accommodated on the existing local highway network. A further 250 dwellings could be accommodated with widening.
 - A further western access to Bradford Road would provide additional capacity
 - Improvements to the highway network, including Cooper Bridge, are required to deliver the remaining capacity of the site – this scheme is due for completion in 2021
 - The provision of services to support the new community
 - Enabling the development of the village centre relatively early would help to both establish the identity of the new community and reduce the level of trips needed outside of the site
 - The desire to achieve a high rate of delivery during the early years of the development
 - Early development starts link to both a western Bradford Road access and a central Lamb Cote Road access would in effect serve to enable two different (but related) development sites to commence (with potentially different developers/house builders)
 - West and central 'start' points would help to manage costs, support equalisation of uses between the two landowners and start to bring forward the bus spine
- 8.5 Having considered the above factors, the broad phasing approach is set out in the table below. The start date for the development and detailed phasing by year will be influenced by the commercial and development approach that is adopted to the sites delivery:

Delivery Tranche	First 5 Years of Delivery	Second 5 Years of Delivery	Third 5 Years of Delivery
Delivery Range	500-750 homes	700-900 homes	500-600 homes
Phases	Phase I Phase Ia	Phase I Phase Ia Phase 2	Phase 2 Phase 3

8.6 The phasing approach focuses on first bringing forward the South Park Housing Cluster – both to the west and the east. It also envisages bringing forward the Village Centre as a later element of the first period. The table below sets out which development parcel is identified in each phase. This can be cross referenced to the development parcels plan within the urban design strategy

Phase I (H1747)	Phase Ia (H351)	Phase 2 (H1747)	Phase 3 (H1747)
Parcels E F G H I A	Parcels P Q O D	Parcels C B I J	Parcels K1 K2 L M1 M2 N1 N2

9.0 Summary & Recommendations

- 9.1 The masterplan for Bradley Park, supported by this delivery statement, has been prepared for the Council in its role as landowner of the majority (82%) of the site. Two housing allocations were included in the Draft Kirklees Local Plan, H351 and H1747. The masterplan and associated technical studies have looked at the two allocations as one combined site. Together, the sites offer the scope to provide a strategic urban extension to the North of Huddersfield with the potential to deliver up to 2000 high quality new homes.

A Deliverable Local Plan Allocation

- 9.2 Fundamentally, the 2-stage masterplanning process, supported by a suite of technical work, has demonstrated that the Bradley Park site is deliverable. The 68 hectare site is within two separate ownerships, but the promoters of each allocation (H1747 and H351) have voiced an intention to work together in developing the masterplan. Whilst no built residential development can take place on the former landfill area there are no showstopper constraints, which have been identified. The early phases of development can be commenced using existing infrastructure and access points – commercially the development can commence in two locations. The allocation of land at Bradley Park will deliver a significant number of homes in a strategic location, close to the motorway network, and within easy distance of the employment opportunities proposed in the Cooper Bridge area as part of the Local Plan.

Future Vision for Bradley Park

- 9.3 Good planning is about creating places where people want to live and spend time. Importantly, the masterplanning exercise has developed an overall vision for the Bradley Park site. The urban design strategy is focussed around the creation of a central park, which balances the distribution of land uses across the site, promoting environmental sustainability, high landscape value and the provision of recreational greenspace, suitable for a variety of activities. The specification of homes is for a high-quality and innovative product, which complements existing housing in the area. As a sustainable urban extension, other benefits would include the provision of a new school to serve the site and the wider community, a new local centre to provide shops and services and implementation of an improved transport and service infrastructure in Bradley. This includes a connection in to the M62 corridor, which will reduce congestion and journey times, meaning residents are better connected not only to local jobs, but also opportunities in neighbouring cities and conurbations.

A Sustainable New Community

- 9.4 The masterplan proposes a mixture of one, two, three and four bedroom homes, with a majority being three and four bed. The type and density of homes would vary across the site, with the aim of catering for people's needs throughout their lives. The density of development would be greater around a new community hub/local centre, which would be at the heart of the development, and would decrease with distance from the local centre. The development would include affordable housing in line with planning policy requirements. The development would be predominantly between two and three stories in height.
- 9.5 In terms of open space and sports provision the project team acknowledges that the proposed change in use of this site from golf course to housing would represent a loss in facilities for this sport. Therefore, the masterplan responds to the requirements of National Planning Policy Framework (NPPF) paragraph 74, that loss of a sporting facility should either be replaced with equivalent or better provision, or that alternative sports facilities should be provided to outweigh the loss.
- 9.6 At the heart of the Bradley masterplan proposal, is a focus on open space. The plan proposes an area of parkland at the heart of the development, a "central park". In addition, there is a very significant area of open space to the east of the site, and a smaller but still substantial area to the west. Between them, these areas make up over 40% of the land area. The identification of large areas of open space as part of the masterplan offers the flexibility to include a range of formal and informal provision, including destination play areas and sports facilities. This could include a cricket pitch, football or rugby pitches or a remodelled golf course, alongside more informal areas of parkland and woodland.
- 9.7 The provision of community facilities will be centred around a "village green" located at the centre of the development, off Bradley Road. This will function as a new local centre and will accommodate shops, a primary school and other services. The masterplan work has identified that a new two form entry primary school would be required on the site. The school provision would include two playing pitches associated with the primary school.
- 9.8 Given the scale of proposed development, a number of access points will be required. Initial highways work has identified that, with junction improvements, the early phases could be built from existing access points. Beyond this, delivery of the whole of the proposed allocation would rely on the implementation of the proposed highways improvement scheme at Cooper Bridge, which is due for completion in 2021.
- 9.9 The proposed masterplan seeks to provide a high quality infrastructure for walking and cycling to encourage use of these forms of transport and minimise car journeys within the site. Designated routes for walking and cycling will sit alongside vehicular highways which

would allow car access and ensure that emergency access requirements could also be fulfilled. The masterplan has been designed to capitalise on existing bus services, and keep the busy routes close to the centre of residential areas in a configuration which would be most commercially attractive to bus operating companies.

Phasing

- 9.10 The development of the site would be phased to deliver housing over the next fifteen to twenty years. There is scope for the phasing to be configured so as to allow the operation of the golf course for as long as possible. To achieve this, development would start on the southern side of the site and the areas adjacent to Bradley Road. This would also allow the development of new homes close to existing access points with the implementation of the Cooper Bridge highway scheme facilitating additional development in the future.

Next Steps and Recommendations

- 9.11 In the short to medium term, the Council in its role as landowner will need to continue to pursue this site as a housing allocation through the Local Plan process. More specifically this will involve:
- Making representations and relevant submissions to the consultation that will take place on a Consultation Draft Local Plan in late 2016
 - Participating in the Examination of the Local Plan in mid-2017
- 9.12 Discussions with the promoters of the adjoining land and the market testing exercise have provided a starting point for further work that will be required to consider how the site is brought forward and ultimately developed. In the short to medium term it is recommended that:
- Discussions continue with the agent of the adjoining site to develop a collaborative approach to delivering a new community and that consideration is given to establishing a more formal basis for joint working
 - Responses and interest shown through the market testing exercise are followed up on as part of a process of exploring future delivery and development options, such as collaboration with a development partner or partners
- 9.13 The preferred option is a high level masterplan, geared to demonstrating the vision, concept and deliverability for the Draft Local Plan allocations. Future stages of work will require further design and layout work, including:
- Undertaking a public consultation exercise on the proposals for the site, and using the ideas, feedback and local knowledge of the existing community to further develop and refine the masterplan proposals

- Developing either a more detailed masterplan or a design code for the preferred option which covers the whole site, with more specific masterplans prepared for each development parcel - to support future planning applications

9.14 In summary, it is considered that the Bradley Park site provides a key opportunity for the Council, as landowner, to create a new community that provides a great place to live and that helps to meet the needs of the wider community. There is a clear opportunity here to shape a new sustainable suburb or urban extension, fulfilling the aspirations of the Local Plan in respect of housing delivery but also setting the benchmark for future development within Kirklees.